Driving Integration to Connect the World

2022 Annual Report

Key Figures

in € millions (unless otherwise stated)	2022	2021	+/– as %	+/– as % acc[1]
Group revenue	**958.2**	**833.8**	**15**	**8**
Product revenue	795.6	684.0	16	10
thereof Digital Business	549.7	469.5	17	11
thereof Adabas & Natural (A&N)	245.9	214.5	15	8
thereof Licenses	314.5	240.5	31	24
thereof Maintenance	405.3	399.4	1	-5
thereof Software as a Service (SaaS)	75.8	44.1	72	62
Group bookings[2]	**700.1**	**517.7**	**35**	**28**
Digital Business bookings[2]	555.6	406.0	37	29
A&N bookings[2]	144.5	111.7	29	23
Group ARR[3] (Dec. 31)	**700.2**	**585.4**	**20**	**16**
Digital Business ARR[3]	516.4	418.5	23	20
A&N ARR[3]	183.8	166.9	10	7
Operating EBITA (non-IFRS)	**178.5**	**163.8**	**9**	
Operating margin (EBITA, non-IFRS) as %	18.6	19.60		
Digital Business segment earnings	38.2	55.8	-32	
Segment margin as %	6.9	12		
A&N segment earnings	169.2	145.9	16	
Segment margin as %	68.8	68.0		
EBIT	**78.1**	**122.1**	**-36**	
Operating net income (non-IFRS)	**48.9**	**114.2**	**-57**	
Operating earnings per share (non-IFRS)[4] in €	**0.66**	**1.54**	**-57**	
Operating cash flow	**18.4**	**116.2**	**-84**	
CapEx[5]	-7.5	-11.8	-36	
Repayment of lease liabilities	-12.0	-13.0	-8	
Free cash flow	**-1.1**	**91.4**		
Free cash flow per share in €	**-0.01**	**1.24**		
Balance sheet	**Dec. 31, 2022**	**Dec. 31, 2021**		
Total assets	**2,678.4**	**2,221.4**	**21**	
Cash and cash equivalents	427.1	585.9	-27	
Net cash position	-240.0	277.3		
Employees (FTE)	**4,996**	**4,819**	**4**	

1 At constant currency.
2 Bookings according to the definition found in the Internal Corporate Control System section.
3 Annual recurring revenue.
4 Based on weighted average shares outstanding (basic) FY 2022: 74.0 mn / FY 2021: 74.0 mn.
5 Cash flow from investing activities adjusted for acquisitions and investments in debt instruments.

Because the figures in this report are stated in accordance with commercial rounding principles, totals and percentages may not always be exact.

Content

This publication is a translation of the German version of Software AG's 2022 Annual Report. The binding version is the German version.

The content of the audit-relevant sections of this Annual Report is consistent with the digital (German) version submitted to the German Federal Gazette (Bundesanzeiger). The electronic document referred to in the Independent Auditor's Report is the basis of the audit.

Photos: Software AG, pp. 14–15: Getty Images/Shunli Zhao, pp. 34–37: illustrations Paddy Mills

Driving Integration to Connect the World

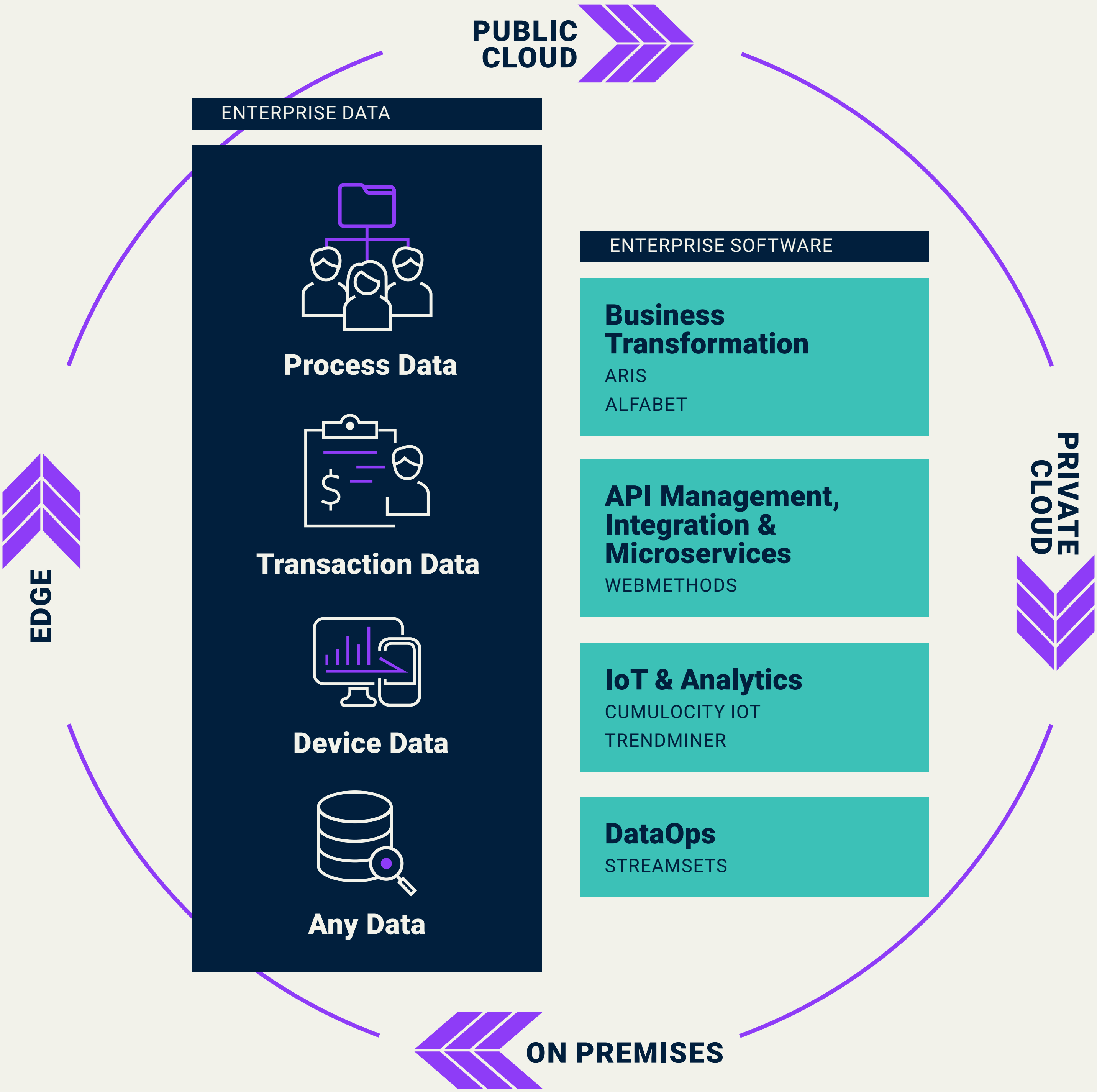
Software AG delivers integration technology for the truly connected enterprise.

Like our customers, we are transforming. We drive product development, evolve our corporate culture, and foster talent.

Our products enable our customers to create an environment in which systems integrate seamlessly, processes run effortlessly, and data moves freely. We deliver cloud-native innovation to our customers and strive for operational excellence and sustainability.

Learn how we are **Driving Integration to Connect the World.**

Choose Connectivity over Complexity



Software AG simplifies the connected world. Our technology forms the digital backbone that integrates applications, devices, data, and clouds; optimizes processes; and connects sensors, devices, and machines. Software AG empowers complete connectivity for more than 10,000 organizations around the world, laying the foundation for faster and smarter decisions.

OUR PRODUCTS

WEBMETHODS is a multi-functional integration Platform as a Service (iPaaS) that integrates systems, applications, and business processes via application programming interfaces (APIs) or direct connections in a hybrid world of cloud and non-cloud environments.

STREAMSETS delivers data integration for sophisticated analytics. This empowers enterprises to better leverage and derive value from data that moves between local applications, data streams, SaaS applications, legacy storage systems, and the cloud.

TRENDMINER is a self-service analytics tool delivering discovery, diagnostic, and predictive analytics on the operational performance of batch, grade, and continuous manufacturing processes.

ADABAS is a high-performance database management system for all platforms. **NATURAL** is the accompanying development environment and the basis of mission-critical software applications across all industries.

CUMULOCITY IOT allows companies to connect and manage devices and sensors, develop IoT apps, and leverage and analyze IoT data—at the edge, in the cloud, or on premises. The platform includes real-time streaming analytics, predictive analytics, artificial intelligence, and machine learning.

ARIS helps organizations model, document and optimize their business processes—from strategy, process mining, and analytics to design and control. In addition, **ALFABET** enables enterprise architecture mapping and therefore sound decisions about IT investments.

"We will drive productivity, efficiency, and profitable growth."

Sanjay Brahmawar has been Software AG's Chief Executive Officer (CEO) for four years. It is therefore a perfect point in time to discuss four questions and answers about the past fiscal year and his plans for the future.

SANJAY, 2022 was the fourth year of the Helix transformation, the journey to making the Company more customer-centric, sustainable, and profitable. Was there a moment that stood out to you?
Looking back over the last four years, there is a lot we can be proud of–that I am proud of. What we have achieved, especially with the challenges we faced, has created a lot of "stand-out" moments. We have transformed our Company to a growing recurring revenue business, taken all our products to the cloud, put service and people at the center of our agenda, and launched our first sustainability strategy. My personal highlight though was the acquisition of StreamSets and integrating our new colleagues. Their fast growth, combined with technology that fits perfectly with our existing hybrid integration portfolio, has enabled Software AG to enter the adjacent market of cloud data integration–a market estimated to have a 21 percent compound annual growth rate.

Transforming a +50-year-old company is not a stroll in the park. What were the main challenges last fiscal year, and how did Software AG deal with them?
Software AG continued its multi-year transformation by shifting to a subscription-based go-to-market model driven by the land, adopt, and expand approach. This required adjustments to incentives, metrics, and resources and upskilling our teams to support customer adoption and expansion. It's a journey we are still on. Alongside this shift, we continued to modernize our cloud portfolio, recognizing that competition doesn't sit still while you are transforming, so continuous innovation was and will continue to be at the top of our agenda. Despite macroeconomic turbulence, Software AG persevered and maintained forward momentum, embodying the spirit of tenacity and resilience. We remain committed to adapting and evolving in an ever-changing business landscape–because every step counts towards achieving our long-term goals.

In 2022, Software AG gained backing from the strategic investor Silver Lake. How has the partnership evolved?
It has been really exciting to have Silver Lake on board. Their level of industry and M&A expertise, vast knowledge base, and strong networks have provided us with a constant source of support. Christian Lucas and Jim Whitehurst, with their software industry experience, have been great additions to the Supervisory Board and having their advice and support has proved invaluable to me as CEO. In fact, I would describe the partnership and how it has evolved as trustworthy and dependable–whenever we need Silver Lake, they are there, and this is positively impacting how we are shaping the next phase of our transformation.

What will the next phase of the transformation look like and what will it mean for customers?
In the next strategy phase, we will intensify our focus on application and data integration and simplify our business operations even further to drive productivity, efficiency, and profitable growth. In parallel, we will continue to be laser-focused in driving financial discipline throughout the organization to mitigate the continuing impact on our cash flows and drive margin expansion. Software AG will double down on cloud, expand the ongoing shift to subscription and SaaS sales, and increase sales specialization to serve our customers even better. This will allow us to present a more powerful product proposition to our customers.

"We believe in our goals and know that every step counts."

SANJAY BRAHMAWAR
CHIEF EXECUTIVE OFFICER

Figures at a Glance

€700.2 mn

Group ARR
(2021: €585.4 mn)

4,996

employees (2021: 4,819)

333
new logos (2021: 312)

€958.2 mn
Group revenue (2021: €833.8 mn)

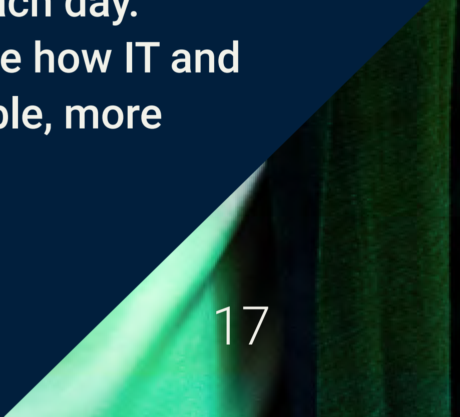
17%
improvement in Net Promoter Score (NPS)

21.2%
organic non-IFRS EBITA margin (2021: 19.6%)

89
nationalities represented by our employees (2021: 88)

Tomorrow Starts Today

Connectivity is one of the biggest topics of our times. From business to sports or science, connectivity pervades and enriches every niche of society more and more each day. The following three Software AG projects illustrate how IT and digitalization are making our lives more sustainable, more diverse, and more exciting.



Connected Racing

ERA Championship is the world's first all-electric junior formula racing series. High-tech IoT car connectivity provides data about races, car condition, and driver behavior in real time. A new age has dawned for next-gen drivers.

Electric vehicles have become commonplace and are known to glide noiselessly along the streets. Electrically powered Formula 4 cars, on the other hand, aren't so quiet. When they speed by the stands at velocities upwards of 200 kilometers per hour, spectators can barely hear themselves talk over the loud hissing and whirring. You might think you're in a science fiction movie with a fleet of spaceships about to land.

Zolder, Belgium is a good place to experience this first-hand. The world-famous racetrack is home to ERA, the Electric Racing Academy, organizer of the world's first all-electric junior racing series targeted at next-gen drivers. ERA was founded in 2020 by Beth Georgiou, Dieter Vanswijgenhoven, and Rudi Penders, and it aims to be more equitable, sustainable and, above all, better connected than the more traditional combustion race series. The first season had its debut in the summer of 2022 in cooperation with Software AG. The vehicles are the first of their kind and are equipped with the latest technologies. Each car has its own 4G hotspot, to be upgraded to 5G in the future.

"Thanks to Cumulocity IoT, we can see a lot of technical data about a car in real time like motor temperature and battery voltage."

LUCAS STRACKERJAN
TECHNICAL DIRECTOR
ERA

IOT DATA: AN ASSET FOR TECHNICIANS AND DRIVERS

ERA isn't just forging new paths on asphalt. The back office also relies on cutting-edge technologies for comprehensive IoT car connectivity. According to Lucas Strackerjan, ERA's Technical Director, "Thanks to Cumulocity IoT, we can see a lot of technical data about a car in real time like motor temperature and battery voltage." Additionally, data is collected about drivers, such as their heart rate. This data can then be used in relation to other metrics such as routing or outside temperature.

The availability of this type of data signifies enormous possibilities for further optimization of race analytics and the ability to leverage this insight advantageously. Race teams can evaluate their strategies relative to the latest IoT data and adapt them based on current situations to secure a competitive advantage. Lucas Strackerjan

> **"The way in which energy is regenerated through braking and decelerating impacts my driving style, which makes it more multifaceted."**

RICHARD MORRIS
BRITISH RACECAR DRIVER

explains, "We are currently at the first stage of a journey that will pass through at least ten stages along the way to achieving greater connectivity and obtaining, analyzing, utilizing, and sharing real-time information."

The data isn't just an asset for technicians and strategists in the pit lane. British race-car driver Richard Morris, who frequently competes for ERA, comments, "Connectivity gives us access to detailed data like what exactly is happening in a car, what input I'm entering as the driver, as well as how the car is responding to me." This is extremely useful with an electric vehicle. "Energy recuperation is a big factor," according to Morris, who also cofounded the Racing Pride initiative, which promotes LGBTQ+ inclusion in motorsports. "The way in which energy is regenerated through braking and decelerating impacts my driving style, which makes it more multifaceted."

BETTER INFORMATION EQUALS BETTER CONTROL

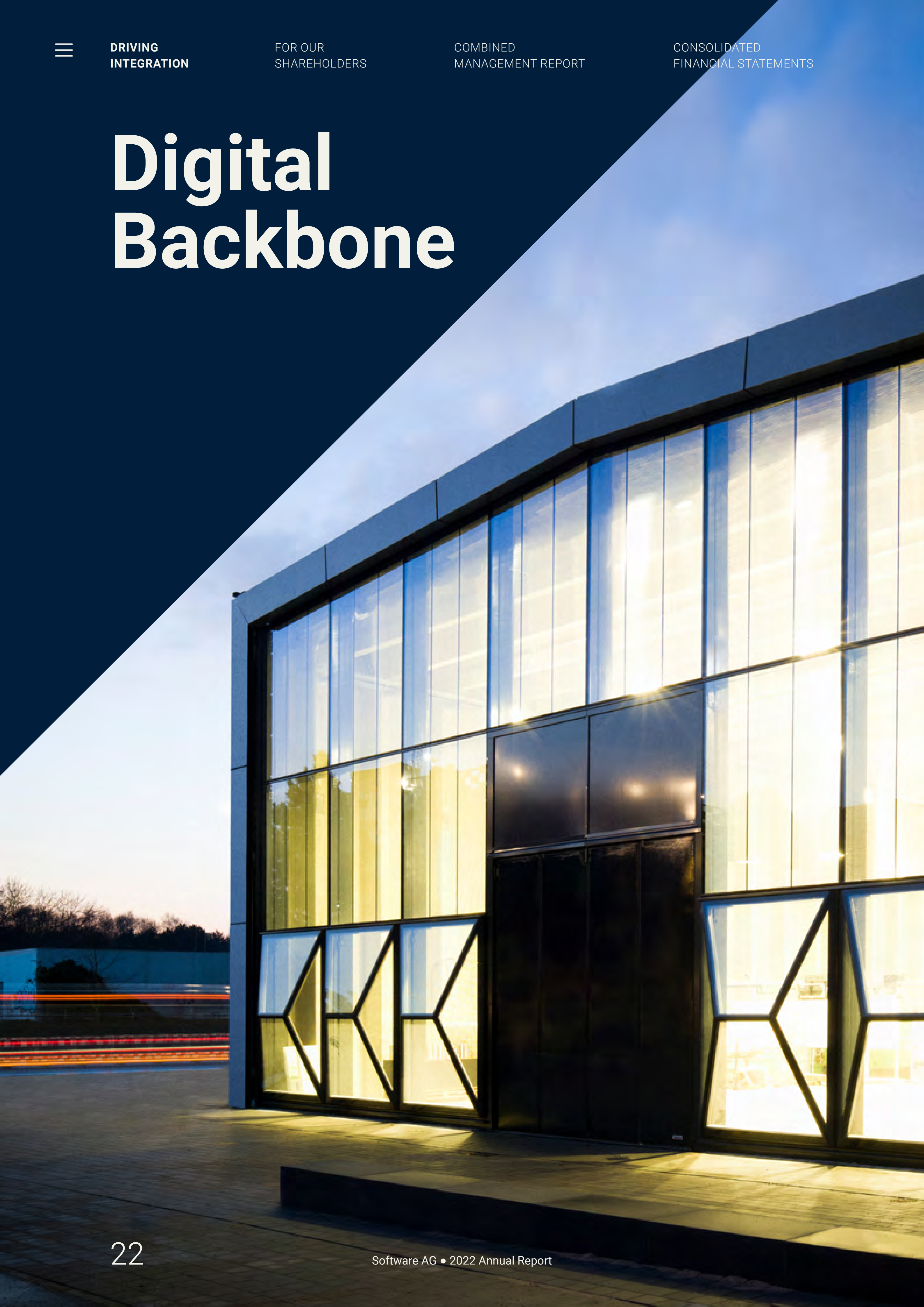
Morris is certain that the more information a driver has, the better he or she can gauge their driving experience and decide what to do in a given situation and in the next race. "Additionally, I can use the data as a basis for in-depth follow-up discussions with my mechanic. It helps us both understand what is going on and what has to happen to be even faster in the future."

Connectivity is an innovation enabler in motorsports as well. "And the journey has just begun," says Director Beth Georgiou. "I am convinced that we can bring about some really positive changes to motorsport when it comes to IoT innovation, sustainability, and diversity," adds the Brit who grew up close to the Silverstone Circuit in England. She has loved car racing for as long as she can remember. The foundation is laid. Now ERA wants to grow the ERA concept throughout Europe and then eventually expand the series to other continents.

"I am convinced that we can bring about some really positive changes to motorsport when it comes to IoT innovation, sustainability, and diversity."

BETH GEORGIOU
COFOUNDER AND DIRECTOR
ERA

Digital Backbone



Industrial companies are under enormous pressure to reduce their carbon emissions and energy consumption. The ETA Factory at the Technical University of Darmstadt, Germany, is shedding light on the role digitalization can play, in cooperation with Software AG.

"We established a process chain with different machines designed to meticulously monitor workflows and rethink factories."

MATTHIAS WEIGOLD
DIRECTOR
INSTITUTE FOR PRODUCTION MANAGEMENT, TECHNOLOGY, AND MACHINE TOOLS

The challenges facing companies today have rarely been so immense. War, crisis, the high cost of energy, and stringent emissions caps present particular hurdles in the manufacturing sector. Realizing efficient, flexible, and economical usage of production resources is therefore a top priority for most management boards, directors, and department heads. The ultimate question is how to achieve these high-stake goals and ambitions on the shop floor—where energy is necessary in day-to-day operations.

Matthias Weigold and his team of 20 scientists at the Technical University of Darmstadt's Institute for Production Management, Technology, and Machine Tools, are investigating exactly this. They work under quasi real-world conditions at the ETA Factory (ETA: Energy Technologies and Applications in Production), a specifically designed facility at the Darmstadt campus, to determine not only the necessary steps, but also the most sustainable, to increase efficiency and neutralize carbon footprint in industrial production. One focus of their research is on digitalization and how it can help

"Our digital backbone enables seamless monitoring and ongoing production optimization."

DR. STEFAN SIGG
CHIEF PRODUCT OFFICER
SOFTWARE AG

optimize operational efficiency, energy flow management, and production plant planning. Software AG is a participating research partner. According to Weigold, Director of the Institute for Production Management, Technology, and Machine Tools, "We established a process chain with different machines designed to meticulously monitor workflows and rethink factories." The institute is home to many cutting-edge concepts such as the building's outer shell. An extensive grid of water lines covers the walls and roof. Surplus energy from production processes is used to heat the building.

TRANSPARENCY THANKS TO 3,000 DATA POINTS

Control plates, like the ones used in machinery and car manufacturing, are produced at the ETA factory, and all the necessary steps are carried out by the machines such as turning, drilling, cleaning, tempering, and sanding. Ultimately, small silver steel plates the size of saucers roll off the production line. Every step is monitored and optimized digitally, in real time and with energy and resource efficiency in mind. Data from approximately 3,000 points is continually being collected, stored, and analyzed. The basis for this is provided by Software AG.

According to Dr. Stefan Sigg, Software AG's Chief Product Officer, "You can only improve something that is measured continually. Here, measuring means collecting data." He continues, "Our products are installed in the ETA Factory and are connected with the machines and components via IoT. They form the digital backbone that enables seamless monitoring and in turn ongoing optimization of the production of the control plates."

The range of data collected is broad: energy consumption, machine performance and speed, water use, sanding pressure, and cooling and hydraulic system metrics. "The exciting part begins as soon as we have data," says Sigg. "We apply process mining to production reality in the factory and by extension could use it in highly strategic areas such as an industrial company's value chain."

IMPROVEMENTS THROUGH PROCESS MINING

What findings is the project delivering? Process analytics are providing valuable insight on the timing of sanding. In the original process, sanding took place after tempering. But process mining is allowing researchers to prove in detail that the other way around is actually more efficient and model an alternative and better process with minimal effort. Applying this digital model to real-life production would pave the way to a long-term reduction in electricity consumption and better utilization of waste heat.

"For users, I see a key benefit in that this type of system doesn't require a choice between building or buying," adds Sigg. There are different applications at each architectural layer that an enterprise can deploy on an individual basis, according to specific needs and objectives. "My advice is: build AND buy! Buy the framework—the digital backbone—and on top of that, build whatever will lead your organization to its goals."

Forging the Path to a Smart Hospital

Stuart MacLellan and his team are helping shape the digital transformation of South London and Maudsley NHS Trust, Britain's oldest mental health trust part of the national healthcare system. The Chief Technology Officer (CTO) believes that, aside from technology, what counts most in digitalization are the people and the right environment that you create. Software AG is helping him achieve that.

When Stuart MacLellan bought his house in South London some years ago, he inherited a pond with red-and-white patterned koi fish from the previous owner. Since then, koi have become his favorite hobby. "I take care of them every day and make sure their living conditions are optimal to keep them healthy and happy," he says. "Care means responsibility."

This is how the 48-year-old approaches his work as well. As CTO of South London and Maudsley NHS Foundation Trust, he is responsible for around 100 specialists driving connectivity and digitalization. He clearly sees the parallels with his hobby: "I am certain that digital transformation depends first and foremost on the people, the right environment, and the right conditions you create. Good will come out of that."

"Digital transformation isn't an abstract concept. Our digital services have a real and positive impact on the lives of many people and patients."

STUART MACLELLAN
CHIEF TECHNOLOGY OFFICER
SOUTH LONDON AND MAUDSLEY
NHS FOUNDATION TRUST

THE GROWING IMPORTANCE OF MENTAL HEALTH

South London and Maudsley is an integral part of the United Kingdom's national healthcare system. With more than 5,000 members of staff, the trust offers a wide range of mental health and substance misuse services. Its hospitals and facilities serve a population of 1.3 million people, primarily providing services in four boroughs in South London. South London and Maudsley is a member of the Academic Health Sciences Center King's Health Partners and, together with King's College London, it manages the UK's only specialist National Institute for Health and Care Research (NIHR) mental health Biomedical Research Centre (BRC).

Describing the current challenges, MacLellan says, "South London and Maudsley's work and research have always been relevant, but through the pandemic, now more so than ever before." He continues, "We have seen an increase in the number of people experiencing mental health conditions. The demand for counseling and therapy continues to grow."

The NHS is facing significant challenges and is under considerable financial strain. For these reasons, it is clear to the CTO that digital technologies are key to becoming more efficient, which allows clinical staff to focus on patients and provide quality care and treatment.

"I am certain that digital transformation depends first and foremost on the people."

STUART MACLELLAN
CHIEF TECHNOLOGY OFFICER
SOUTH LONDON AND MAUDSLEY
NHS FOUNDATION TRUST

To achieve that, MacLellan and his team employ Software AG products. Bethlem Royal Hospital is the first hospital in Great Britain to have a private 5G-supported cloud. This makes it possible to fully leverage the potential of Software AG's Cumulocity IoT with a wide range of applications.

One study, for example, is examining how virtual reality can enhance the treatment of patients with eating disorders to encourage positive behavioral changes or alleviate anxiety in specific situations. IoT technology is also useful for monitoring refrigerators remotely to ensure medication is stored at optimal temperatures and maximize shelf life. Furthermore, IoT technology supports clinical staff on their rounds. With the help on a new app for tablets, they can update patient records immediately from any location. This saves valuable time and allows for more precise documentation of patient histories.

DIGITALIZATION MAKES WORK EASIER IN THE LABORATORY AT BETHLEM ROYAL HOSPITAL IN LONDON.

CLARITY, TRANSPARENCY, AND EQUITY

As part of another digital project, South London and Maudsley introduced a new blood test for the use of antipsychotics that shortens the average turnaround time for results from 10 days to just six minutes. Antipsychotics are a type of drug used primarily in the treatment of schizophrenia and obsessive or delusional behaviors. Thanks to the new test, medical staff can make fast yet clinically based decisions about a course of treatment and include the patient from the start. "According to estimates, the new procedure could potentially reduce the length of a hospital stay from three months to just three weeks," adds MacLellan.

But technology isn't everything to the CTO. Corporate and leadership cultures are just as important. When it comes to digitalization, MacLellan believes that South London and Maudsley's overarching goals must be communicated clearly and transparently to all employees to empower them to meet their sub-goals independently. That means listening closely and creating a fair and productive environment for the team.

"Of course we aren't always successful, and we have a lot of work ahead of us. But we are seeing great progress," he says. "Digital transformation isn't an abstract concept. Our digital services have a real and positive impact on the lives of many people and patients."

Six Propositions on Sustainable Enterprise Digitalization

In 2022, Software AG joined the United Nations Global Compact (UNGC), the world's largest initiative for responsible and sustainable corporate governance. We are committed to supporting and promoting environmentally, socially, and economically sustainable business practices. Business ethics professor Thomas Beschorner discusses why sustainability is becoming ever more important to companies and the role digitalization plays. The 52-year-old is the director of the Institute for Business Ethics at the University of St. Gallen, Switzerland.

1

Sustainability and digitalization go hand in hand

When it comes to sustainability and corporate social responsibility (CSR), organizations often neglect digitalization. This is shortsighted. Traditionally, CSR focuses on the impact and responsibility business activities have on/for the environment, the economy, and society. The topics of climate change and human rights are particularly important. The role of new technologies and digitalization is growing. Organizations are well advised to give these aspects greater consideration and incorporate them into their business practices—especially companies in the tech sector.

2

Corporate digital responsibility: more relevant than ever

Essentially, corporate digital responsibility (CDR) is about avoiding bad digitalization practices and realizing good products and services that are beneficial to society on a long-term basis. Secondly, the good practices must be found within the organization's core business and have a positive social impact. Good CSR and CDR are integral components of business operations and relevant to every imaginable department in a company: from Human Resources to R&D, Procurement, Marketing, and so on.

"CSR and CDR are ongoing processes. So there's no reason to think an organization's approach to them should be perfect from one day to the next."

THOMAS BESCHORNER
PROFESSOR OF BUSINESS ETHICS AND DIRECTOR OF THE INSTITUTE FOR BUSINESS ETHICS
UNIVERSITY OF ST. GALLEN, SWITZERLAND

3
Gauge consequences and ask questions

How do you differentiate between good and bad practices? This can be done systematically, by conducting professional impact assessments, and individually, by asking yourself as a software developer, a department, or a manager what impact the products you offer have on society. Put yourself in the shoes of your software users—your customers and employees. Ask yourself, would I want to be the object of this surveillance system? Or, how will my app affect children and young adults?

4
Responsible enterprises are at an advantage

Only enterprises that address the demands of society and act responsibly will prevail in the long term. All the while, a new mindset is taking hold in companies. They aren't just aiming for short-term profits anymore, but also thinking about their purpose in society. Who are we as a company? What are our values? How can we make a positive social contribution as a genuinely responsible part of this very society? These questions are essential because they show that a company takes its responsibility seriously.

5

Discuss, analyze, take a stand

CSR and CDR cannot remain abstract concepts. They have to be put into practice. I have three main recommendations for companies to accomplish this. The first step is to give serious thought to what your company's values are. Who are we and who do we want to become? The answers to these questions can be used to formulate a mission statement. The second step is to identify and prioritize specific key topics. This should happen in dialogue with stakeholders, like as part of a "stakeholder day" to which critical members of that community are invited. The third step is developing and operationalizing strategies, structures, and practices. This can include every imaginable department, organizational level, and process of a company.

6

A rewarding journey

CSR and CDR are ongoing processes. So there's no reason to think an organization's approach to them should be perfect from one day to the next. All companies will have to continue seeking good solutions, trying out different things, and experimenting with new approaches. Some will be rejected and some will be kept. This is a journey. But the direction is clear: companies must take their responsibility seriously, and strategically and structurally anchor the topic of sustainability within their business processes.

Sustainability at Software AG

Software AG's solutions, tools, and applications are designed to work together seamlessly to form the digital backbone for enterprises. This allows us to help our customers utilize their resources as efficiently and sustainably as possible and improve their energy and carbon footprint. Our products enable digital transformation which, in turn, empowers organizations to conduct business in an economically, environmentally, and socially responsible way. Our Sustainability Strategy and Sustainability Roadmap 2025 define five action areas with eight material topics—which we evaluated together with our stakeholders—that represent a holistic view of our business and its economic, social, and environmental impact. For more information, please refer to our Sustainability Strategy.
In addition, we have compiled a Guide for organizations seeking to combine sustainability and connectivity and integrate the two more seamlessly.

Change

JOAN VAN DE WETERING
MANAGING DIRECTOR
TRENDMINER, HASSELT, BELGIUM

… describes collaboration within the Culture Framework project team.
I've worked for TrendMiner, an analytics platform, since 2016. When Software AG acquired us mid-2018, I quickly recognized how rich the company's mix of cultures and skills was. For one thing, people here come from many different parts of the world. Also, like me, many of them had worked for companies that were acquired by Software AG as well. I realized that this historically traditional German company had continued evolving over 50 years by embracing fresh ideas, perspectives, and cultures! This was a surprise–a positive one–for me.

So how do we find a single framework that works for everyone when there is such a mix of styles and cultures? The Culture Framework project team I served on together with colleagues from different countries, business areas, and functions examined this question. Our vision was to offer clarity on our key drivers, values, and leadership practices that would help all employees in their work with each other as well as with customers. While we wanted to provide direction, we also wanted the framework to offer sufficient flexibility to take different cultures, individual personalities, and styles into consideration. I believe this is the Culture Framework's key message: Let it guide you, and at the same time, make it your own. Embody it, as it relates to your own experience, knowledge, and actions.

When it came to defining who Software AG is, we identified three Ps: People, Passion, and Products. Then we highlighted three I's that stand for our core values: Inclusion,

A corporate culture is defined by its employees. They make change possible by passionately driving innovation, sharing knowledge, and embracing values. On the pages that follow, three people report how they are perceiving and influencing Software AG's transformation.

Is Now!

SHIKHA AGARWAL
SOLUTIONS ARCHITECT
SYDNEY, AUSTRALIA

Integrity, and Innovation. No one must memorize the companywide meaning we assigned to these terms. Rather, we want everyone to think about them and what they mean to every individual as well as the teams. Software AG is and will always be a company of many cultures, which is fantastic. The new Culture Framework challenges and invites employees to contribute to our corporate culture, with their individual flavor based on Software AG's purpose and values.

… shares insights on her employee journey and the high-potential community.
The three things that have been instilled in my mind since I was a child are always give your best, be honest, and be curious. Born and raised in India, my global IT journey started right after my graduate degree. Integration technologies formed the basis for my career and travel and periodic relocations were part of my work life. Things changed, however, when I became a mother and my ways of life had to change.

When my former boss invited me to join Software AG, I was quite nervous about the challenge ahead. With a toddler at home and no extended family to help out, it looked like a mountain to climb. Getting to know a new product, settling at new company, and learning to sell all seemed overwhelming. However, I also felt excited about learning something new and embracing this challenge. I was off to a start enabled by the network I built within the first few months, finding the right mentors, and by just being curious. Soon, I realized that Software AG is one of a kind; a company, which provides the right ecosystem for me to grow and at the same time maintain the balance between work and motherhood.

And here I am, five years later, now relocated to Australia. Every year has been a rewarding learning curve. At Software AG, I'm part of a diverse and international high-potential community, made up of passionate and energetic individuals who have the knowledge and skills to evolve personally as well as contribute to the growth of the entire organization with their innovative ideas. As an organization which puts employees at the center, it provides channels to express as well as execute your vision. If you are eager to learn and willing to step out of your comfort zone, Software AG provides the right ecosystem for you to grow. There are opportunities all around you, so, be vigilant–and be curious.

RICK BENNETT
PARTNER ACCOUNT MANAGER
RESTON, VA, USA

… discusses his work as ambassador for diversity, equity, and inclusion.
A complete focus on customer success has always been my work mantra. We want our products to make customers happy but also to enable their success. If that is the case, customers are more likely to stay with us and refer other organizations. At Software AG, the concept of customer success has expanded significantly in recent years. But it can only be accomplished if people from different parts of the organization collaborate in project teams in which they can trust each other and passionately put forth their best.

At Software AG, we are proud of our strong corporate culture that embraces change.

I truly believe this works best when we embody diversity, equity, and inclusion—DE&I for short—in our company.

DE&I is my second mantra. These values have always been important at Software AG, but they've taken on a new dimension in the last two years. As DE&I ambassador, not a week goes by in which I don't talk about these topics with colleagues, partners, or customers.

Why are they important? Because transparent DE&I communication leads to a culture of respect and understanding. Our DE&I team organizes panel discussions and training programs to share experiences and raise awareness. We cover topics such as why diverse teams are proven to be more successful; what disabilities people may have, including those that aren't physically visible; or holidays and celebrations that are observed by different ethnicities around the world. The conversation has become more open about these subjects and many more. By being ourselves, we share our identities with our teams and build connection and community.

Openness creates a culture in which I can always show my authentic self: my skills, my traits, my identity … me as a person. I believe that this openness cultivates trust—within teams, with customers, and with partners. In this way, DE&I is becoming a cornerstone of customer success … and bringing my two mantras together beautifully!

For Our Shareholders

Letter from the CEO

The fourth quarter of 2022 marked Software AG's seventh consecutive quarter of Digital Business product revenue growth as well as the end of a fiscal year for which we delivered on our full-year guidance. The successes over four years of Helix transformation now form the basis for evolution of the strategy going forward.

DEAR LADIES AND GENTLEMEN,
DEAR SHAREHOLDERS,

On behalf of the Management Board, I am pleased to present our 2022 Annual Report. We delivered a strong fourth quarter and a full year 2022 in line with or, in the case of Adabas & Natural (A&N), ahead of our guidance ranges, despite ongoing macro challenges. Our successes are the result of four years of root-and-branch transformation and form the basis on which we will start to evolve our strategy going forward.

This evolution starts with five strategic priorities for 2023. We will double down on cloud, intensify our focus on application and data integration to leverage rising market opportunity, and increase our competitive success. We will also specialize our sales force and focus more on partnerships. Furthermore, we will increase operational efficiency to become a leaner organization. With demand for Software as a Service (SaaS) accelerating and our cloud integration portfolio going from strength to strength, these areas will be major themes. We will also scale our business efficiently, sharpen our sales execution, and deepen our commitment to cost management in the face of macroeconomic uncertainty. Doing so will help us become more efficient, productive, and profitable as we scale.

OUR 2022 PERFORMANCE: 10 PERCENT ORGANIC ARR GROWTH–CONTINUED TRANSFORMATION PROGRESS DRIVING GROWTH

During 2022, we delivered strong financial performance despite ongoing challenges in the macroeconomic environment. Organic bookings in our Digital Business saw consistent growth of 15 percent in the fourth quarter to €197.6 million, bringing full-year bookings to €478.9 million. This represented 12 percent growth year-on-year, in line with guidance. With the addition of StreamSets, our acquisition in data integration, which we closed mid-April 2022, bookings in the Group's Digital Business were €555.6 million for the full year, up 29 percent. On an organic basis, total revenue was €292.0 million in the fourth quarter and €930.8 million for the full year, representing growth of 19 percent and 6 percent respectively. With the contribution of StreamSets, Software AG reported €303.8 million in Group revenue in the fourth quarter and €958.2 million for the full year, an increase of 24 percent and 8 percent respectively. On an organic basis, product revenue saw robust growth of 24 percent in the fourth quarter to €251.4 million and was up 7 percent at €773.4 million in the full year, in line with guidance. With the addition of StreamSets IFRS revenue, Group product revenue was €261.0 million in the fourth quarter, up 28 percent and €795.6 million in the full year, an increase of 10 percent.

Annual recurring revenue (ARR), our indicator for future revenue and cash flow and now a headline guidance metric going forward, was €660.0 million on an organic basis at the end of the fourth quarter, representing 10 percent growth year-on-year. 2022 organic ARR within the Digital Business grew 11 percent year-on-year to €476.2 million, driven by SaaS where bookings grew three times faster than subscriptions. Organic recurring revenue represented 93 percent of the organic total product revenue for the full year 2022, ahead of the original Helix target of 85 to 90 percent. Including StreamSets, Group ARR within the Digital Business grew 20 percent driven by continued strong double-digit growth from StreamSets.

A&N showed subscription-led bookings growth of 144 percent in the fourth quarter to €76.3 million, bringing full-year A&N bookings to €144.5 million, an increase of 23 percent, ahead of guidance.

We saw continued robust organic profit in line with expectations in 2022, delivering an organic operating margin (EBITA, non-IFRS) of 23.1 percent in the fourth quarter and 21.2 percent for the full year, within guidance range.

CONTINUED STRENGTH IN KEY GROWTH AREAS

This strong performance reflects the continued progress we have made through our transformation in 2022. One of our key goals from the outset of the Helix program was to take a material leap forward with our cloud product portfolio to drive our future growth.

This reacceleration is being driven by the quality of our cloud offering and strong cohort of growth products—webMethods.io, ARIS cloud, Cumulocity IoT, and StreamSets—which together contribute to ARR growth in the strong double digits. This product set is driving our new business success as we won 333 new logos in 2022, representing a second consecutive record year. In the fourth quarter, our API Management and Industrial IoT products were all recognized as Magic Quadrant leaders by Gartner and our product Net Promoter Score (NPS) also reached an all-time high of +61, up from +52 in 2021.

We have seen particular strength in Integration and API Management, where customers continue to seek innovative solutions to derive value from data stored across disparate cloud and on-premises systems and applications that are not designed to work together. Our key products addressing this opportunity are webMethods.io, our cloud integration and modern API platform, and our recent acquisition, StreamSets. StreamSets has continued to grow vigorously and is driving further synergy deals, including a win with Dubai Airports in the fourth quarter, a deal building on our synergy success with G42 in the third quarter.

OUR 2023 PRIORITIES–KICKING OFF OUR NEXT PHASE OF TRANSFORMATION

With the final year of Helix upon us, we have been working hard to consolidate our plan for our next phase of growth. While our underlying demand remains robust, we are mindful of the macro environment causing lengthened sales cycles and have budgeted accordingly. The five guiding principles below inform both our 2023 plan and the mid-term view we will be sharing in detail at our Capital Markets Day later in the year. Formulating these principles has been an honest and self-critical process, identifying both our strengths and areas for improvement. Developed with the full support of our new Supervisory Board and with the input of our refreshed Management Board, they underpin our guidance for the year, and they provide a strong sense of how we envision the longer-term future of the Company.

1. **Accelerate the journey to cloud-first:** Our high-quality cloud products are driving greater-than-expected demand for cloud, with SaaS organic Digital Business bookings up 30 percent in 2022. We will prioritize specific SaaS sales motions for growth products like webMethods.io and StreamSets to capitalize on this market opportunity.

2. **Double down on innovation in integration:** The cloud data and application integration markets are growing at 21 percent, reaching €11 billion by 2026. We will direct resources to this area where we have an optimal combination of product leadership, current growth, and future growth opportunity, accelerating innovation for our leading products, webMethods.io and StreamSets.

3. **Increase sales specialization to drive efficacy and efficiency:** We will specialize our sales force to derive greater impact from our growth products, starting in North America. This will increase go-to-market efficacy and drive further sales efficiency.

4. **Leverage the value of A&N:** We will continue the ongoing shift to subscription which offers an important pathway to cloud rehosting and the interaction between A&N customers and our wider Digital Business.

5. **Optimize our operating platform:** Increasing our efficiency and productivity through a program that increases operating leverage and delivers a margin benefit of between €30 million and €35 million in 2023 and delivers further benefit thereafter. This will affect roughly 200 employees, or 4 percent of total full-time equivalents (FTE). In parallel, we will continue to be laser-focused on driving financial discipline throughout the organization as it relates to cash and cash management. As more and more of our customers consume our products through subscriptions and SaaS, we work to mitigate the continuing impact on our cash flow. We are driving the right sales behaviors, for example, around payment term negotiations and optimizing efficiency with costs overall. Our full focus is on ensuring profitable growth.

I am proud of how we finished 2022 with our performance showing we have strong momentum as we start 2023, particularly in our Digital Business, underpinned by growing demand for our cloud product portfolio.

The Management Board and I look forward to steering Software AG to our ambitions through our 2023 priorities and continuing to build our business toward sustainable, profitable, and long-term growth.

Yours sincerely,

Sanjay Brahmawar
Chief Executive Officer

For more information on the members of the Management Board, please refer to Note [34] in the Notes to the Consolidated Financial Statements.

Software AG's Share

THE YEAR ON THE STOCK MARKET

TURNING POINT FOR CAPITAL MARKETS

The Russian war of aggression against Ukraine, which began on February 24, 2022, led to economic turmoil that had an extremely adverse effect on stock markets in 2022. Russia responded to sanctions imposed by western nations by cutting the supply of natural oil and gas. That, in combination with rising grain prices, stoked inflation. To counteract upward price pressures, central banks—predominantly the US Federal Reserve—veered off course from their long-standing policy of low interest rates and raised key interest rates in several steps, in some cases sharply. This, accordingly, had an impact on capital markets.

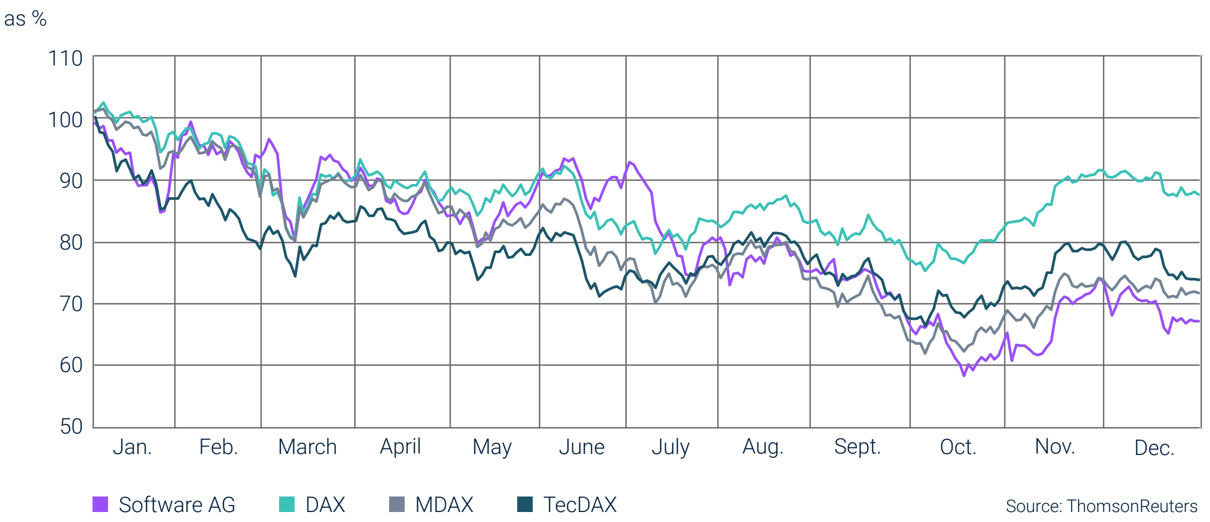
Germany's DAX® benchmark index lost 12.3 percent in the year under review, performing better than the MDAX® mid-cap index and the TecDAX® technology index in which Software AG shares were listed in the year under review.[1] The DAX started the year trading at 15,885 points and closed on December 30, 2022, at 13,924 points. In 2021, Germany's benchmark index had gained a solid 16 percent over the year.

The DAX peaked at 16,272 points on January 5, 2022, and bottomed out for the year at 11,976 points on September 29, 2022.

The MDAX was down 28.5 percent for the year, kicking off 2022 at 35,123 points. Its peak was also on

[1] On March 3, 2023, Deutsche Börse announced as part of the quarterly review of the index composition that Software AG's shares would no longer be listed in the MDAX, but in the SDAX®, effective March 20, 2023.

Stock Index Performance Comparison December 30, 2021-December 30, 2022 (indexed)



Source: ThomsonReuters

January 5, 2022, when it closed at 35,631. The year's low was 21,791 points on September 29, 2022. The MDAX closed out the year at 25,118 points.

The TecDAX recorded a 25.5 percent loss in 2022. It opened the year at 3,920 points and quickly hit its peak for the year on January 3, 2022, the first day of trading, at 3,927 points. The TecDAX also had its lowest closing price of the year on September 29, 2022, at 2,607 points. The tech index closed out the year at 2,921 points.

Selected Indexes

MDAX
TecDAX
Prime All Share
Technology All Share
HDAX
CDAX
EURO STOXX Technology
STOXX Europe 600 Technology
DAXglobal Sarasin Sustainability Germany EUR

SOFTWARE AG SHARES IN A VOLATILE MARKET ENVIRONMENT

Software AG shares also posted losses in 2022. Overall, the share price was down by 31.0 percent. It started out the new financial year at €35.08 on January 3, 2022. The full-year 2021 results which were released on January 27, 2022, resounded well with the market, and shares peaked at €34.84 on February 2, 2022. Software AG could not buck the overall downward trend following Russia's invasion of Ukraine. After an inconsistent period of stabilization from mid-March to late June 2022, things went downhill until October. Here, the adjustment of the outlook for annual bookings in the Digital Business segment came into play after the end of the second quarter. The share price bottomed out for the year on October 12, 2022, at €20.48. In the following weeks, it followed a moderate upward trajectory and stabilized at the end of the year. Software AG shares closed trading on December 30, 2022, at €24.22.

Software AG's market capitalization was €1.79 billion at the end of the 2022 fiscal year.

In Xetra® trading, Software AG saw an average volume of around 93 thousand shares per day in the 2022 stock market year.

Key Share Data

ISIN	DE 000A2GS401
WKN	A2GS40
Symbol	SOW
LEI	529900M1LIO0SLOBAS50
Reuters	SOWGn.DE
Bloomberg	SOW:GR
Listed on	Frankfurt stock exchange
Market segment	Prime Standard
Index	MDAX, TecDAX
IPO on	April 26, 1999
Issue price on April 26, 1999	€10[1]

[1] 3-for-1 split in May 2011.

Key Figures

	2022	2021
Closing price in €	24.22	35.08
Year high in €	35.32	43.48
Year low in €	20.32	31.82
Total number of shares at year-end	73,979,889	73,979,889
Treasury shares held by Software AG	20,111	20,111
Market capitalization at year-end in € millions	1,792.3	2,595.9
Free float as %	68.94	68.94

TREASURY SHARES

Unchanged from the previous year, Software AG held 20,111 treasury shares—representing 0.03 percent of its share capital—at the end of the 2022 fiscal year.

ANNUAL SHAREHOLDERS' MEETING AND DIVIDEND

Due to the lasting pandemic situation, the Annual Shareholders' Meeting was held virtually for the third year in a row in 2022. With approximately 79 percent (2021: 77 percent) of voting shares represented, attendance of the online meeting again exceeded that of the previous year. All resolutions proposed by Software AG to be voted on were approved.

The dividend for the 2021 fiscal year remained unchanged at €0.76 per no-par value share, maintaining the previous year's record level. Given an unchanged number of shares, the total disbursement sum amounted to €56.2 million (2021: €52.5 million). Based on the closing share price (December 30, 2021: €35.08), this corresponds to a dividend yield of 2.17 percent (previous year 2.28 percent).

The Management Board will propose a dividend of €0.05 per no-par value share for the 2022 fiscal year at the 2023 Annual Shareholders' Meeting. The treasury shares held by Software AG are not entitled to a dividend.

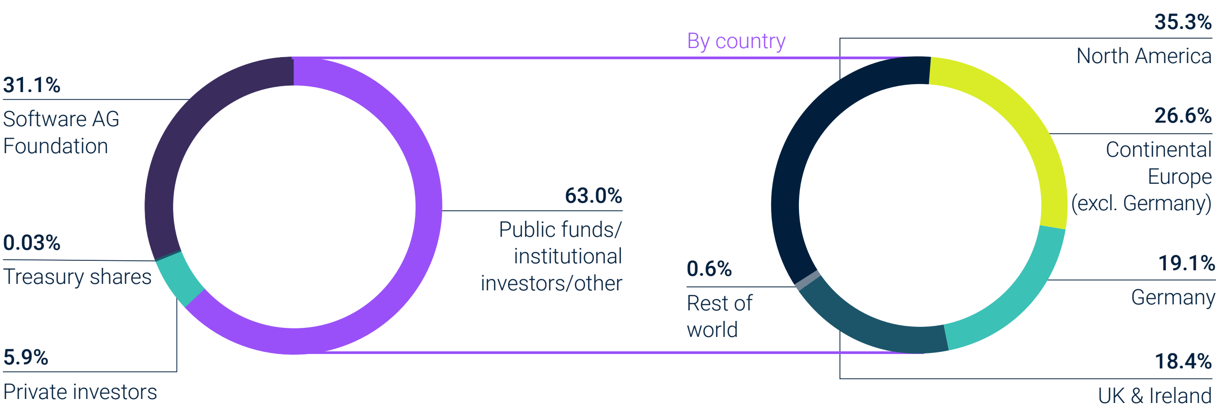
SHAREHOLDER STRUCTURE

The Software AG Foundation remains Software AG's largest shareholder and thus its key anchor investor with 31.1 percent of its share capital. The Software AG Foundation is an independent, non-profit organization under civil law based in Darmstadt, Germany. It is committed to projects that directly serve the common good. The foundation's support focuses on education, children and youth, as well as individuals with assistance needs and senior adults. Furthermore, it backs academic teaching as well as scientific and life projects in agriculture and nature conservation.

After deducting the balance held by the Software AG Foundation and shares held by the Company itself, Software AG's free float is about 69 percent. This is calculated as defined by the Deutsche Börse as the percentage of a stock corporation's shares that are not held by long-term investors and can thus be traded freely on the stock market.

A geographic analysis of the identified institutional free float shows that around 35.3 percent of Software AG shares are managed in North America, 26.6 percent in Continental Europe, 19.1 percent in Germany, and 18.4 percent in the United Kingdom and Ireland.

Shareholder Structure



Source: BD Corporate – IHS Markit, December 2022.

Because of Software AG's growth strategy, the Company increasingly appeals to long-term growth investors—especially investors in the United States experienced in the transformation of software companies. The alliance with US technology investor Silver Lake, which was announced in mid-December 2021, is therefore an ideal fit. As part of this strategic partnership, Silver Lake made a PIPE investment (private investment in public equity) in the amount of €344 million, thereby subscribing to convertible bonds which will reach maturity at the beginning of 2027 and, upon conversion, will represent around 10 percent of the current issued share capital.

ONGOING DIALOGUE WITH INVESTORS

In addition to engaging in ongoing dialogue with existing shareholders, the Investor Relations team also addresses prospective new investors. Software AG further intensified its relationship with investors and analysts having conducted approximately 280 meetings in 2022. Individual discussions took place primarily with investors from Germany, the United States, the United Kingdom, as well as France and the Netherlands. Software AG was also represented at 10 capital market conferences in Germany and abroad.

Software AG's Capital Markets Day (CMD), held on February 22, 2022, provided financial analysts, investors, and the media with the opportunity to discuss the Company's strategy with the entire Management Team. Open dialogue with investors and the financial market community enables strategic focus areas to be assessed and provides essential impetus for the Company's development. A Capital Markets Day is also planned for 2023 to continue the dialogue.

Analysts from 16 investment banks currently track Software AG and regularly publish study results. Software AG shares received a positive or neutral rating from 11 of them as of the end of 2022. Analysts' overall average price target was €28.28.

Software AG provides all members of the capital market with key up-to-date information on the Investor Relations website.

Corporate Governance Statement

BASIC UNDERSTANDING

Good corporate governance is a core component of management at Software AG. The Management Board and the Supervisory Board are bound to it, and all business lines are guided by it. Responsible, qualified, and transparent corporate governance focuses on a company's long-term success. It includes both compliance with the law and extensively following generally accepted standards and recommendations. Values such as sustainability, transparency, and value orientation are its focus. The Corporate Governance Statement in accordance with sections 289f and 315d of the German Commercial Code (HGB) is the central instrument of corporate governance reporting.

COMPLIANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE

Declaration of Compliance pursuant to section 161 of the German Stock Corporation Act (AktG) by the Management Board and Supervisory Board of Software AG, Darmstadt, on the German Corporate Governance Code (GCGC):

On January 30, 2023, the Management Board and the Supervisory Board declared that, since issuing the last Declaration of Compliance on January 25, 2022, Software AG has complied with and will continue to comply with all recommendations of the government commission's German Corporate Governance Code published by the German Ministry of Justice and Consumer Protection in the official section of the Federal Gazette, initially in the version dated December 16, 2019 (effective March 20, 2020), and subsequently in the version dated April 28, 2022 (effective June 27, 2022).

The Management Board and the Supervisory Board would like to highlight that the Supervisory Board adopted a new remuneration system for the Management Board in January 2021 and amended it in 2022; it was last approved by Software AG's Annual Shareholders' Meeting on May 17, 2022, and fully complies with the recommendations of the GCGC. The policies of the revised remuneration system shall be applicable when concluding contracts with new Management Board members or amending existing contracts with Management Board members. One current Management Board contract has not yet been adjusted to reflect the new remuneration system.

Please visit Software AG's corporate website to view the Declaration of Compliance. Declarations of Compliance from the last five years are also available there.

REMUNERATION SYSTEM AND REMUNERATION REPORT

The Management Board's remuneration system, which was adopted by the Supervisory Board and effective as of January 1, 2022, was approved at the Annual Shareholders' Meeting on May 17, 2022, by an 85.03 percent majority of the valid votes cast. This most recent remuneration resolution in accordance with section 113(3) of AktG as well as the current remuneration system are available on the corporate website at Remuneration Systems and Report. The Remuneration Report for the 2022 fiscal year and the auditor's report in accordance with section 162 of AktG are also available on the corporate website.

KEY PRINCIPLES AND PRACTICES OF CORPORATE GOVERNANCE

Compliance management system

Software AG's compliance management system is based on its risk situation and serves as part of the Software AG Global Code of Business Conduct and Ethics. The Compliance Board reports to the Management Board. It initiates and orchestrates measures to ensure strict compliance management at Software AG.

Global Code of Business Conduct and Ethics

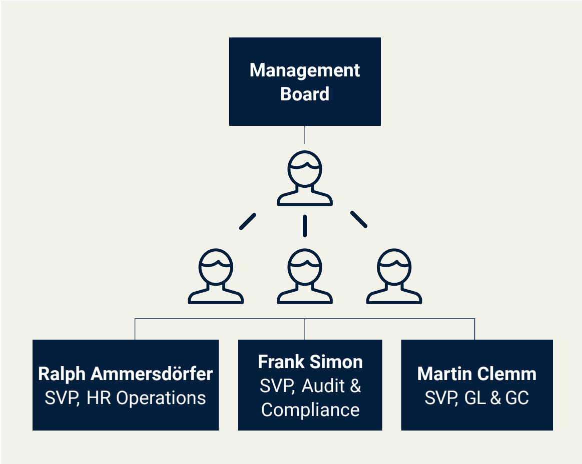
Software AG established a Code of Business Conduct and Ethics. It contains ethical standards applicable to the Company worldwide and is available on Software AG's corporate website at ESG Environment | Social | Governance. The Code was updated and revised to meet compliance requirements in 2022. The code is binding for all employees of Software AG and its subsidiaries. All employees are required to familiarize themselves with the contents of the Code of Conduct. To this end, all new staff members attend mandatory Web-based training sessions and receive certification upon completion. The revised version of the Code of Conduct is available in seven languages. In addition, Software AG has published guidelines for conduct with partners and suppliers, its commitment to upholding human rights, and anti-corruption guidelines.

Compliance Board

The Compliance Board can be contacted (anonymously if desired) about general issues as well as with information about compliance incidents. To this end, Software AG set up a system for whistleblowers at complianceboard@SoftwareAG.com.

A total of 82 (2021: 43) inquiries were filed with the Compliance Board in 2022 by employees of Software AG. Seven of them were related to information on possible compliance violations, and 75 were general compliance inquiries. The Compliance Board was comprised of the following members in the year under review:

- Ralph Ammersdörfer (Senior Vice President, HR Operations)
- Frank Simon (Senior Vice President, Audit & Compliance)
- Martin Clemm (Senior Vice President, Global Legal & General Counsel)



For more information on the Code of Conduct, the Code of Conduct for Partners and Suppliers, and the Compliance Board, please refer to the Combined Non-Financial Statement.

Open and transparent communication

Software AG communicates openly, transparently, comprehensively, and in a timely manner with all market participants. The Company held a Capital Markets Day in February 2022 and participated in numerous investor conferences, road shows, and other capital market events in the 2022 fiscal year. Due to precautions taken in connection with the COVID-19 pandemic, many of these events took place virtually.

Globally consistent corporate messaging is necessary to earn the trust of investors, analysts, and journalists. Regulatory bodies and the media review publications and press releases for consistency and to ensure compliance with laws and regulations. Software AG's communications guidelines define how it handles corporate communications. Software AG provides information to investors, analysts, and journalists in accordance with standard criteria. This information is transparent for all capital market participants.

All ad hoc disclosures, press releases, as well as presentations held at press and analyst conferences and road shows are published promptly to the Investor Relations section of Software AG's website. Planned publication dates can be found in the Financial Calendar, which is also published on the corporate website.

COMPOSITION AND PROCEDURES OF THE MANAGEMENT BOARD

The Management Board is autonomously responsible for leading the Company with the goal of sustainable value creation. The members of the Board share responsibility for management of the Company. The guidelines for the work of Software AG's Management Board are elaborated in the Rules of Procedure of the Management Board. Above all, they define the members' individual responsibilities, the tasks assigned to the Board as a whole, adoption of resolutions, and the rights and obligations of the Chief Executive Officer. The Management Board of Software AG comprised between four and six members in the 2022 fiscal year:

Sanjay Brahmawar, born in 1970 (nationality: Belgian), holds an MBA in finance and marketing from the University of Leeds (England) and a Bachelor's degree in civil engineering from Delhi College of Engineering (India), and has been Chief Executive Officer (CEO) of Software AG since August 1, 2018. His term is in effect until July 31, 2026.

Joshua Husk, born in 1974 (nationality: USA), holds a Bachelor's degree in business management from Franklin Pierce College (USA) and an MBA in global management from the Thunderbird School of Global Management (USA), and has been a member of Software AG's Management Board since August 1, 2022. As Chief Revenue Officer (CRO), he oversees Sales, Alliances & Channels, Customer Success and Renewals, Marketing, and Solution Management. His term is in effect until July 31, 2025.

Dr. Benno Quade, born in 1977 (nationality: German), holds a PhD (Dr. jur.) from Ludwig-Maximilians University of Munich (Germany), and has been a member of Software AG's Management Board since August 1, 2022. As Chief Operating Officer (COO), he oversees Customer Operations, Professional Services, IT, TrendMiner, and the Alfabet Customer Center. His term is in effect until July 31, 2025.

Dr. Stefan Sigg, born in 1965 (nationality: German), holds both a Master's degree (Diplom) and a PhD (Dr. rer. nat.) in mathematics from the University of Bonn (Germany), and has been a member of Software AG's Management Board since April 2017. As Chief Product Officer (CPO), he oversees Research & Development, Product Management, CTO Office, Cloud Operations, and Global Support. His term is in effect until March 31, 2027.

Dr. Elke Frank, born in 1971 (nationality: German), holds a PhD (Dr. jur.) from Julius-Maximilians University in Würzburg (Germany), and was a member of Software AG's Management Board from August 2019. She oversaw Global Human Resources, Talent Management and Transformation, Global Legal, and IT. Her appointment to the Management Board ended on October 31, 2022.

Dr. Matthias Heiden, born in 1972 (nationality: German), holds a Higher National Diploma in business and finance from European College of Business and Management, Suffolk College (England), a degree (Diplom) in business administration, and a PhD (Dr. rer. Oec.) both from the University of Saarland (Germany). He was Chief Financial Officer (CFO) from July 1, 2020. In that function, he oversaw Global Finance, Controlling, Corporate Development (including Investor Relations, Mergers & Acquisitions, and Post Merger Integration), Treasury, Global Services, Taxes, and Business Operations. His appointment to the Management Board ended on December 31, 2022.

Succeeding him as CFO as of the 2023 fiscal year is **Daniela Bünger**, born in 1974 (nationality: German), who holds a Bachelor's degree (Hons) from Brunel University in London (England) and is a Chartered Global Management Accountant (Chartered Institute of Management Accountants). Her term is in effect until December 31, 2025.

COMPOSITION AND PROCEDURES OF THE SUPERVISORY BOARD AND ITS COMMITTEES

The Supervisory Board appoints, monitors, and advises the Management Board. The Management Board informs the Supervisory Board without delay and comprehensively about all issues relevant to the Company, particularly strategy, planning, business development, the risk situation, risk management, and compliance. Pursuant to recommendations made by the Personnel Committee, the Supervisory Board determines a clear and comprehensible remuneration system for the Management Board, which it evaluates regularly. On that basis, it determines the specific remuneration for each Management Board member. The remuneration structure is geared toward Software AG's sustainable and long-term development and helps support its business strategy. The chair of the Supervisory Board coordinates the work of the Supervisory Board, leads its meetings, and maintains regular contact with the CEO between Supervisory Board meetings to discuss strategy, business development, the risk situation, risk management, and compliance. The CEO informs the chair without delay of any key events that are relevant to the assessment of the Company's position and performance and to the leadership of Software AG. The Supervisory Board chair then reports to the Supervisory Board and, if necessary, convenes a special meeting of the Supervisory Board. Transactions that require the approval of the Supervisory Board are listed in the Rules of Procedure of the Management Board. The Supervisory Board also meets on a regular basis without the Management Board.

Composition

The Supervisory Board of Software AG is composed in accordance with the regulations of the One-Third Participation Act. Bettina Schraudolf (substitute member: Jörg Anton) and Madlen Ehrlich were elected to the Supervisory Board in the Supervisory Board election held on October 28, 2021, in accordance with the provisions of the One-Third Participation Act. They have been in office since the outcome was announced by the main election committee on November 4, 2021. Madlen Ehrlich was elected deputy chair of the Supervisory Board.

At the Supervisory Board meeting on December 13, 2021, the chair of the Supervisory Board, Karl-Heinz Streibich, and the chair of the Audit Committee, Ralf Dieter, resigned from their positions, effective at the end of January 31, 2022. Markus Ziener ended his term as of the conclusion of the Annual Shareholders' Meeting on May 17, 2022. The Darmstadt District Court appointed Christian Lucas as member of the Supervisory Board by resolution dated January 27, 2022, and effective on February 3, 2022. The Supervisory Board elected him chair of the Supervisory Board. The Darmstadt District Court appointed Oliver Collmann as member of the Supervisory Board by resolution dated March 16, 2022, and effective on April 4, 2022. On May 17, 2022, the Annual Shareholders' Meeting confirmed Christian Lucas and Oliver Collmann as members of the Supervisory Board, and James M. Whitehurst as member of the Supervisory Board to go into effect as of January 1, 2023. A further member of the Supervisory Board is Ursula Soritsch-Renier, who was elected to the Supervisory Board by the 2020 Annual Shareholders' Meeting.

Committees

Guidelines for the work of the Supervisory Board of Software AG are described in the Rules of Procedure of the Supervisory Board. In addition to the tasks and powers of the chair of the Supervisory Board, they define the structure of meetings, the adoption of resolutions, and the formation of committees. The Management Board, Supervisory Board, and committees work together closely with the objective of sustainably enhancing Software AG's value.

The Supervisory Board established three committees to efficiently carry out its tasks: the Audit Committee, the Personnel Committee, and the Nominating Committee.

The **Personnel Committee** prepares personnel-related decisions for the Supervisory Board provided they affect the remuneration, appointment, reappointment, or dismissal of members of the Management Board. The Personnel Committee has three members. The chair of the Supervisory Board also chairs the Personnel Committee. Further Personnel Committee members in 2022 were Bettina Schraudolf (employee representative) and Ursula Soritsch-Renier (shareholder representative).

The **Audit Committee** handles issues related to accounting and the audit of interim financial information as well as the supervision of account processes, the effectiveness of the internal control system, the risk management system, the internal audit system, and compliance. The Audit Committee also handles the audit of the financial statements, in particular the selection and independence of the auditor, the quality of the audit, and the additional services provided by the auditor. The Audit Committee has three members. In 2022, the chairs were Ralf Dieter until he left on January 31, 2022, followed by Markus Ziener, and Oliver Collmann since April 2022. Further members were Madlen Ehrlich (employee representative) and Christian Lucas (shareholder representative).

The **Nominating Committee** names suitable candidates to the Supervisory Board for its proposals to the Annual Shareholders' Meeting. It consists of shareholder representatives only. The chair of the Supervisory Board also chairs the Nominating Committee. Further members in 2022 were Markus Ziener and Ralf Dieter initially, followed by Ursula Soritsch-Renier and Oliver Collmann.

Self-assessment

Members of the Supervisory Board assesses at regular intervals how effectively the Supervisory Board as a whole and its committees fulfill their duties (self-assessment). Each member completes a questionnaire to assess all areas of the Supervisory Board's work. The questionnaire contains more than 30 questions. The key aspects of the self-assessment are the composition of the Supervisory Board, the availability of information, preparation and follow-up of meetings, committee responsibilities, as well as training activities and succession planning. The Supervisory Board discusses the results of the annual self-assessment extensively and, if necessary, agrees on measures to increase its effectiveness. The Supervisory Board's self-assessment was initiated in the December meeting of 2021, and the results were evaluated in its meeting on January 25, 2022. The overall assessment of the Supervisory Board's activities and work was good, particularly regarding information, the frequency of meetings, discussions at meetings, and onboarding support. Measures discussed by the Supervisory Board were implemented in the 2022 fiscal year. A self-assessment was initiated again in December 2022.

Training and professional development

Supervisory Board members are responsible for completing any training necessary to perform their duties. Such topics may include regulatory changes or new and innovative technologies. The Company supports them in these activities. In the case of regulatory changes that are of particular relevance to the Supervisory Board or the Company, training is provided by internal and external experts. Internal information sessions are offered for the purpose of training in specific topics.

Software AG supported and supports members of the Supervisory Board during their onboarding process. For example, new members of the Supervisory Board met with Management Board members to discuss general and current topics specific to each role on the Management Board and to the Company. In addition, new members participated in external training events. Furthermore, information on changed governance requirements was provided during meetings.

For more information on the Supervisory Board's work and its committees, please refer to the Report of the Supervisory Board. For more information on the current members of the Supervisory Board, including their curricula vitae and committee membership, please visit the corporate website at Software AG Leadership and Corporate Governance. The CVs are updated regularly—at least once per year.

TARGET PERCENTAGES FOR WOMEN PURSUANT TO SECTIONS 76(4) AND 111(5) OF AKTG

In its meeting on February 28, 2022, the Supervisory Board stipulated 33.33 percent as the target percentage for female members of the Supervisory Board (two of six Supervisory Board members as of the resolution adoption) and 25 percent of the Management Board (one of four Management Board members as of the resolution adoption). The deadline for meeting this target is the end of May 2025. The Supervisory Board's composition exceeded its target by 26.67 percentage points (three of five members) as of December 31, 2022. The Management Board's composition did not meet its target as of December 31, 2022.

Pursuant to section 76 IV of AktG, the Management Board defined targets for the share of women in the first and second tiers below the Management Board in its meeting on January 14, 2022: 22.7 percent in the first tier below the Management Board (five of 22 people as of the resolution adoption) and 24.1 percent in the second tier below the Management Board (14 of 58 people as of the resolution adoption).[1] The deadline for meeting this target is the end of May 2025. As of December 31, 2022, the share of women in the first tier of management below the Management Board was 13.6 percent (three of 22 people) and 19.6 percent in the second tier below the Management Board (10 of 51 people).

DIVERSITY CONCEPT, COMPOSITION TARGETS, AND SKILLS AND EXPERTISE PROFILE

The Supervisory Board believes that diversity is critical to Software AG's successful development. Promoting diversity in the Company, specifically when appointing members of the Supervisory and Management Boards, is an important factor in ensuring Software AG's sustainable success. The concept covers age and term caps, gender quotas (as described in Target Percentages for Women), and the explicit need to establish a sensible and broad mix of backgrounds with respect to education and experience (professional experience), as well as international experience and cultures on the boards.

Management Board

The Supervisory Board established an age cap of 65 as well as a percentage of female members (see Target Percentages for Women) on the Management Board. The Supervisory Board does not see a reason to define a rigid diversity concept for the Management Board. The Personnel Committee regularly evaluates the composition of the Management Board and compares the skills and experiences represented in the Management Board with its current requirements. It is the judgment of the Personnel Committee of the Supervisory Board as to how the results of this comparison are handled. The objective of the process is to achieve the best possible skill and experience representation in the Management Board based on the current and future business situation.

[1] The relevant employees are those of Software AG (not of the Group).

Succession planning

The Supervisory Board, in cooperation with the Management Board and with the assistance of the Personnel Committee, is responsible for succession planning on the Management Board. When a successor is needed, the Personnel Committee considers quality and mandate requirements as well as composition targets, before creating an ideal candidate profile. Available candidates are shortlisted based on this profile. If necessary, the Supervisory Board or the Personnel Committee may employ the services of external consultants in creating a requirements profile and selecting candidates. Structured interviews are conducted with candidates before a recommendation is submitted to the Supervisory Board for a vote. The chair of the Supervisory Board, who also chairs the Personnel Committee, regularly discusses suitable candidates with the Management Board.

Supervisory Board

The composition of the Supervisory Board has to ensure that its members collectively possess the knowledge, skills, and professional expertise required to properly perform their duties. Software AG's Supervisory Board defined diversity-related targets for its members and created a skills and expertise profile for the body as a whole.

Unless there are sound reasons warranting otherwise, members of Software AG's Supervisory Board should be appointed only for terms of office ending no later than at the end of the Annual Shareholders' Meeting following the 75th birthday of the Supervisory Board member (target age cap, see section 9(3) of the Articles of Association).

Nominations of candidates to be elected to the Supervisory Board should take into consideration a maximum term of 15 years.

At least one member of the Audit Committee must have expertise in the field of accounting and at least one other member of the Audit Committee must have expertise in the field of auditing (financial experts). The expertise in the field of accounting shall consist of special knowledge and experience in the application of accounting principles and internal control and risk management systems, and the expertise in the field of auditing shall consist of special knowledge and experience in the auditing of financial statements. Accounting and auditing also include sustainability reporting and its audit and assurance. The chair of the Audit Committee shall have appropriate expertise in at least one of the two areas.

The Supervisory Board deems three independent members representing shareholders to be appropriate.

The Supervisory Board set itself the target of women constituting 33.33 percent of the Supervisory Board (see Target Percentages for Women).

Supervisory Board members as a whole must be familiar with the sector in which the Company operates (enterprise software). The Supervisory Board considers the following competencies and skills to be essential to the fulfillment of its mandate (skills and expertise profile):

1. Members' professional backgrounds should be in one or more of the following fields:
   a) Sector familiarity: ICT, similar fields, direct or indirect experience with enterprise IT, and/or understanding of digitalization and enterprise software solutions
   b) Management experience: current or former CEO, CTO, or CRDO of a technology company
   c) Knowledge of the economic and technical demands of a medium-sized company
   d) Human resources: knowledge and experience in human resources management
   e) CSR/ESG: expertise regarding sustainability issues relevant to the enterprise
   f) Investor relations: experience dealing with investors, analysts, and shareholders of listed companies
2. International experience, especially at a global company, and in dealing with customers and in various markets.

The goal of this interplay between the diversity concept, the skills and expertise profile, and composition targets is to ensure that the composition of the Supervisory Board—always taking into account current business and strategic priorities—is as broadly based as possible in terms of experience so that the Supervisory Board members, in forming their opinions from their diversity, can make the best possible decisions for Software AG when monitoring and advising the Management Board.

Qualification Matrix

	Christian Yannick Lucas	Oliver Collmann	Madlen Ehrlich	Bettina Schraudolf	Ursula Soritsch-Renier	James M. Whitehurst
Member since	**2022**	**2022**	**2021**	**2021**	**2020**	**2023**
Diversity						
Gender	male	male	female	female	female	male
Year of birth	1969	1979	1981	1960	1967	1967
Nationality	French	German	German	German	Austrian	USA
Education	Master of business administration	Business administration (Diplom)	International business administration	Business information systems (Diplom)	Master of philosophy, minor in informatics	Master of business administration
Independence	+	+	Employee representative	Employee representative	+	+
Professional competence						
Financial expert	+	+				+
Sector familiarity	+		+	+	+	+
Management experience	+				+	+
Demands of medium-sized companies	+	+	+	+	+	+
Human resources	+		+	+		+
Sustainability	+	+	+	+	+	+
Investor relations	+					+
International experience	+	+			+	+

Implementation status / qualification matrix
The Supervisory Board considers its diversity concept and skills and expertise profile as well as its specific composition targets to be met.

Independence: In the estimation of the Supervisory Board, all shareholder representatives are independent in accordance with the criteria of the GCGC. They consisted of the former chair Karl-Heinz Streibich and the current chair Christian Lucas, as well as former members Ralf Dieter and Markus Ziener, and current members Ursula Soritsch-Renier and Oliver Collmann as well as, from 2023 on, James Whitehurst. Based on attendance numbers from the last three Annual Shareholders' Meetings, the Supervisory Board determined that Software AG does not have a controlling shareholder with a sustainable Annual Shareholders' Meeting majority. The Supervisory Board does not consider Markus Ziener's employment with the Software AG Foundation to be a dependency. Karl-Heinz Streibich had been a member of the Management Board of the Company nearly two years prior to his election to the Supervisory Board. The two-year cooling-off period, however, was almost complete with 36 days until the election. Additional factors reflecting no dependencies are that all seats on the Management Board have been filled with new members since April 2017, and Software AG does not maintain direct or indirect business relationships with any members of the Supervisory Board. Ralf Dieter was CEO of Dürr AG until end of 2021. Dürr AG Group companies are Software AG customers. Software AG and the Dürr Group, as well as other companies, cofounded ADAMOS GmbH. All partners in ADAMOS GmbH have a 12.5 percent share in the company. The Supervisory Board considers both the scope of customer relationships and Software AG's share in ADAMOS GmbH to be immaterial business relationships. Furthermore, no mutual consulting agreements or other contracts for work or services exist.

Christian Lucas is Managing Director and James Whitehurst is Special Advisor of Silver Lake. Investment funds affiliated with Silver Lake have subscribed to convertible bonds in Software AG entitling it to convert into up to 7.4 million shares (corresponding to up to 10 percent of currently outstanding shares, or 9.09 percent taking into account the dilutive effect). In addition, Silver Lake entered a management advisory agreement with Software AG whereby Silver Lake shall provide management advisory services to Software AG at no cost other than the reimbursement of out-of-pocket expenses. In the opinion of the Supervisory Board, the two contractual relationships do not diminish the independence of Christian Lucas and James Whitehurst.

Financial experts: The Supervisory Board members in the 2022 fiscal year Ralf Dieter, Markus Ziener, Oliver Collmann, and Christian Lucas, as well as from 2023 on, James Whitehurst, have expertise in the field of accounting and in the field of auditing due to their respective professional experience. Markus Ziener has been Chief Financial Officer of the Software AG Foundation for many years and was previously the chair or a member of Software AG's Audit Committee. After having worked as a strategy consultant, Christian Lucas worked as an investment banker. Since joining Silver Lake in 2010, he has held numerous positions on comparable foreign supervisory bodies, also deepening the knowledge of accounting and auditing acquired during his studies and professional activities. Oliver Collmann has in-depth knowledge in the field of accounting and auditing due to his education and many years of professional activity in auditing companies. The experience James Whitehurst brings from his leadership positions also includes extensive financial expertise. During his time at Delta Air Lines, he oversaw the company's recovery and led it out of bankruptcy, deepening his expertise in accounting and auditing.

Sustainability: Software AG identified the sustainability issues that are significant for the Company in five action areas and reported on them for fiscal year 2021 in the Combined Non-Financial Statement (Sustainability Report).

1. Leadership and Corporate Governance with a focus on sustainable economic growth, information security, and data protection.
2. Our Employees with a focus on Software AG's corporate culture, diversity, and employer attractiveness.
3. Customers and Technology: sustainability depends in particular on the quality of products and services, innovative solutions to problems, and other effects of products on customers.
4. Value for Society through Tech for good: Software AG is committed to increasing digital skills in society and participates in collaborative research projects that contribute to social, environmental, or economic improvements.
5. Impact on Environment: energy and the reduction of the Company's CO_2 emissions are particularly important for Software AG.

Each member of the Supervisory Board contributes specific expertise on the sustainability issues of importance to Software AG. The Supervisory Board as a whole has the skills and expertise to advise and oversee the Management Board in the key five action areas and to monitor how environmental and social sustainability is taken into account in strategic direction and corporate planning.

ADDITIONAL INFORMATION ON CORPORATE GOVERNANCE

Shareholders and the Annual Shareholders’ Meeting

The **Annual Shareholders’ Meeting** is one of Software AG's main corporate bodies. Shareholders can exercise their rights and their voting rights at the Annual Shareholders' Meeting. Software AG invites its shareholders to participate in its Annual Shareholders’ Meeting. Important decisions are made at the meeting, including ratification of the actions of the Management and Supervisory Boards, election of shareholder representatives and external auditors, amendments to the Articles of Association, and capital measures, intercompany agreements, and transformations. Furthermore, shareholders decide on the appropriation of profits. They decide, in an advisory capacity, on the approval of the Management Board remuneration system presented by the Supervisory Board, on the Supervisory Board’s specific remuneration and, in a recommendatory in capacity, on the approval of the Remuneration Report for the preceding fiscal year. In accordance with a binding financial calendar, shareholders are informed regularly (four times per year) of Software AG’s business development, financial performance, assets and financial position.

Due to restrictions associated with the COVID-19 pandemic, the Annual Shareholders’ Meeting took place virtually on May 17, 2022, in an effort to minimize the pandemic’s impact. Approximately 79 percent of voting shares were present. The next Annual Shareholders' Meeting is scheduled for May 17, 2023.

Pursuant to the suggestion of the GCGC, Software AG conducts the Annual Shareholders’ Meeting in an expedient manner, preferably within four hours. All duly submitted questions were addressed and answered at the Annual Shareholders' Meeting held in the year under review. The CEO’s presentation was published on the corporate website in advance to help shareholders submit relevant questions. Shareholders had the option of voting by mail (including email) and by way of Company-appointed proxies bound by shareholder instructions. The invitation to the Annual Shareholders’ Meeting is published on Software AG’s website at Annual Shareholders' Meetings as well as voting results and presentations from past Annual Shareholders' Meetings.

Financial reporting and auditing

The 2022 Annual Shareholders' Meeting elected Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich (hereinafter: Deloitte GmbH), as **Software AG auditor**.

Non-audit services subject to approval may only be rendered by the auditor if and to the extent they have been approved by the Audit Committee in accordance with the legally binding approval process. No business, financial, personal, or other relationships that could cast doubt on the independence of the audit firm have existed at any time.

Pursuant to the Annual Shareholders' Meeting resolution, the Supervisory Board, represented by the chair of the Audit Committee, appointed the auditor and agreed on the fee. In connection with the awarding of the contract, the chair of the Audit Committee also agreed with the auditor to comply with the reporting duties pursuant to the GCGC. The auditor participates in meetings of the Supervisory Board's Audit Committee concerning the financial statements and Consolidated Financial Statements and reports on key audit findings.

MANAGERS' TRANSACTIONS PURSUANT TO ART. 19 OF THE MARKET ABUSE REGULATION (MAR)

Personal share transactions conducted by persons discharging managerial responsibilities and by those related to them (natural or legal) are disclosed on the corporate website at Managers' Transactions. One transaction subject to mandatory disclosure was reported in the 2022 calendar year.

Report of the Supervisory Board

DEAR LADIES AND GENTLEMEN, DEAR SHAREHOLDERS,

Aside from the challenges the COVID-19 pandemic continued to present during the past year, Software AG's 2022 fiscal year was shaped by the acquisition of StreamSets and changes to the Management Board to set up the Company for long-term success. The Supervisory Board helped the management team to carefully evaluate and execute the highly complementary StreamSets acquisition, the Company's first major acquisition in recent years, and strengthened the management team and the Company's go-to-market capabilities to further boost growth by hiring a new CFO and US-based CRO and promoting internal talent to the new COO position in the Management Board. This was a core focus for the Supervisory Board, in addition to actively supporting the management team with prudence and constructive criticism.

Christian Lucas
Chair of the Supervisory Board

COOPERATION BETWEEN THE MANAGEMENT BOARD AND SUPERVISORY BOARD

In the 2022 fiscal year, the Supervisory Board performed its duties as required by law and by the Company's Articles of Association. It advised the Management Board in leading the Company and supervised its management. In doing so, the Supervisory Board was directly involved in all decisions of fundamental importance to Software AG. Via oral and written reports, the Management Board informed the Supervisory Board regularly, without delay, and comprehensively about all issues relevant to strategy, business development, the risk situation, risk management, and compliance, and was available to the Supervisory Board in meetings for questions and discussions. Departures in the current business development from existing projections were addressed in detail. The Supervisory Board also received regular reports outside of meetings on financial KPI development, staff development, corporate governance, and the sustainability strategy.

The Supervisory Board chair maintained regular contact with the CEO. They consulted regularly on Software AG's strategy, planning, business development, risk situation, risk management, and compliance. The CEO informed him without delay of major events. The relationship between the Management Board and Supervisory Board was characterized by close, trusting cooperation, and an open, constructive dialogue.

The Supervisory Board's discussions covered topics such as the acquisition and integration of StreamSets as well as Management Board composition and succession planning. Together, the Supervisory Board and the Management Board thoroughly analyzed ongoing business development. Any transactions requiring Supervisory Board approval in accordance with legal regulations or the Articles of Association, were reviewed and voted on accordingly. Documents relevant to decisions were provided to the Supervisory Board in due time before the relevant meeting. The Supervisory Board voted on resolutions following extensive evaluation and consideration and based on decision papers and conversations. After having carefully monitored the Management Board's leadership, the Supervisory Board confirms that it acted lawfully, appropriately, and economically in every respect.

SUPERVISORY BOARD MEETINGS

The Supervisory Board met eight times in the year under review. Of those, seven were held as video conferences. If a member of the Supervisory Board was unable to attend a Supervisory Board or committee meeting, he or she had the option of participating via telephone or casting a vote in writing. This was only necessary for three members who were excused from attending specific meetings. Otherwise, all other members of the Supervisory Board attended the meetings of the Supervisory Board and its committees during the year under review. The Supervisory Board met regularly without the Management Board. When the external auditors were invited to meetings to provide expertise, the Management Board only attended when the Supervisory Board or the committee considered its attendance necessary.

The following table illustrates members' attendance of meetings of the Supervisory Board and its committees held in the 2022 fiscal year.

In its **first three meetings** of the fiscal year, held in **January and February 2022**, the Supervisory Board approved the Declaration of Compliance with the German Corporate Governance Code (GCGC) and the Corporate Governance Statement. It also conducted the self-assessment on the effectiveness of the Supervisory Board's and committees' fulfillment of their tasks. Further discussion points were the changes in the Supervisory Board, finalization of the budget, and targets for members of the Management Board for the 2021 and 2022 fiscal years. The acquisition of StreamSets was also a key topic.

At the accounts meeting on **March 18, 2022**, in presence of the external auditor, BDO AG, the 2021 financial statements and Consolidated Financial Statements were discussed in detail and subsequently, at the recommendation of the Audit Committee following its own thorough review, approved by the Supervisory Board. Furthermore, at this meeting, the Supervisory Board informed itself of current business developments, including considerations related to the war against Ukraine and sanctions against Russia; it approved the Report of the Supervisory Board as well as resolution proposals for the Annual Shareholders' Meeting agenda.

In **two meetings in May 2022**, the Supervisory Board closely examined the composition of, succession planning for, and changes in the Management Board, as well as the Management Board's remuneration system. In addition, current business development and financial results were discussed.

The main topics of the two **meetings held in September and October 2022** were business development and corporate strategy as well as the composition of the Management Board. In addition, the results of the second quarter of 2022 and the outlook for the second half of 2022 were discussed.

Supervisory Board Meetings in 2022

	Plenum		Personnel Committee		Audit Committee		Nominating Committee	
Supervisory Board Member	Attendance	as %	Attendance	as %	Attendance	as %	Attendance	as %
Karl-Heinz Streibich, chair (until Jan. 31, 2022)	1/1	100	1/1	100				
Christian Yannick Lucas, chair (since Feb. 3, 2022)	7/7	100	1/1	100	2/3	67	1/1	100
Madlen Ehrlich, deputy chair	8/8	100			3/3	100		
Ralf Dieter (until Jan. 31, 2022)	1/1	100						
Oliver Collmann (since April 4, 2022)	5/5	100			2/2	100		
Bettina Schraudolf	8/8	100	2/2	100				
Ursula Soritsch-Renier	7/8	88	2/2	100			1/1	100
Markus Ziener (until May 17, 2022)	2/4	50			1/1	100	1/1	100

COMMITTEES

In order to efficiently perform its duties, the Supervisory Board established a Personnel Committee, an Audit Committee, and a Nominating Committee. The committees prepare the Supervisory Board's resolutions and topics to be discussed by the plenum. Decision-making powers are transferred to the committees to the extent allowable. The respective committee chairs report to the Supervisory Board about the results of the respective committee meetings. For more information on the composition and procedures of the Supervisory Board and its committees, please refer to the Corporate Governance Statement which is published on Software AG's website.

The **Personnel Committee** prepares personnel-related decisions for the Supervisory Board, provided they affect Management Board member remuneration policies or appointment decisions. The Personnel Committee held two meetings the 2022 fiscal year, both as video conferences. These dealt with personnel-related matters on the Management Board and the preparation of Supervisory Board decisions. Given multiple changes to the Management Board during the year, most personnel-related topics were discussed directly with the full Supervisory Board to ensure all members were fully involved.

The **Audit Committee** deals with issues related to monitoring the financial reporting process, the effectiveness of the internal control system, the risk management system, internal audit and compliance, the financial statement audit—particularly the selection and independence of the auditor—as well as the quality of the audit and any additional services rendered by the auditor. The Audit Committee also prepares the Supervisory Board's discussions and resolution adoptions to approve the annual and Consolidated Financial Statements. The Audit Committee met three times in the 2022 fiscal year; two of the meetings were held as video conferences. In a meeting on March 17, 2022, and in the presence of auditors (BDO AG), it discussed the annual and Consolidated Financial Statements, the Combined Management Report (including the Non-Financial Statement), the Management Board's proposal on the appropriation of profits, the selection and independence of the auditor for fiscal 2022, and the Supervisory Board's respective resolution recommendation to the Annual Shareholders' Meeting. It also dealt with the quality of the audit. The Audit Committee also informed itself of the internal audit and of compliance matters at this meeting. The Audit Committee's other meetings in 2022 focused on important audit topics, non-audit services, and the independence of the auditor, as well as compliance. In addition, information about current developments within the corporate governance framework was provided; and the Risk Report was submitted. The auditor attended meetings to discuss relevant issues. The Audit Committee consults regularly with the external auditors without the Management Board.

The task of the **Nominating Committee** is to name suitable candidates to the Supervisory Board for its proposals to the Annual Shareholders' Meeting. The Nominating Committee held one meeting in the 2022 fiscal year, as a video conference, in which it discussed candidates for election to the Supervisory Board at the 2022 Annual Shareholders' Meeting and formulated a recommendation to the Supervisory Board.

AUDIT OF THE FINANCIAL STATEMENTS AND CONSOLIDATED FINANCIAL STATEMENTS

The Supervisory Board awarded the audit contract for Software AG's financial statements and Consolidated Financial Statements for fiscal 2022 to Deloitte GmbH Wirtschaftsprüfungsgesellschaft, Munich (referred to hereinafter as Deloitte GmbH), in accordance with the corresponding election at the Annual Shareholders' Meeting. Deloitte GmbH audited Software AG for the first time in 2022.

Deloitte GmbH audited the financial statements and Consolidated Financial Statements for the year ended December 31, 2022, as well as the Combined Management Report, including accounting books and records. The auditor issued unqualified audit opinions. Since the audit of the 2022 financial statements and the Consolidated Financial Statements by Deloitte GmbH, the signers of the audit opinions are Kirsten Gräbner-Vogel, who is responsible for the audit, together with Dr. Steffen Umlauf (financial statements) and Sebastian Zandt (Consolidated Financial Statements); in each case, the Combined Management Report was included. In accordance with section 111(2), sentence 4 of AktG, the Supervisory Board commissioned Deloitte GmbH to also conduct a voluntary content review of the Combined Non-Financial Statement to attain a limited level of assurance.

The financial statements and Consolidated Financial Statements, the Combined Management Report (including the Combined Non-Financial Statement), and the auditor's reports were submitted to the Supervisory Board and explained personally to the Audit Committee and the entire Supervisory Board by the Management Board and the auditor responsible for conducting the audit. Deloitte GmbH's report on the limited assurance review of the Combined Non-Financial Statement and the Management Board's proposal on the appropriation of profits were communicated to all Supervisory Board members. The Audit Committee and Supervisory Board reviewed the financial statements, the Combined Management Report, and the audit reports in their meetings on March 22, 2023. In both meetings, the auditor reported on the scope, the focus, and the key results of the audit, emphasizing the particularly important audit matters and audit actions taken. The auditor was available to answer questions and provide additional information. No reservations were raised at the conclusion of the Supervisory Board's review. The Supervisory Board confirmed the results of the audit, concurred with the Management Board's judgment regarding the assessment of the Group's and parent Company's position, and approved the financial statements and Consolidated Financial Statements as of December 31, 2022. This constituted formal approval and acceptance of the annual financial statements. The Supervisory Board supports the Management Board's recommendation on the appropriation of profits.

The Remuneration Report was reviewed separately by the auditor. In addition to the legally required formal review in accordance with section 162(1 and 2) of AktG, the content of the Remuneration Report was also reviewed. For more information on the Remuneration Report, please refer to the corporate website at: Remuneration Systems and Report.

CORPORATE GOVERNANCE

The Supervisory Board addressed the subject of corporate governance and the GCGC again in the 2022 fiscal year, particularly the amendments effective as of June 27, 2022.

No conflicts of interest on the part of members of the Supervisory Board arose in the year under review.

A detailed report by the Management Board and the Supervisory Board on implementation of the GCGC can be found in the Corporate Governance Statement. The Declaration of Compliance is published on the corporate website.

CHANGES TO THE MANAGEMENT BOARD AND SUPERVISORY BOARD

As of August 1, 2022, Joshua Husk, CRO, and Dr. Benno Quade, COO, became members of the Management Board.

Dr. Elke Frank, CHRO, decided to leave the Company as of October 31, 2022, to pursue other opportunities. Sanjay Brahmawar, CEO, assumed responsibility for the Human Resources organization. His appointment to the Management Board as well as his contract were renewed for three years until July 31, 2026. Dr. Matthias Heiden, CFO, decided to leave the Company as of December 31, 2022. His successor as of January 1, 2023, is Daniela Bünger.

The chair of the Supervisory Board, Karl-Heinz Streibich, and the chair of the Audit Committee, Ralf Dieter, submitted resignations from their positions, effective at the end of January 31, 2022. The Darmstadt District Court appointed Christian Lucas as member of the Supervisory Board by resolution dated January 27, 2022, and effective on February 3, 2022. The Supervisory Board elected him chair of the Supervisory Board. The Darmstadt District Court appointed Oliver Collmann as member of the Supervisory Board by resolution dated March 16, 2022, and effective on April 4, 2022. On May 17, 2022, the Annual Shareholders' Meeting confirmed Christian Lucas and Oliver Collmann as members of the Supervisory Board, and James M. Whitehurst as member of the Supervisory Board to go into effect as of January 1, 2023.

For more information on the composition of the Management Board and Supervisory Board, as well as on training and professional development options for members of the Supervisory Board, please refer to the Corporate Governance Statement on the Software AG corporate website.

The Supervisory Board would like to thank Software AG's Management Board and employees for their high degree of commitment and excellent work during fiscal year 2022.

Darmstadt, March 22, 2023

The Supervisory Board

Christian Lucas

Christian Lucas
Chair of the Supervisory Board

For more information on the members of the Supervisory Board, please refer to Note [34] in the Notes to the Consolidated Financial Statements or visit Software AG's website at Management.

Combined Management Report

Fundamental Aspects of the Group

ORGANIZATION AND GROUP STRUCTURE

LEGAL CORPORATE STRUCTURE

The Software AG Group is managed globally by the parent Company, Software Aktiengesellschaft (for short: Software AG), in its role as a holding company. The financial position of Software AG is shaped by the financial position of the Group. For this reason, the Management Board of Software AG prepares one Combined Management Report for the Group and for Software AG. Unless otherwise stated, “Software AG” will hereinafter refer to the Software AG Group.

Software AG was founded on May 30, 1969, in Darmstadt, Germany. It has been listed on the Frankfurt Stock Exchange since April 26, 1999.

Software AG has control and profit transfer agreements with its four German subsidiaries: SAG Deutschland GmbH, SAG Consulting Services GmbH, Cumulocity GmbH, and SAG LVG mbH. Otherwise, the Group is structured as a matrix organization reflected in its reporting lines, global policies, and committees. The Software AG Group currently consists of 72 affiliated companies. Software AG’s scope of consolidation is outlined in Note [3] of the Notes to the Consolidated Financial Statements.

MAJOR LOCATIONS

As a globally active Group with a far-reaching sales and partner network, Software AG strives to maintain proximity to its customers by serving customers in more than 70 locations worldwide. The Company's corporate headquarters are located in Darmstadt, Germany. Its largest locations by employee numbers are in Germany, India, the United States, Israel, Bulgaria, the United Kingdom, and Malaysia. Software AG is positioning itself both in established as well as in emerging and high-potential regions as part of its global geographic strategy.

As of December 31, 2022, Software AG employed 4,996 (2021: 4,819) full-time equivalents around the world, which represents an increase of 4 percent compared to the previous year. The employees are separated into four business areas: Research & Development (R&D), Support and Services, Sales and Marketing, and Administration. Software AG's global staff was distributed according to country and function as follows:

Headcount by Country and Function

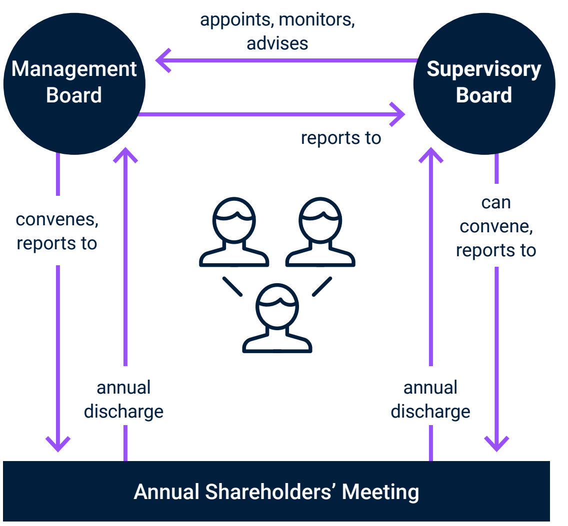
Full-time equivalents	Dec. 31, 2022	Dec. 31, 2021	+/– as %
Total	**4,995**	**4,819**	**4**
Germany	1,306	1,385	-6
India	1,103	1,097	1
USA	796	601	32
Other countries	1,790	1,736	3
Research & Development	1,584	1,477	7
Support and Services	1,477	1,526	-3
Sales and Marketing	1,159	1,074	8
Administration	775	742	5

The increase in employees in Research & Development as well as Sales and Marketing is due largely to the acquisition of US software company StreamSets. Likewise, the acquisition of StreamSets also explains the Company's growth in the United States.

MANAGEMENT AND CONTROL

Software AG's Management Board consists of: Chief Executive Officer (CEO) Sanjay Brahmawar, Chief Financial Officer (CFO) Daniela Bünger, Chief Revenue Officer (CRO) Joshua Husk, Chief Operating Officer (COO) Dr. Benno Quade, and Chief Product Officer (CPO) Dr. Stefan Sigg. The Board members as well as the personnel changes in fiscal year 2022 are presented in Note [34] of the Notes to the Consolidated Financial Statements. The Management Board is appointed, supervised, and advised by the Supervisory Board.

Corporate Governance Structure



The Supervisory Board of Software AG is composed in accordance with the stipulations of the One-Third Participation Act. It includes six members: four shareholder representatives and two representatives of the employees of Software AG.

BUSINESS ACTIVITIES

BUSINESS MODEL

Software AG uses its technological expertise to connect people, systems, and devices, enabling customers and partners—and the Company itself—to have a positive impact on people's lives. That applies to delivering better product offerings in the present as well as embracing co-innovation toward a smarter, more connected, and sustainable future.

For more than 50 years, Software AG has provided its customers with products and services that expand existing IT architectures through innovation and allow integration of new functions and technologies. Software AG uses its industry expertise to support companies with data integration, regardless of its source, and with process management. The Company's digital business solutions are intended to enable customers to develop new business models and robust solutions that meet the needs of their end users.

This is underpinned by horizontal integration capabilities both within the Company's own product portfolio as well as the partners' technology segments. Software AG offers open technology and pursues a vendor-neutral approach to integrating the best software solutions available anywhere. The Company preserves customer choice, the ability to use whatever applications they need, and the agility to react to rapidly changing markets and economic conditions. With the broad availability of its software solutions in the cloud, Software AG also enables its customers to quickly implement use cases and create incremental value while reducing operating costs at the same time.

Software AG considers its sustainable success to be the reason for its long-term customer relationships. This allows customers' IT investments to be protected and enables Software AG's long-term planning, ongoing product innovations, and smart technology acquisitions.

Customers are also at the center of Software AG's flexible licensing options. And, in line with Software AG's transformation, the Company's focus on shifting its licensing model toward subscriptions including usage-based licenses (Software as a Service, SaaS) aligns with its customers' preference for subscriptions over traditional licensing models.

Finally, as a global technology provider, Software AG has a special connection to customer and employee issues. Responsible conduct and integrity are of key importance in a highly competitive market environment.

BUSINESS LINES

Software AG operates three complementary business lines to address differing customer requirements and business objectives:

- Digital Business
- Adabas & Natural (A&N)
- Professional Services (PS)

The first two business lines, Digital Business and A&N, represent Software AG's broad product portfolio and are the primary revenue drivers through license and maintenance fees. Licenses for Software AG's product portfolio can be term (subscription) or perpetual. Maintenance contracts consist of support services and regular product enhancement updates. In addition, Software AG customers can use products as part of SaaS offerings.

The Professional Services (PS) business line comprises consulting and implementation services that accelerate customer deployment of Software AG products.

Together, the business lines allow enterprises to successfully master the digital transformation from any starting point and in whatever direction they choose to go.

A summary of the respective business lines' performance can be found under Segment Reporting in the Financial Performance section of the Economic Report.

Digital Business

The Digital Business line groups multiple technologies that meet key requirements of the digital transformation and support digital business models. The business line is divided internally into three product lines: API Management, Integration & Microservices; IoT & Analytics; and Business Transformation. StreamSets was acquired during the reporting year to strengthen the Company in the high-growth hybrid integration area. StreamSets supplements Software AG's data integration portfolio with its DataOps platform, which enables the smooth flow of data from different data sources.

Due to the openness and ease-of-use of these technologies, Cumulocity IoT, webMethods, and webMethods.io are extensively used as white-label software in original equipment manufacturer (OEM) contracts globally.

A&N

Adabas (Adaptable Database) and Natural (a fourth-generation software development language, 4GL) were Software AG's first product releases (1971 and 1979 respectively). They power financial institutions and the public sector in more than 30 countries around the world (over half the 50 states in the USA use A&N). A&N applications run airlines, railways, and freight services. They are in use anywhere that mission-critical, high-transaction, industrial-strength applications with extremely high levels of performance, availability, and security are needed.

In 2016, Software AG launched its A&N 2050+ program, a roadmap of technology updates, support services, and maintenance initiatives that will ensure that customers can rely on their installations through the year 2050 and beyond. The program includes an active talent search for A&N employees.

The first major impact of A&N 2050+ is the roadmap to full integration with the Digital Business technologies including:

- Developing modern tools for agile application development (DevOps)
- Providing A&N applications as standard application programming interfaces (APIs)
- Database integration with analytics platforms
- Rehosting A&N applications from legacy mainframe and open systems platforms on z/OS® or Linux and in the cloud
- Mainframe cost optimization with Adabas & Natural for zIIP through offloading workload to the low-cost IBM z Systems® Integrated Information Processors (zIIP)

Professional Services

The Professional Services (PS) business line provides implementation, development, and upgrade/migration services in connection with the full product portfolio of Software AG. Professional Services supports both the Digital Business and A&N business lines in ensuring that customers get the maximum benefit from their technology investments as quickly as possible.

- In the third quarter of 2022, the Company expanded its collaboration with Persistent Systems, a middleware implementation partner in North America, to drive market penetration of the Group's Digital Business products in the strategically important North American market. Persistent will be able to offer its customers new solutions based on Software AG products. Software AG's Professional Services specialists were transferred to Persistent Systems as part of the strategic partnership. Subcontracting the North American Professional Services implementation business to Persistent will enable Software AG to focus on particularly complex consulting projects as well as its core business in the future.

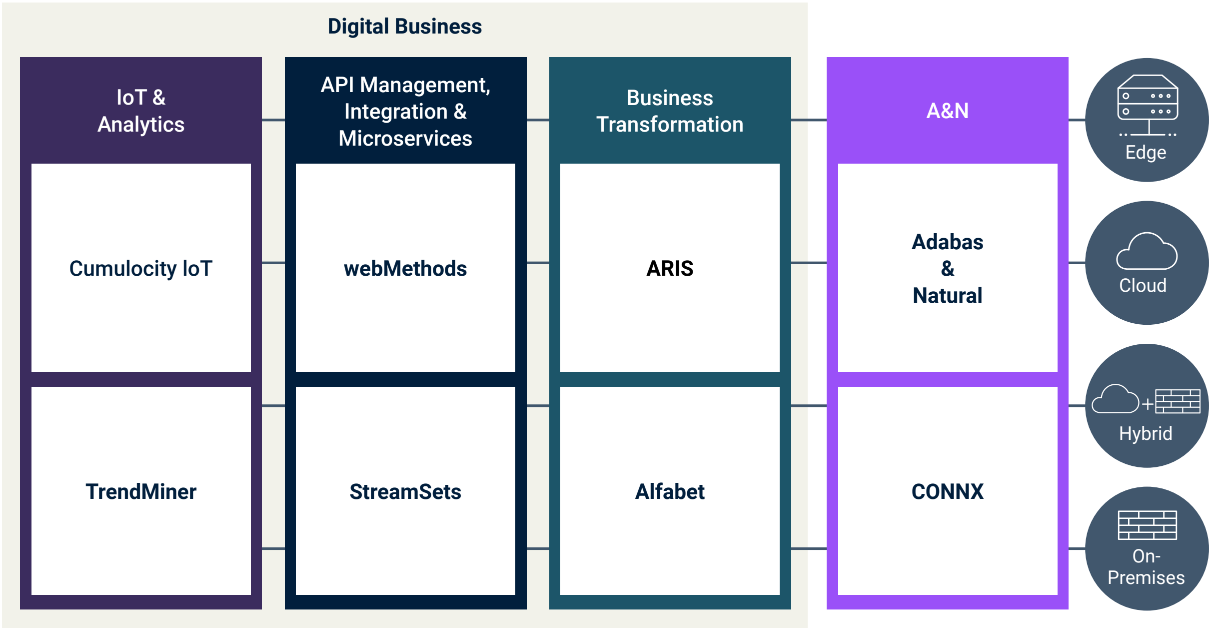
PRODUCT AND BRAND PORTFOLIO

The Digital Business line comprises Alfabet, ARIS, Cumulocity IoT, TrendMiner, and the webMethods product families as well as the StreamSets DataOps platform since its acquisition in April 2022. Adabas and Natural as well as CONNX form the product offering of the A&N business line. The entire product portfolio is designed to comprehensively support customers as they transform to a digital enterprise. Using a clearly structured brand architecture, the individual brands have been separated into four market segments, which represent the core themes of digital enterprise transformation:

- **IoT & Analytics:** With **Cumulocity IoT**, Software AG's customers can integrate digital equipment and sensors through an IoT device management and application enablement platform in the IoT and make data further processable and usable with dashboards and control systems. Moreover, this platform includes streaming analytics for big data analytics in real time and solutions for predictive analytics, artificial intelligence (AI), and machine learning. **TrendMiner** offers an intuitive Web-based analytics platform for flexible visualization of industrial processes and process data.
- **API Management, Integration & Microservices: webMethods** is a multifunctional integration Platform as a Service that integrates systems, applications, and processes via APIs or direct connections and orchestrates them in the form of microservices. With these microservices, users can introduce independent tasks in processes and infrastructures with flexibility, manage them, and replace them if necessary. Integration solutions for large business-to-business infrastructures and data transfers (managed file transfers) round out the webMethods portfolio. StreamSets enables the data-driven enterprise through seamless data integration (i.e., connecting different data sources and sinks, data formatting and monitoring, scaling when data volume changes, etc. transparently and in a central system), even in complex hybrid or multi-cloud environments. The platform implements multi-step dataflows (data pipelines) in a controlled, resilient, and repeatable way. This cuts costs and risks associated with data management and maximizes the benefits derived from data, e.g., better decisions can be made based on real-time data.
- **Business Transformation: ARIS** enables companies to improve their process management with business process analysis and process mining. With ARIS, they can model, document, and optimize business processes—from defining strategies to analysis, design, and control. Additionally, Alfabet enables companies to design their IT landscape to optimally support their strategic business goals and make decisions about IT investments. This includes the planning and management of IT as well as ongoing optimization of the system portfolio.
- **A&N:** Software AG's products for transaction processing are based on Adabas and Natural. For more than 50 years, Software AG has delivered a high-performance database management system for all platforms with **Adabas**. **Natural** is the accompanying development environment and the basis of numerous software applications that support companies across many industries. Further, the **CONNX** products provide data integration, virtualization, and replication so businesses can access and utilize their data wherever it is stored.

Software AG's portfolio is available for customers in the cloud, on-premises, hybrid (mix of local and cloud-based), or as an edge solution. In addition, Software AG also operates an open cloud platform—SoftwareAG.Cloud—that businesses can use to create, test, implement, and manage apps ranging from very simple to highly complex cloud-capable enterprise and IoT applications.

Product Portfolio



MARKET POSITIONING

Sales markets

Software AG has global market coverage. Its geographic sales markets are divided into the following three regions: Americas, EMEA (Europe, Middle East, and Africa), and APJ (Asia-Pacific and Japan).

Measured by percentage of product revenue, the EMEA region—with Germany as Software AG's domestic market—is the largest sales market, followed by the Americas and APJ regions. As the world's biggest IT market with respect to sales revenue, the North American market is of crucial importance, with US government agencies playing a key role for Software AG's business. In addition to Germany as the Company's domestic market, the United Kingdom, France, Israel, and the Middle East are the most important sales markets in the EMEA region; in the APJ region, Australia is the largest single market. For more information on product revenue by region in 2022, please refer to the Financial Performance section of the Economic Report.

In addition to the geographic perspective, target markets can also be separated by industry. When it comes to sales revenue, the public sector, IT industry, and financial service providers are the most important customers here, followed by the manufacturing industry.

Competitive situation

The market for enterprise software is still in the midst of a fundamental transformation. The development of new business models has brought new, innovative competitors onto the scene with technology startups and former industry outsiders. At the same time, customer market power has grown. Established companies are facing major innovative pressure. In light of this situation, portfolio quality and ongoing development as well as differentiation from the competition with customized solutions and independent positioning are key criteria for success.

Software AG's **key differentiators** in the view of the Management Board are summarized in the following graphic.

The Management Board believes that with these **unique selling points**, Software AG can address customers' growing need for custom solutions. Moreover, the Company is positioning itself in the most important growth markets with its products for integration, process improvement, digital transformation, and with its IoT technologies.

Software AG has established a basis for effective market cultivation and higher sales productivity through a focused, scalable go-to-market model. Extending the partner network and close collaboration with universities and research institutions support this direction.

Vendor-neutral portfolio	Reliable and proven	The right size
Software AG enables the integration of different systems and technologies from different providers.	For over 50 years, Software AG has been a partner of top companies in more than 70 countries. Independent market analysts name Software AG a technology leader every year because of its innovative power.	Software AG is large enough to support major companies and agile enough to be able to focus on individual customer requirements.

Industry Recognition
Software AG considers the recognition of independent research firms as confirmation of its success and product and service quality. For years, the Company portfolio has been positioned as a Leader in market analyst firm evaluations. Software AG was recognized in 2022 as follows:

A Leader
The following **Gartner**®[1] research recognized Software AG as a Leader:
- "Magic Quadrant™ for Strategic Portfolio Management"[2]
- "Magic Quadrant™ for Full Life Cycle API Management"[3]
- "Magic Quadrant™ for Enterprise Architecture Tools"[4]
- "Magic Quadrant™ for Global Industrial IoT Platforms"[5]

The following **Forrester** research recognized Software AG as a Leader:
- "The Forrester Wave™: Strategic Portfolio Management Tools, Q1 2022"[6]
- "The Forrester Wave™: API Management Solutions, Q3 2022"[7]

IoT testing and benchmarking firm **MachNation** recognized Software AG's Cumulocity IoT as a Leader in the following international rankings:
- MachNation's "2022 IoT Application Enablement ScoreCard"[8]
- MachNation's "2022 IoT Edge ScoreCard"[9]
- MachNation's "2022 IoT Device Management ScoreCard"[10]

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[2] Gartner "Magic Quadrant for Strategic Portfolio Management," Anthony Henderson, Daniel Stang April 18 2022.
[3] Gartner "Magic Quadrant for Full Life Cycle API Management," Shameen Pillai, Kimihiko Iijima, Mark O'Neill, John Santoro, Paul Dumas, Akash Jain, November 14, 2022.
[4] Gartner "Magic Quadrant for Enterprise Architecture Tools," Akshay Jhawar, Gilbert van der Heiden, Andrew Gianni, Andreas Frangou December 12, 2022.
[5] Gartner "Magic Quadrant for Global Industrial IoT Platforms," Alfonso Velosa, Eric Goodness, Ted Friedman, Katell Thielemann, Emil Berthelsen, Lloyd Jones, Kevin Quinn, Scot Kim, Peter Havart-Simkin, Matthew Flatley, December 12, 2022.
[6] The Forrester Wave™: Strategic Portfolio Management Tools, Q1 2022, Forrester Research, Inc., February 14, 2022.
[7] The Forrester Wave™: API Management Solutions, Q3 2022, Forrester Research, Inc., August 22, 2022.
[8] MachNation: 2022 IoT Application Enablement ScoreCard, July 2022.
[9] MachNation: 2022 IoT Edge ScoreCard, July 2022.
[10] MachNation: 2022 IoT Device Management ScoreCard, July 2022.

SALES AND MARKETING

From a **sales** perspective, 2022 was centered around building a modern sales organization with a culture to sustain ambitious growth objectives. This included new technologies for collaboration, optimizing account plans in Altify, the account planning software, mapping sales plays, and enabling better opportunity management. The focus remained on the shift to subscription, net new logo acquisition, key account expansion, and strategic alignment between Sales, Marketing, and Customer Success Managers.

In **marketing**, the focus was on transforming to a digital-first always-on strategy that finds buyers at the beginning of their journey and engages them throughout. Additional key aspects of the new strategy were efficiency and effectiveness with respect to marketing budgets and resources. Thanks to the globalization of digital campaigns, the Company was able to reach more buyers with the right message and right content based on target account data obtained from direct or third-party sources.

As part of the strategy, an ideal customer profile (ICP) was defined for each product line in cooperation with the Sales organization and the business units. Target accounts were then determined for each region, and marketing campaigns were designed to address the key focus accounts of Sales.

Pipeline progression was the focus of the **field marketing teams**. Smaller, more meaningful events were intended to enable Sales teams to reach more roles and people within customer buying teams. These personal events and interactions concentrated mainly on accounts already in the funnel to increase engagement within the account to drive closed/won deals.

In certain markets, some larger strategic events took place. These included:

In the Middle East, both **LEAP** (Riyadh, from February 1-3) and **Gitex** (Dubai, October 10-14) showcased cutting-edge technologies across major sectors including smart cities, cybersecurity, the data economy, mobility, healthcare, and telecoms.

As a premier exhibitor, Software AG participated in the **Gartner IT Symposium/XPO Orlando** (October 17-20) and **Gartner IT Symposium/XPO Barcelona** (November 7-11). Software AG hosted sessions with customers and partners on their vision for enterprise transformation with IoT, integration, API management, and business process and IT transformation. A sustainability headliner was the talk from the **Electric Racing Academy (ERA)** team.

Whether through digital or physical tactics, this holistic marketing strategy to acquire the right audience by being in the right place, at the right time, with the right content created—in Software AG's view—more consistent demand generation, higher conversion rates, and a higher return on marketing investment.

CUSTOMERS

Successfully serving customers as a trusted partner with innovative technologies to enable transformation to an agile digital enterprise is Software AG's primary objective as a B2B software provider. The Company therefore leverages the concept of co-innovation: collaborating with users to continue developing solutions.

User groups serve as one of the most valuable instruments for strengthening customer relationships. These groups bring the users of Software AG's primary product lines together on a regular basis to share experiences at the regional level. Customers discuss how products can evolve with representatives of Software AG. The international user groups comprise almost 2,500 members from more than 1,150 companies and 74 countries. The annual meeting of the international user groups was held from May 30, 2022 to June 3, 2022, in the Hague, Netherlands, and was attended by participants from all over the world. A total of more than 400 people participated in person and an additional 500 or so took part in the event online.

Software AG's relevance as a global player of digital transformation is reflected in its ever-expanding international customer base and long-term customer relationships. The customer base continued to grow in fiscal 2022. Software AG was able to win 333 new logos during the reporting period (2021: 312). In order to continue this growth trend, the Company will continue to concentrate on winning new logos in 2023. At the same time, the Company's Customer Success Management team and Professional Services unit will intensively support the new logos won in 2022 with the implementation of their projects to ensure they achieve the best-possible success in using Software AG technology.

PARTNERS

After launching the PartnerConnect program in the previous year, the goals for 2022 were to activate the partner ecosystem and accelerate partner business. To this end, PartnerConnect Summits were held for the first time with aligned global content. Partners and potential partners were invited to coordinate the go-to-market strategy and define the shared value add for the customers. More than 440 people from 168 partner companies participated in the four PartnerConnect Summits under the motto "Accelerate Your Success" in EMEA, North America, Latin America, and APJ.

Positive feedback on the summits is also reflected in the numbers: More than 250 new partners were accepted into the program in 2022. As in the previous year, the Channel Company awarded it a top rating of five stars in its CRN Program Guide, confirming the program's appeal.

Growth from the previous year also continued with respect to new business and partner bookings in Digital Business. Software AG succeeded in increasing the incremental partner business by 34 percent to €54 million in Digital Business bookings and signed 143 logos with the help of partners. That corresponds to double-digit growth over fiscal 2021. The incremental contribution of partners to overall Digital Business revenue increased by two percentage points over the previous year to 13 percent.

Collaboration with independent software vendors (ISVs) and original equipment manufacturers (OEMs) with the goal of integrating Software AG products into their portfolios has contributed significantly to the incremental partner business. After being launched in the previous year, the program also generated significant growth in the reporting year. Bookings increased by 64 percent over the previous year to €12.4 million.

This growth and activation of partners is due in part to a new marketing development program. As part of the program, Software AG's top-tier partners can receive financial and content-related support. Over the last year, the Company's partners succeeded in generating an additional Digital Business pipeline totaling €80 million, which will contribute to Software AG's future growth.

Partner marketing processes were professionalized and automated to support the marketing program, so partners could request financial support online and then upload invoices and receipts for their activities to the partner portal. Software AG offers partners ready-made campaigns—Campaigns in a Box—that they can adapt and execute as self-services. In addition, they can easily integrate their own logo on documents and use email and social media templates for letters and invitations.

Partner training and certification are another key success factor for the partner business. This helps Software AG ensure that partners present, sell, and implement their products successfully. Numerous product-specific certifications/badges are available for all three Digital Business product areas. These offerings were very well received by partners during the past year. Technical implementation saw an increase of 123 percent and product presentation (presales) achieved certification growth of more than 300 percent compared to the previous year. During the reporting year, Software AG issued a total of 7,980 certifications/badges to partners.

Since the majority of Software AG's products operate in the cloud now, business with commercial infrastructure operators (hyperscalers) Microsoft and Amazon Web Services (AWS) is of crucial importance for Software AG's partner business. The positive trend of recent years continued in 2022. This is evident in the 16 percent increase in shared business generated with Microsoft and AWS, including an SaaS agreement in the USA that was Software AG's biggest ever with respect to bookings.

Collaboration with leading global systems integrators and consulting firms is and remains another key building block of Software AG's partner strategy. Here Software AG has started to enter strategic partnerships for individual product areas and regions. These include a partnership with Ernst & Young in the area of business transformation that was launched for 180 customers with an exclusive customer event in September 2022, followed by a webinar series on the topic in November 2022. Also strategically significant is the new collaboration with Persistent in the areas of process mining and IoT in North America.

On the whole, Software AG was able to increase bookings from partner business by 11 percent to €167 million in the Digital Business segment.

As in previous years, the EMEA region without DACH delivered the greatest contribution by far, generating a solid half of the partner business. Next came DACH and North America each contributing about the same amount. With regard to Software AG's product areas that are relevant for the partner business, API Management, Integration & Microservices yielded the highest percentage as in previous years, followed by Business Transformation and IoT & Analytics.

STRATEGY AND GOALS

VISION AND BUSINESS STRATEGY

Software AG's purpose is to **connect people and technology for a smarter tomorrow**. With this in mind, Software AG's vision is to unlock the power of data to shape a better future. Software AG does this by focusing on a mission to empower customers to turn data into value by enabling a connected customer experience in which data, processes, platforms, and progressive technological capabilities are made available to every end user.

With the products in its Digital Business line, Software AG lays the foundation for an integrated infrastructure that integrates all of a customer's business processes regardless of the complexity of the individual IT landscape. The goal is to seamlessly and securely connect applications, processes, users, and customers as well as every kind of data and device across all deployment models—in the cloud, on-premises, hybrid, or as an edge solution.

Software AG's primary goal is to generate sustainable profitable growth in order to increase enterprise value. To that end, the multi-year Helix transformation program was launched in 2019 and is divided into three pillars: **Focus**, **Team**, and **Execution**.

Focus

Accelerating product innovation: In 2022, product development in Digital Business focused on supporting the automation of networked companies, promoting central, digital transformation projects through innovative offerings, and integrating the StreamSets DataOps platform into the existing Digital Business portfolio. StreamSets delivers modern data pipeline technology to address a key part of the challenge of hybrid integration for enterprise customers.

Promising new developments in the Digital Business portfolio including the DataHub, lean multi-tenant provisioning, and the migration to the CA3S automation platform contributed heavily to the core goals of product development in the webMethods Platform for API Management, Integration & Microservices. Software AG also improved its digital transformation solutions with the new ARIS for Sustainability package and closer integration between business process analysis and expanded process mining. In addition, the Company introduced a new self-service certification tool as part of the program for self-certification of IoT devices that enables manufacturers to test run their devices with Cumulocity IoT. The Net Promoter Score (NPS), an indicator of customer satisfaction with Software AG's products, reached a record high of +61.

Team

Developing people and culture: Software AG is harnessing its most valuable asset, its people, to deliver on its transformation. Building on its global guidelines for hybrid work, which allow flexible distribution of work hours between the office and home, Software AG expanded its employee value proposition to include the opportunity to work from abroad for ten days per calendar year.

As in the previous year, Software AG placed continued focus on developing and cultivating its employees. In 2022, it implemented modern employee incentives to promote key competencies that encourage profitable growth. These include investments in a high potential program, providing a leadership conference to develop leaders in the Company, and the global recognition program, "Elevating Excellence," that acknowledges outstanding employee performance. The annual global employee survey showed how successful those staff development activities were: The rating for the question about personal development support rose to 4.21 (+0.02) respectively, with 5 being the highest possible score.

Furthermore, Software AG promoted its **cultural transformation** through the established Leadership Learning Journey as well as by introducing a Culture Framework that translates the Company's core principles and values into concrete leadership practices. Software AG has anchored inclusion as a value in day-to-day work, for instance, with training programs and an ambassador network for diversity, equity, and inclusion (DE&I). Thanks to the overall appeal of its value proposition to employees, Software AG was able to make approximately 700 new hires (excluding StreamSets) in 2022.

Execution

Continued dynamic trend toward subscriptions as a growth driver: In 2022, Software AG continued to invest in its go-to-market organization. The Company focused on securing customer success through targeted ongoing development of its Customer Success Management and Renewal teams. Additional standard service packages supported the acceleration of product deployment and acceptance with customers. Furthermore, the Company stepped up the alignment of all functions with the go-to-market processes, the disciplined integration of Sales, Marketing, and Product Development to position itself in the areas of innovation and growth markets it has identified. On the whole, Software AG saw continued acceleration of the subscription business in 2022. The percentage of bookings from subscriptions and SaaS out of total organic bookings in the Digital Business line rose to 91 percent.

Moreover, Software AG expanded its partner network again in 2022, for instance with its **strategic partnership with Persistent Systems**, in which the companies collaborate on go-to-market activities and develop shared solutions to accelerate modernization of customer applications and processes.

Systematic increase in productivity: Software AG expanded on the process framework for optimizing productivity established in the previous year. Initial process optimizations were achieved through process mining as well as rolling out the piloted processes for booking and invoicing travel in more country organizations. To identify more areas needing to reduce complexity of business operations, Software AG conducted a review of all organizational units. The resulting catalog of measures establishes the starting point for further activities in the area of operational excellence, improving the customer experience, as well as slimming down the process and system landscapes.

Monitoring

In order to measure the Helix transformation's progress and impact, Software AG introduced new KPIs in 2019 that are presented in the section on Performance Indicators and Monitoring.

In addition to these external KPIs, the Company has introduced an internal **transformation scorecard** which complements the financial KPIs with more qualitive measurements. These include the NPS, a well-known indicator of customer loyalty in the industry. In addition, the scorecard contains information about the transformation's structural successes, such as how many new logos were signed in a period, or what share of bookings are from subscriptions or SaaS.

Financial objectives

Software AG's forecast which was announced to financial markets at the start of 2023 included only financial targets for 2023, which are described in greater detail in the Expected Financial Performance section. Because the final planning year of the Helix transformation program was incorporated with operational planning for 2023, the Company is drafting a new medium-term plan during the first half of 2023 that will be presented on Capital Markets Day mid-year. This new medium-term plan will reflect the financial impact that can be traced back to adjustments in the strategic direction, such as streamlining and focusing the product portfolio as well as strengthening specialization in sales. Ongoing existing contract development from recurring product license streams as reflected in the ARR will continue to play a key role. Since ARR development is determined not only by new customer contracts—it also depends heavily on the retention and development of contracts from the existing customer base—the net retention rate (NRR) indicator becomes increasingly important.

Furthermore, the Company aims to steadily grow the operating earnings (EBITA, non-IFRS) through economies of scale in conjunction with a constant increase in recurring revenue streams as well as through efficiency programs launched in every part of the Company.

Non-financial objectives

Software AG is focusing on long-term, sustainable growth. Software AG has identified factors for sustainable, continued development to drive profitable growth with its sustainability strategy. These factors are discussed under Non-Financial Performance Indicators in the Internal Corporate Control System section.

STRATEGIC DIRECTION OF THE BUSINESS LINES

Digital Business

Software AG sees the greatest potential for growth opportunities in the Digital Business line, which is why innovation services are bundled in this segment. The Digital Business line has become the Company's top revenue generator because it offers a product portfolio that helps businesses achieve their digital transformation, whether that involves strategy, process or IT planning, product development, or managing customer interactions. This business line's goal is to deliver a comprehensive, consistent, flexible cloud-based platform that is built on modern architecture elements (APIs, microservices, containers, events). To this end, Software AG is constantly developing and enhancing the relevant capabilities as part of its own R&D activities as well as making targeted acquisitions to strengthen its technological basis.

Software AG's IoT solution, Cumulocity IoT, gives customers the freedom to integrate any "thing" as a data element in any way and anywhere. There is no limit to what customers can connect to optimize operations to the edge, improve their customer experience, or launch new business models.

The acquisition of StreamSets strengthens the area of hybrid integration with a view toward focusing future innovations on integration, with the key products webMethods.io and StreamSets.

The Company also continued to drive forward its shift to cloud-first with specialized SaaS sales programs for high-growth products such as webMethods.io and StreamSets.

Adabas & Natural (A&N)

The A&N business line can rely on an established customer base that wants to continue using A&N and offers promising sales potential for Digital Business products. A survey conducted in 2016 showed that 98 percent of A&N customers employ A&N for strategic, mission-critical enterprise applications. For that reason, the **Adabas & Natural 2050+** program was launched to continue developing and supporting the A&N product portfolio through the year 2050 and beyond. By pursuing this long-term agenda, the Company also aims to support its customers through the generational shift that is facing the entire software industry and enable them to secure, modernize, and expand the expertise built up during decades of development work on enterprise applications.

The transition to subscriptions in this segment enables cloud rehosting and, in the view of the Company, opens up opportunities to familiarize established A&N customers with Software AG's broad Digital Business portfolio.

Professional Services

The Professional Services (PS) business line helps customers achieve the full value of their investment in Software AG products. In light of the shift in customer buying behavior toward usage-based models such as cloud and SaaS, Professional Services aims to help customers who employ Software AG technology succeed quickly. The Professional Services business line manages the Services Partner network to make sure reliable, skilled partners scale the mutual business. Today's products and use cases are increasingly complex—in a market where customers want simplicity. Professional Services play an important advisory role guiding customers through their digital transformation journey, for example, by packaging proven, industry-relevant solutions. Repeatable service offerings, such as Fast Track Services, give customers ease of use, transparency, and dependability.

The Professional Services consultants and Service Partners are a key interface between software customers and product developers. This interface enables Software AG to continually optimize its solutions and functionality as well as address specific user needs.

As part of the strategic development of the segment, Software AG expanded its partnership with Persistent Systems, a North American implementation service provider, in the third quarter of 2022. Subcontracting the North American professional services implementation business to Persistent will enable Software AG to focus on particularly complex consulting projects as well as its core business in the future.

MERGERS & ACQUISITIONS STRATEGY

Corporate acquisitions and equity interests are a strategic instrument at Software AG for addressing new innovative markets while growing market shares. Throughout its more than 50 years of history, Software AG has succeeded in reinventing itself and transforming time and again—a key prerequisite for staying successful in today's IT world with its changes at breakneck speed and shrinking innovation cycles.

The strategy for mergers & acquisitions (M&A) defined in the Helix transformation, which follows a "string of pearls" approach, was continued in fiscal 2021 with systematic screening of relevant business landscapes and in-depth analyses of potential acquisition targets. This strategy led to the acquisition of StreamSets, a data integration provider, in early 2022. The purchase was announced at the end of February and concluded in mid-April 2022. The StreamSets technology and Software AG's product portfolio for hybrid integration complement each other as does the go-to-market approach, which will yield cross-selling potential. In addition, shared products are being developed in the integration Platform as a Service segment. StreamSets' rapid growth will also be driven more profitably.

In the future, selected key acquisitions are planned that will accelerate organic growth, especially in core markets and adjacent areas with substantial growth potential. This will focus on fast-growing, profitable companies in the cloud application integration and cloud data integration segments, for instance. The strategic partnership with US technology investor Silver Lake struck in December 2021 enables access to comprehensive transaction expertise and a broad network in the sphere of fast-growing software companies.

Software AG's M&A department is based in Darmstadt, Germany, at corporate headquarters and is in constant contact with the Management Board. It operates in an international, heavily networked ecosystem consisting of numerous investment banks, M&A boutiques, financial investors, and partner companies as well as leading IT companies and startups. Furthermore, the Company maintains regular contacts with startups in Silicon Valley along with global IT industry giants. Software AG utilizes this ecosystem and constant market and competitor analyses to recognize future trends in the software sector early on, to test, harness, and develop them. Businesses in the target markets are systematically analyzed and evaluated based on the Company's strategy. This enables Software AG to keep a close eye on technology development to expand and strengthen its product portfolio with targeted acquisitions and build its global market presence in relevant core markets.

In addition, Software AG regularly reviews opportunities for revising and focusing its portfolio on the core business. In this vein, after selling the Professional Services unit in Spain in 2020, Software AG concluded the sale of a majority interest in FACT Informationssysteme & Consulting AG at the end of September 2022.

INTERNAL CORPORATE CONTROL SYSTEM

PERFORMANCE INDICATORS AND MONITORING

Software AG's internal control system enables it to meet strategic corporate objectives. Software AG focuses on continued profitable growth and strengthening its financial power so that it can help customers master digital transformation and increase its own enterprise value. To this end, Software AG has established a comprehensive **internal corporate control system** that measures both hard and soft performance indicators of success.

Key financial performance indicators

As a result of the Helix transformation with its strategic shift from perpetual licenses to subscriptions, the bookings metric assumed a key role in the product business. Bookings comprise the order entries across the different license and contract models, normalized for the average term of a subscription contract of three years. Due to the transition to subscriptions, the cash flows are also distributed across the average contract term. While this stretches out the cash flow, it renders it significantly more predictable. In 2022, almost 90 percent of bookings came from subscriptions and SaaS because the Helix program was so successful. For that reason, now almost all bookings contribute directly to annual recurring revenue (ARR). Furthermore, the progress with subscriptions means that the majority of Software AG's income will be earned in annual cycles.

Consequently, the management team decided to make the ARR the key indicator for the Company's growth performance and is targeting that in its full-year 2023 guidance in both product segments, Digital Business and Adabas & Natural (changes at constant currency).

While bookings were decisive for Company management at a product-level from the start of Helix through fiscal 2022, this indicator will be replaced by ARR in the future. In addition to ARR, product revenue (at constant currency) and operating profit margin (non-IFRS) will remain the key financial performance indicators in managing the Company.

Bookings

The bookings metric captures the sales performance in a reporting period based on order entries. To make this metric comparable across the different license models, it is normalized for three years and calculated as follows:

Perpetual licenses	Total contract value
Maintenance services on new perpetual licenses	Three years maintenance services
Subscription agreements[1]	Contract volume divided by the contract term multiplied by three years
SaaS[1]	Contract volume divided by the contract term multiplied by three years
Usage-based license models incl. maintenance	The order entry corresponds to the booked revenue based on the measured usage in the respective quarter

[1] Contracts with a term of less than 360 days are included as order entries at their contract volume.

Product revenue

Segment and Group product revenue comprises sales revenue that was directly earned with Software AG's software products. Which specific legal form these revenues were earned in is insignificant. Hence, this metric reflects the gross earnings from software products. This indicator is made up of the following:

	License revenue from term and perpetual license agreements with regard to software product offerings
+	Maintenance revenue from term and perpetual licenses
+	SaaS sales revenue[1]
=	Product sales revenue

[1] SaaS sales revenue resulting from term contracts with customers in which the customers are offered online usage of software that is hosted by Software AG or third parties on its behalf.

Annual recurring revenue (ARR)

This metric shows the annualized contract value[1] of active contracts with recurring revenue at the end of the reporting period. Thus, ARR is an indicator of expected annual recurring revenue and cash flows with continuation of the active contracts of the following contract types:

- Term licenses/subscription licenses
- Maintenance from term and perpetual licenses
- SaaS licenses
- Usage-based licenses[2]

Operating margin (non-IFRS)

Software AG also employs a multidimensional matrix structure to continuously monitor **changes in EBITA**[3] for every profit and cost center. The matrix is broken down further according to business lines and revenue types and, within the business lines, by region. Furthermore, Software AG constantly observes the operating income of its service business with respect to specific projects, from the time a quote is prepared through to project conclusion. One of the most important goals is the constant improvement of sales efficiency. Software AG pursues this through its customer-centric go-to-market model. The key performance indicator **operating margin (non-IFRS)** is calculated as follows:

Earnings before interest and taxes (EBIT[4])	
+	Acquisition-related amortization of intangible assets
+	Acquisition-related reductions in product revenue due to purchase price allocations
+/–	Other acquisition-related effects on earnings
+/–	Income/expenses resulting from share price-based remuneration
+	Restructuring/severance/litigation
= EBITA (non-IFRS)	
÷	by Group revenue adjusted for acquisition-related product revenue reductions
= Operating margin (EBITA, non-IFRS)	

[1] Value of all active contracts at period end (without one-time effects) divided by the contract length in months multiplied by 12.
[2] Realized monthly revenue of usage-based license agreements at period end multiplied by 12.
[3] Earnings before interest, taxes, and amortization.
[4] Earnings before interest and taxes.

Further financial performance indicators

Software AG also reports **operating earnings per share (non-IFRS)** to account for tax-related factors and net financial income/expenses. They are calculated as follows:

EBITA (non-IFRS)	
+/–	Net financial income/expenses
–	Other taxes
= Operating earnings before income taxes (non-IFRS)	
–	Income tax based on Group's income tax rates
= Net income (non-IFRS)	
÷	by average number of shares outstanding
= Operating earnings per share (non-IFRS)	

Net retention rate (NRR)

NRR is an indicator for measuring and evaluating recurring product revenue in existing customer business (subscriptions, SaaS, and maintenance in connection with perpetual licenses) and shows how well the Company succeeds in not only renewing its existing customer agreements with recurring revenue streams, but also in generating additional recurring income from those customers. Consequently, NRR includes all new customer business for the respective fiscal period.

NRR is defined as the annualized contract value of all existing customer agreements at a defined calendar date (target date = January 1) compared to the same customer group at the end of the year (target date = December 31). The initial baseline value for customer agreements at the beginning of the year is set at 100. The development in this existing customer group is calculated by adding contract upgrades (through up-selling, cross-selling, and capacity and price increases) and subtracting contract terminations and reductions in scope.

100	Annualized existing contracts of all recurring product sales agreements (subscriptions/SaaS/maintenance)	As of January 1
+	Contract upgrades (up-sells, capacity and price increases)	
–	Terminations and reductions in scope	
=	Net retention rate of annualized contract value of all recurring product sales agreements (subscriptions/SaaS/maintenance)	As of December 31

Additional segment performance indicators

The key performance indicators for the product business are those reflecting sales efficiency. Efficiency is portrayed through the **cost of sales ratio**, which reflects the sales and marketing expenses of a product in relation to the associated product revenue. Because the share of recurring revenue is on the rise, monitoring sales performance solely on the basis of revenue is no longer sufficient. For this reason, sales success is also considered in relation to the bookings metric, because these are normalized independent of the recognized revenue from the different types of licensing agreements. The factors influencing optimization of the cost of sales ratio are determined using additional efficiency indicators such as revenue performance or bookings per Sales employee and average deal size trends.

The **segment margin** (revenue less cost of service and sales, marketing, and distribution expenses in relation to revenue) is reported in the Segment Report and is an especially important performance indicator for the Professional Services line. It is influenced primarily by the capacity utilization of employees in Professional Services, sales, marketing, and distribution expenses, and the cost per employee.

Monitoring types of revenue

Software AG reports the revenue types: licenses, maintenance, SaaS/usage-based, and services, whereby the **license revenue** represents the key growth driver for maintenance and service revenue. Due to the focus on term and usage-based license models (subscription/SaaS), the percentage of this revenue type is growing steadily within total revenue.

Cost and cash flow monitoring

All cost items in the Group are subject to stringent budget control and are assigned to clearly defined controlling areas depending upon their business segment (R&D, Sales, Administration). On a monthly basis, the individual profit and cost centers are reviewed to determine whether budgets were adhered to, how forecast costs evolved, and how cost growth compares to revenue growth. Software AG uses a **dynamic budget model**, ensuring that key components of the cost budget remain flexible in relation to sales growth. The cost budget is adjusted as needed throughout the year in order to achieve or surpass profit targets.

Receivables management has a significant effect on cash flow. It is controlled centrally by the Software AG parent company and executed locally by subsidiaries. Receivables management is monitored by way of various internal controlling processes.

Software AG's **cash management** is a centralized function and is carried out at corporate headquarters in Darmstadt, Germany using a global standardized cash management system. It enables Software AG to optimize its investment strategy and minimize investment risk.

Non-financial performance indicators

Software AG's enterprise value is defined not only by financial indicators, but also by non-financial performance indicators. Software AG strongly believes that they are an element of long-term business success and are meaningful for understanding the Company's business growth as well as business impact. Software AG's non-financial performance indicators comprise the aspects of leadership and governance, employee concerns, customer concerns, and environmental matters. They are presented in detail in the Combined Non-Financial Statement.

COMPANY-SPECIFIC EARLY WARNING INDICATORS

The key early warning indicators used by Software AG include the performance indicators and further financial metrics described in the Internal Corporate Control System section.

In the **Professional Services** business line, **order entries** are a key indicator for future business development. Anticipated order entries is a preliminary early warning indicator in the sales process for order entries. The anticipated metric is qualified in the **pipeline** according to probability, volume, and expected project start date. Anticipated order entries as well as actual order entries of acquired Professional Services projects are both reported monthly. Work orders typically define clearly quantifiable order entries, whereas service agreements only stipulate an anticipated volume. Since neither the size of orders nor the date they are received are evenly distributed, total order value can fluctuate considerably. For this reason, Software AG assigns greater importance to the Professional Services business line's **order backlog** than to its order entries. The order backlog at the end of a period is defined as: existing orders at the beginning of a period plus all order entries in that period minus all realized (completed) order entries in that period. The order backlog for a reporting period should increase by about the same rate as the target revenue growth for the next periods. Should that not be the case, the Professional Services business line has to intensify its sales activities.

In the **product business, order entries** are also a key indicator for future business development. The existing **qualified product pipeline** is upstream from order entries and should therefore be categorized as the essential early warning indicator in the product business. In this qualified product pipeline, existing opportunities are evaluated by size and probability and placed in relation to anticipated order entries. Since opportunities naturally become disqualified, delayed, lost, or contracted during the sales process, the relation between the pipeline and order entries is not fixed. Rather, it is subject to constant change until the end of the reporting period. To actively manage the complexity of this early warning indicator, Software AG uses an appropriate customer relationship management tool that shows the correlation between the existing pipeline, the anticipated order entries, and the resulting license revenue in real time.

INTEGRATED MANAGEMENT SYSTEM

The integrated management system implemented in 2016 is a supplemental control system that includes the areas of quality management, business continuity management, information security management (cloud), and data protection management. It was introduced to provide an adequate answer to the growing compliance requirements on the customer side.

By defining internal quality goals and continuously monitoring compliance with them through management reviews and monitoring key quality indicators, Software AG is creating a corporate culture that is committed to meeting high quality standards. Its successful recertification to ISO 9001:2015 in 2022 is evidence of this commitment.

Software AG has performed a targeted analysis of its business processes and the accompanying IT systems to develop strategies that enable it to preserve the most critical processes and services from a customer's perspective, also in crisis situations, or be able to restore them as quickly as possible. This also includes concepts for redundant data storage. The Company is further securing its constant preparedness through regular training of the global Incident Response team and continuously testing crisis scenarios. The Company's successful ISO 22301:2019 certification (business continuity management) confirms the effectiveness of these measures.

For more information about quality assurance and the ISO 27001-certified cloud information management system (Cloud IMS), please refer to Customers and Technology in the Product and Service Quality section of the Combined Non-Financial Statement.

RESEARCH & DEVELOPMENT (R&D)

STRATEGIC FOCUS

Ongoing portfolio development, partnerships, and co-innovation projects with customers as well as joint research projects with academia, research centers, and startups ensure that Software AG is able to address the practical needs of customers based on the latest trends in technology.

INNOVATIONS

As part of Software AG's **co-innovation strategy**, its R&D unit collaborates closely with customers and strategic partners. Software AG contributes to various standards bodies and open-source projects, participates in various **research programs**, and established a **Scientific Advisory Board** in 2017. Software AG also encourages and sponsors grassroot-level innovations from employees as part of various internal initiatives and events designed to foster innovation.

Innovative technology acquisitions are another key component for gaining expertise as described in Mergers & Acquisitions Strategy.

In addition, Software AG legally protects its knowledge and expertise with patents. Details on Software AG's patent practices are covered under Legal Risks in the Opportunity and Risk Report.

SECURITY

Software AG follows the Open Web Application Security Project Software Assurance Maturity Model (OWASP SAMM), which is an industry standard for secure software development formerly known as OpenSAMM. The SAMM is an open framework that enables organizations to formulate and implement software security strategies tailored to their specific risks. The policies, standards, and security processes are defined satisfying the needs of OpenSAMM and the industry best practices. The security processes and procedures provide for a wide range of detailed controls in each phase of the software life cycle that ultimately ensure robust software security and compliance requirements in products under development and in maintenance. Furthermore, the Company contracts with external independent security consultants to perform vulnerability analysis and research to improve security posture of the product/platform offerings.

In addition, Software AG launched the cross-departmental SecureBiz program in early 2021 to create an infrastructure that is aligned with the requirements of modern IT security while at the same time establishing an efficient work environment. Numerous IT security projects and external audits to improve IT security were conducted during the year under review as part of SecureBiz.

ONGOING PRODUCT PORTFOLIO DEVELOPMENT

In 2022, R&D worked primarily on customer-centric development, with a particular focus on a complementary product portfolio, integration of new partners' technologies into the Digital Business and A&N product lines as well as implementing the co-innovation strategy. Key R&D topics in the Digital Business line were the digital enterprise (cloud, analytics, data integration, and API management), the use of AI technologies in analyzing complex IT landscapes and for intuitive user guidance through such analyses, and IoT (platform services, device management, data streaming, and analytics). A&N focused primarily on cloud transformation, security, and mainframe optimization. Approaches such as scrum, design thinking, and test automation were employed in the innovation process.

Software AG has driven development in the area of cloud infrastructure through shared solutions with Microsoft and Amazon Web Services. The cloud partners and their networks open up access to new markets for Software AG and give its customers flexibility when selecting their infrastructure. Cloud platforms are a key component of Software AG's technology portfolio for its customers—this applies to all of the Company's solutions and products. Software AG will continue to develop secure cloud solutions for its customers to help them succeed.

COLLABORATION WITH SCIENCE AND RESEARCH

Software AG's **Scientific Advisory Board** once again contributed important ideas on technology trends in 2022. The technology company's customers benefit first and foremost from these efforts, as the scientific perspective complements Software AG's strategic development and product planning. The task of the Scientific Advisory Board is to identify new technology trends early on, evaluate them, and discuss the implications for the Company with Software AG's leadership. The board has an advisory function and does not act as a controlling body under corporate law. In addition to Software AG executives, the board consists of top experts from the scientific and research communities who are appointed for a term of at least three years. During the reporting year, Prof. Dr. Mira Mezini, a full professor of computer science at the Technical University of Darmstadt, was appointed to the board. Mezini leads the software technology group in the Department of Computer Science and has been recognized with many international awards. Her research focuses on programming paradigms and languages for robust decentralized software systems, code intelligence, and development methods for AI software systems.

Members of the board determine what its areas of focus will be at least once per year. For instance, the board decided in 2022 to focus on the topics of software engineering, quality assurance, process mining of IoT data, large speech models, and EU regulation (EU Data Act).

Software AG participated in **collaborative research projects** with universities, research institutes, and other companies as part of many publicly funded research projects in fiscal 2022. Sharing knowledge with partners from science and research leads to early identification of market and technology trends, as well as important knowledge for product development. The following is a selection of current research projects:

- **The Intelligent Empowerment of Construction Industry (iECO)** project sponsored by the German Federal Ministry for Economic Affairs and Climate Action aims to increase productivity in the construction industry by up to 10 percent with the help of a shared data space. Data silos are widespread in the construction sector. They prevent efficient collaboration between companies and also hinder coordination efforts that are naturally quite extensive in the industry. Changes to plans and deadlines—usually the rule rather than the exception in the construction industry—need to be coordinated manually, which often leads to costly idle time. That results in an approximately 30 percent lower productivity level in construction compared to the industrial sector, which not only reduces competitiveness, it also puts performance at risk due to a shortage of skilled professionals.

- **The Data Management for Augmented Reality (DM4AR)** research project sponsored by the German Federal Ministry of Education and Research aims to pave the way for augmented reality (AR) in technical services. These services include the maintenance and repair of industrial plants and machinery, and they require a great deal of different information, such as CAD models of the equipment, sensor data, and maintenance protocols. Currently this information has to be manually extracted from different systems and then prepared for AR use. The associated cost and effort stands in the way of broad deployment of AR in technical services. This is where DM4AR comes into play, and will (partially) automatically collect the needed information and make it available for use.
- **The VersiPack (versatile and self-organizing system for user-specific beverage packaging)** project supported by the German Federal Ministry of Food and Agriculture aims to enable smaller beverage companies to also utilize fully automated packaging lines. Currently, this is not profitable for them. Their output is either too low and/or their variety of products is too high, so they cannot recoup the initial acquisition cost. Thus, many beverage fillers are forced to manually package their drinks, which is not only very labor-intensive but above all costly. To remedy this problem, the VersiPack project is developing a modular, and therefore convertible, packaging line. Beverage filling companies can lease it as a service and it can be adapted to their individual needs. It turns fixed capital costs into variable operating costs.
- Demand-side management (DSM) enables electricity customers to flexibly influence their own consumption and grid operators to supply their system services through the increased flexibility of the customers' loads. If system services are delivered dynamically, network stability can be better regulated over the longer term and expansion of the network and provision of additional storage capacity are limited by the dynamic shifting of residual loads. However, having energy-efficient operations that are flexible at the same time is a challenging task for companies. The field of providing dynamic system services by industry is still largely unexplored, especially for the beverage industry under consideration here. Energy monitoring and forecasting for individual components on the filling line and bottle production are lacking, along with detailed information about process flexibility. Likewise, there are no suitable strategies that guarantee the dynamic provision of system services without impairing the production process. The aim of the **Demand-Side and Production Management for Beverage Filling Processes (DESPRIMA)** project, sponsored by the German Federal Ministry for Economic Affairs and Climate Action, is therefore to highlight the possibilities for provision of potential system services by the beverage industry, in particular through intelligent control of filling systems and bottle production. A new smart energy management system will enable active participation in electricity markets. The project wants to demonstrate that sufficient flexibility saves costs while making controllable and predictable loads available for the grid.

Other R&D activities

Software AG is active in many German and European committees, associations, and organizations. This involvement enables the Company to react quickly to new challenges, set standards, and positively influence digital transformation and its impact on society. The Industry 4.0 Platform is an example of Software AG's involvement. This platform grapples with not only the technological aspects, but also the social and legal aspects, of Industry 4.0. Software AG is represented on the platform's steering committee, collaborates in several workgroups, and provides the co-chair of the research advisory committee.

Network Memberships and Political Involvement (Selection)

Organization	Additional information
BDI—National Association of German Industry	bdi.eu
BDVA—Big Data Value Association	bdva.eu
Bitkom—Germany's Digital Association	bitkom.org
DFKI—German Research Center for Artificial Intelligence	dfki.de
GI—Society of Computer Science	gi.de
House of Digital Transformation e. V.	hodt-hessen.de
ITEA 4	Itea4.org
Industry 4.0 Platform	plattform-i40.de
Plattform Lernende Systeme	plattform-lernende-systeme.de
NESSI—The Networked European Software and Services Initiative	nessi.eu
Software Campus	softwarecampus.de

R&D EMPLOYEES AND LOCATIONS

Software AG works constantly on developing its product portfolio and has always been a pioneer and innovation leader in the software industry thanks to its intensive R&D activities.

Considering the high strategic importance of R&D for the Group, the number of employees in this area grew accordingly during the current fiscal year. There was a significant increase in employee numbers over the previous year to 1,584 (2021: 1,477), due in particular to the acquisition of StreamSets. In total, Software AG has R&D centers in 25 countries. India is the largest R&D location with 613 (2021: 607) employees, followed by Germany with 429 (2021: 446) employees. After the StreamSets acquisition, the USA takes third place with 178 (2021: 104) employees, followed by Bulgaria with 136 (2021: 142) employees as an additional main location.

R&D EXPENSES AND INTERNAL STRATEGY

R&D expenses rose by 20 percent in 2022 to €181.4 million (2021: €151.2 million). Accordingly, R&D expenses as a percentage of product revenue (licenses, maintenance, and SaaS) increased from 22.1 percent in 2021 to 22.8 percent in the year under review. This rise is mainly due to higher R&D investments totaling €149.5 million (2021: €120.1 million) in the high-growth Digital Business line. In particular, the Company invested more heavily in IT infrastructure and additional cloud services.

Software AG embraces a strategy of efficient distribution of R&D spending, whereby R&D capacities in various countries are taken into consideration. Over time, the Company has established R&D centers in India, in the cities of Bangalore, Chennai, Hyderabad, and Virar. Software AG's location strategy is based on global availability of outstanding talent and distributes product responsibility accordingly across R&D locations.

Multi-Period Summary for R&D

in € millions	2022	+/− as %	2021	2020	2019	2018
R&D expenses for A&N	31.9	3	31.1	30.9	26.2	23.8
R&D expenses for Digital Business	149.5	24	120.1	113.1	105.1	100.6
Total	**181.4**	**20**	**151.2**	**143.9**	**131.3**	**124.4**
as % of product revenue	22.8	3	22.1	21.4	18.7	18.2
as % of total revenue	18.9	4	18.1	17.2	14.7	14.4
R&D headcount (FTE)	**1,584**	**7**	**1,477**	**1,494**	**1,419**	**1,310**

Economic Report

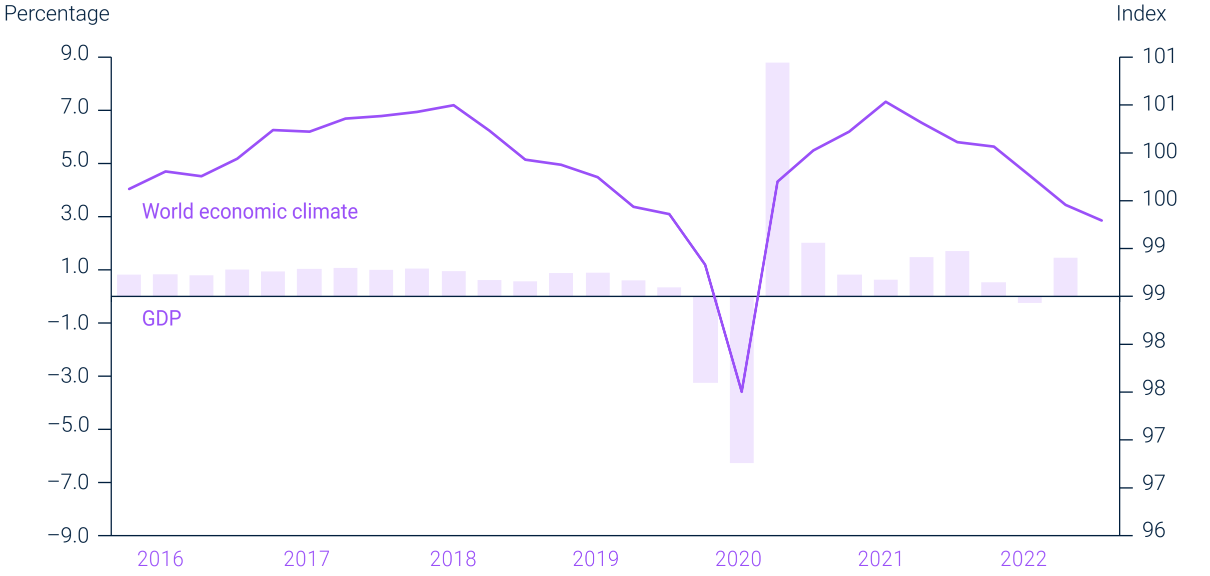
BUSINESS SUMMARY

GENERAL ECONOMIC CONDITIONS

In 2022, as the COVID-19 pandemic ebbed and supply bottlenecks eased, the global economy was dominated by high energy prices, sharply increasing inflation, and tight monetary policy in response. The upward pressure on prices reached historic levels in many countries. In the G7 countries, for example, inflation was at 8.4 percent in October 2022. Many central banks reacted by sharply increasing their key interest rates. At the end of the year, however, pressure on prices lessened somewhat, as energy and producer prices declined significantly. Conditions in commodity markets eased as well. The Institute for the World Economy (IfW) in Kiel, Germany, forecasts an increase in global economic production of 3.2 percent in the year under review, reflecting significantly weaker growth compared to 6.1 percent in 2021.

Production growth slowed significantly in the United States as well. Among the effects of the increased interest rates was a decline in construction investments. As in Europe, inflation increased strongly. The IfW anticipates a jump from 4.7 percent in 2021 to 8.0 percent in 2022. The USA is also striving to limit the impact of the energy crisis on companies and households by means of fiscal stimulus packages. To this end, the Inflation Reduction Act provides for increased expenditures over

Global Economic Activity 2016-2022



Quarterly data; seasonally adjusted; world economic climate calculated based on sentiment index in 42 countries.
GDP: adjusted for price, change compared with the previous quarter, 46 countries, weighted by purchasing power parity.
Source: OECD, Main Economic Indicators; national sources; calculations of the IfW, Kiel, Germany.

the next ten years to promote the expansion of renewable energies. The government also provided financial assistance during the pandemic to support the economy. In consequence, consumption rose above the trend. Extra savings were depleted, bringing the savings rate down to nearly historic lows. A simultaneous increase in consumer loans led to an unusually high deviation in the development of private consumption and real income. For 2022 as a whole, the IfW expects an increase in gross domestic product in the USA of 1.9 percent, after growth of 5.9 percent in 2021.

The eurozone experienced economic growth up to the third quarter, despite the impact of the war in Ukraine, but the growth momentum recently slowed. For 2022, the IfW anticipates growth in gross domestic product of 3.4 percent. In 2021, growth was significantly stronger, at 5.3 percent.

In Germany, the significantly increasing energy prices were the dominant issue for the government, companies, and private individuals. The rising prices burdened the economy and slowed consumption. At the end of 2022, in an attempt to counter the trend, the government introduced price freezes on electricity, gas, and heating which are to remain in place until April 30, 2024. Consumer prices are expected to have increased by 8.0 percent in 2022. In addition to energy prices, food prices, for example, also contributed to the increase. In 2021, by comparison, inflation increased by only 3.1 percent. Gross domestic product is expected to have grown by 1.9 percent in 2022, after growth of 2.6 percent in 2021. In spite of this, the labor market remained robust, in part because companies are still urgently seeking skilled workers. The IfW forecasts a further decline in the unemployment rate, from 5.7 percent in 2021 to 5.3 percent in 2022.

SECTOR ENVIRONMENT AND INFLUENCING FACTORS

The coronavirus pandemic and the energy crisis have accelerated the digitalization of the public sector, business, and society—a trend that also benefits Software AG. According to the digital trade association Bitkom, almost half of companies will be climate-neutral by 2030, and a further 37 percent by 2040. This goal cannot be achieved without radically increasing energy efficiency. Digitalization will therefore play a major role. At every fourth company, digital technologies will play the decisive role in the implementation of a sustainability strategy. From companies' point of view, cloud computing, i.e. the provision of computing resources (servers, storage, databases, applications, etc.) via the Internet, the Internet of Things, and artificial intelligence are technologies with significant climate protection potential. According to Bitkom, 75 percent of German companies see digitalization above all as an opportunity to achieve sustainability and climate protection. An even greater share, namely 89 percent, believe that a company that invests in digital technologies will gain a long-term advantage. And 91 percent are convinced that IT professionals need climate competence.

However, experts find that in order to unlock the full potential of digitalization, Germany also needs better framework conditions. Bitkom sees a need, among other things, for a digitally functional public sector, targeted use of data, and a solution for the structural personnel problem, with the shortage of IT experts already at 137,000 today. The opportunities and risks that arise for Software AG in this connection are described in the Opportunity and Risk Report in Key Individual Risks and Opportunities.

SECTOR-SPECIFIC CONDITIONS

Given the difficult economic environment, with the war in Ukraine, disrupted supply chains, and inflation, the global IT sector also could not maintain its recent high growth rates, but experienced only a limited decline in growth. The US-based market research firm Gartner forecasts that global IT expenditures will have declined slightly overall in 2022, by 0.2 percent to $4.4 trillion. Contrary to this trend, computing center systems (12.0 percent) and software (7.1 percent) achieved strong growth. There were declines in hardware (10.6 percent) and communication services (2.4 percent). According to Gartner, employees and consumers acquired new tablets, laptops, and mobile phones during the pandemic. Without a compelling reason for an upgrade, they are thus not replacing these devices for the time being.

In Germany as well, the sector performed robustly. At the start of 2022, Bitkom had anticipated ITC sales of €184.9 billion for the year as a whole; at the start of 2023, the association was anticipating €196.1 billion, reflecting an increase of 4.0 percent. Information technology experienced above-average growth, with revenue forecast to reach €118.9 billion (+6.6 percent). Bitkom anticipates that the number of jobs grew by 3.5 percent, to 1.307 million, in 2022.

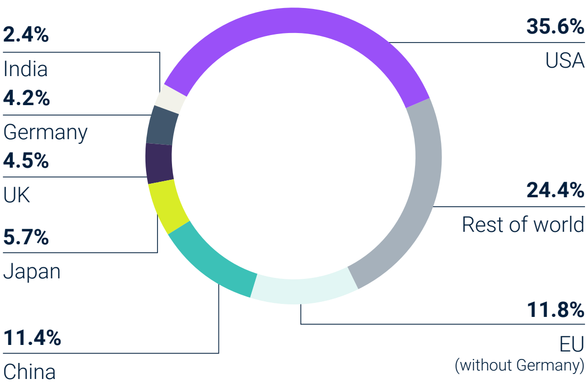
KEY EVENTS AFFECTING BUSINESS PERFORMANCE

The Helix transformation for sustainable profitable growth, begun in 2019, continued in the year under review. The key pillars of the Helix strategy are a focus on the right products and markets, a marketing strategy oriented to customers' needs, and fostering a team approach, both in regard to developing talent within the Company and to expanding partnerships in the sector. In the year under review, progress was achieved in all areas: Software AG's products are cloud-enabled, and thus meet customers' needs for fast availability at a reasonable cost. Accordingly, the Company continued the shift from perpetual licenses to subscription agreements in order to achieve consistent and sustainable growth. The first sign of success is the increase in product revenue, especially in the Digital Business line. Employees also showed greater engagement, as was clear once again from the increase in the Q12 index in the annual employee survey.

The acquisition of StreamSets, a data integration provider, which was announced in February and completed in mid-April 2022, strengthened the Hybrid Integration product area and allowed the Company to capture a greater share of the addressable market. However, Software AG's business performance was impacted by the overall economic situation. The economic upheaval caused by Russia's war of aggression against Ukraine, accompanied by increased uncertainty, rising prices, and growing inflation, led to delays in customers' decision-making. This dampened order entry in the Digital Business segment, in particular, leading to an adjusted guidance after the first half of the year. To further strengthen strategy implementation, Joshua Husk was appointed Chief Revenue Officer and Dr. Benno Quade was named Chief Operating Officer. As part of Software AG's efforts to sharpen its focus, the Company disposed of its ownership interest in FACT in the year under review. The niche provider for regulatory software was taken over by a new proprietor that is closer to FACT's actual business.

In addition, the Company pursued a partnership with Persistent, a middleware implementation partner in North America, and entered into an agreement to subcontract Persistent in connection with the Professional Services business in North America. The goal is to ensure accelerated product growth in the largest software market worldwide through the development of a strong customer and partner ecosystem.

The ICT Market: 2022 Revenue Shares by Country/Region



Note: forecast.
Source: Bitkom e.V., as of: January 2023.

MANAGEMENT'S GENERAL STATEMENT ON BUSINESS PERFORMANCE AND FINANCIAL POSITION

Software AG delivered its seventh consecutive quarter of Digital Business revenue growth in the fourth quarter and full-year performance in line with (Digital Business bookings, product revenue, and operating margin (EBITA, non-IFRS)) or ahead of (A&N bookings) the 2022 guidance ranges, underpinned by growing demand for our mission-critical, cloud-native product set. For 2023, we have outlined a clear set of strategic priorities that will shape our evolution as we build on our successes from four years of root-and-branch transformation through Helix and continue our path to sustainable profitable growth.

Organic bookings in Digital Business saw consistent growth of 20 percent (acc: 15 percent) in the fourth quarter to €197.6 million, bringing full-year bookings to €478.9 million. This represented 18 percent (acc: 12 percent) growth year-on-year. With the addition of StreamSets, bookings in the Group's Digital Business were €238.7 million in the fourth quarter and €555.6 million for the full year.

On an organic basis, total revenue was €292.0 million in the fourth quarter and €930.8 million for the full year, representing growth of 24 percent and 12 percent (acc: 19 percent and 6 percent) respectively. With the contribution of StreamSets, Software AG reported €303.8 million in Group revenue in the fourth quarter and €958.2 million for the full year.

Annual recurring revenue (ARR), now a headline guidance metric for the business, was €660.0 million on an organic basis at the end of the fourth quarter, representing 13 percent (acc: 10 percent) growth year-on-year. Organic ARR within the Digital Business grew 14 percent (acc: 11 percent) year-on-year to €476.2 million. Including StreamSets, Group ARR within the Digital Business grew 23 percent (acc: 20 percent).

Adabas & Natural (A&N) business product revenue saw a year-on-year increase of 79 percent (acc: 72 percent) to €91.6 million in the fourth quarter, driven by the increasing share of subscription in the Group's A&N revenue mix. In the full year, A&N product revenue was €245.9 million, up 15 percent (acc: 8 percent).

We saw continued robust organic profit in line with expectations in 2022, delivering an organic operating margin (EBITA, non-IFRS) of 23.1 percent in the fourth quarter and 21.2 percent for the full year.

For 2023 and beyond, we are working on a plan for the next phase of growth, and we will be sharing our mid-term view at Capital Markets Day later this year. The five guiding principles of the 2023 plan are as follows: accelerate the journey to cloud-first, double down on innovation in integration, increase sales specialization to drive efficacy and efficiency, leverage the value of A&N, and optimize our operating platform.

Due to the success of the Helix transformation, almost 90 percent of our total bookings in 2022 came from subscription and SaaS. Therefore, nearly all of our bookings now contribute directly to ARR. In addition, our progress on subscription means that the vast majority of our cash is now collected on annual cycles. As subscription, SaaS, and new business contracts start to stack up over time, we decided to base our 2023 guidance on ARR as key indicator of future revenue and cash flow. We will also continue to run the business with financial discipline and maximum efficiency with respect to costs overall, while we continue to pursue our bold growth ambitions.

For more information on our financial guidance for 2023, please refer to the Forecast.

COMPARISON OF ACTUAL PERFORMANCE WITH PREVIOUSLY ISSUED FORECASTS

Software AG communicated the following forecast for fiscal 2022 with the release of its 2021 consolidated results on January 27, 2022:

- Bookings growth in the Digital Business line of 15 to 25 percent year-on-year
- Bookings growth in the A&N business line of 0 to 5 percent year-on-year
- Growth in product revenue of 7 to 11 percent year-on-year
- Operating profit margin (EBITA, non-IFRS) between 20 and 22 percent

The growth forecasts for the bookings and product revenue indicators were at constant currency.

With the announcement of the acquisition of StreamSets on February 28, 2022, this organic forecast was confirmed. In addition to organic growth, the Company communicated the guidance that the acquisition of StreamSets in 2022 would lead to growth in Group product revenue (non-IFRS) of 12 to 16 percent. The impact of the acquisition on operating profit (EBITA, non-IFRS) was expected to be -€17 million to -€13 million.

After the first half of the year, Digital Business bookings the guidance was adjusted due to customers' delayed decision-making on contracts in light of the overall economic situation. The other guidance ranges were confirmed. The adjusted forecast for organic growth issued on July 14, 2022 was as follows:

- Bookings growth in the Digital Business line of 12 to 18 percent year-on-year
- Bookings growth in the A&N business line of 0 to 5 percent year-on-year (unchanged)
- Growth in product revenue of 7 percent to 11 percent year-on-year (unchanged)
- Operating profit margin (EBITA, non-IFRS) between 20 and 22 percent (unchanged)

Assumptions regarding the impact of the StreamSets acquisition remained unchanged, with an anticipated increase in Group product revenue (non-IFRS) of between 12 and 16 percent and an impact on operating profit (EBITA, non-IFRS) of -€17 million to -€13 million. This adjusted forecast was confirmed on October 27, 2022, with the release of the figures for the first nine months of the year.

Excluding StreamSets, Software AG posted the following results for the 2022 fiscal year:

- The Digital Business line reported €478.9 million (2021: €406.0 million) in bookings in 2022, representing 12 percent growth year-on-year at constant currency. These results were at the lower end of the latest stated guidance range of 12 to 18 percent for the year.
- The A&N business line generated bookings in the amount of €144.5 million (2021: €111.7 million) in fiscal 2022, reflecting a 23 percent increase year-on-year at constant currency. This result exceeds the stated guidance range of 0 to 5 percent. A&N thus developed significantly better than forecast. The reason for the better performance was largely a major customer contract in Israel which was signed earlier than expected.
- Product revenue increased 7 percent at constant currency totaling €773.4 million (2021: €684.0 million). This result is at the lower end of the guidance range that had been forecast since the start of the year.
- Software AG's operating profit (EBITA, non-IFRS) was €197.6 million (2021: €163.8 million) in 2022. This reflected an operating profit margin (EBITA, non-IFRS) of 21.2 percent, in the upper half of the guidance range of 20 to 22 percent.

Including StreamSets, Group product revenue (non-IFRS) increased 10 percent over the previous year at constant currency and was thus below the guidance range that had been forecast. Including StreamSets, the operating profit (EBITA, non-IFRS) was €178.5 million. The impact of StreamSets on this indicator was thus -€19.1 million, which was below the forecast.

Actual performance of secondary other key performance indicators that do not serve as a basis of Group management, compared with the previous year's forecast

To ensure consistency and transparency of reporting, the organic results are reported in this section without the impact of the acquisition of StreamSets, which was completed in April 2022. The Group results reported below in the Financial Performance section include StreamSets. Where necessary for clarity with regard to the developments described, the impact of StreamSets on the Group results is noted.

An organic increase in total revenue in the mid to high single-digit percent range at constant currency was expected for the Group in 2022 in comparison to 2021. This guidance was not changed in the adjusted forecast for the fiscal year issued on July 14, 2022. Excluding StreamSets, Group revenue in fiscal 2022 came to €930.8 million (2021: €833.8 million). At constant currency, this reflects an increase of 6 percent year-on-year. Actual revenue thus reached the original forecast.

The Management Board anticipated that **revenue in the Digital Business** line would be 9 to 13 percent higher at constant currency than in the previous year. Revenue (excluding StreamSets) rose by 12 percent, from €469.5 million to €527.5 million, or 7 percent at constant currency. The segment thus remained slightly below expectations.

For the **A&N business line**, an increase in revenue of 3 percent to 5 percent at constant currency year-on-year was forecast. A&N revenue actually increased

Outlook for Fiscal Year 2022

	FY 2021 in € mn	Outlook FY 2022 as of Jan. 27, 2022 as %	Adjusted outlook FY 2022 as of July. 14, 2022 as %	Actual change in comparison to the previous year as %
Digital Business bookings	406.0	+15 to +25[1]	+12 to +18[1]	+12[1]
A&N bookings	111.7	0 to +5[1]	0 to +5[1] (unchanged)	+23[1]
Product revenue	684.0	+7 to +11[1]	+7 to +11[1] (unchanged)	+7[1]
Operating profit margin (EBITA, non-IFRS)[2] as %	19.6	20 to 22	20 to 22 (unchanged)	21.2

[1] At constant currency.
[2] Before adjusting for non-operating factors (see non-IFRS definition of earnings) in Key Financial Performance Indicators.

from €214.5 million to €245.9 million in comparison to 2021, representing a 15 percent increase, or an 8 percent increase at constant currency. Revenue in this segment thus exceeded expectations.

Professional Services revenue (excluding StreamSets) increased in fiscal 2022 by 5 percent to €157.4 million (2021: €149.8 million), reflecting a decline of 1 percent at constant currency.

In last year's Forecast, Software AG's Management Board anticipated that, assuming stable conditions (precluding unforeseeable special effects and the acquisition of StreamSets), **IFRS net income for the Group** would increase by 10 to 25 percent. The reason for this was the forecast positive revenue effects from the anticipated increase in bookings, together with slower growth of costs in proportion to revenue. IFRS net income, excluding StreamSets, came to €73.3 million (2021: €84.3 million) in 2022, and thus declined by 13 percent in comparison to the previous year. IFRS net income was thus below expectations. This deviation was driven primarily by unexpected one-time effects such as the goodwill impairment recognized in the third quarter in the Professional Services segment in the amount of €25.3 million, and the valuation adjustment to deferred tax assets carried out in the fourth quarter in the amount of €21.8 million.

For the **Digital Business segment**, the Management Board anticipated that the segment margin would increase 20 to 50 percent year-on-year. Excluding StreamSets, the actual segment margin was 13.3 percent (2021: 11.9 percent), reflecting an increase of 12 percent, which was below expectations. This was because the lower-than-planned bookings and revenue in this segment, as described above, could not be fully offset on the cost side if the Company were to avoid constraining future growth.

In the **A&N segment**, a 2 to 5 percent margin increase was expected. The actual margin was 68.8 percent (2021: 68.0 percent), reflecting an increase of 1 percent.

In the **Professional Services segment**, a 20 to 25 percent decline in the segment margin was expected. The actual segment margin (excluding StreamSets) was 14.7 percent (2021: 18.5 percent), representing a decline of 21 percent, which was in line with expectations.

FINANCIAL PERFORMANCE

REVENUE

Group revenue totaled €958.2 million (2021: €833.8 million) in 2022, representing a 14.9 percent increase, or an 8.0 percent increase at constant currency. Of this total, €27.4 million was attributable to StreamSets. The **Digital Business** segment posted an increase in revenue which is in line with the current phase of the Helix strategy and the resulting intensified focus on subscription and SaaS business: Digital Business revenue increased by 17 percent (acc: 11 percent) to €549.7 million (2021: €469.5 million). Excluding StreamSets, revenue in the segment came to €527.5 million. The **Adabas & Natural (A&N)** business line generated revenue of €245.9 million (2021: €214.5 million). This reflected an increase of 15 percent year-on-year, or 8 percent at constant currency. At the end of fiscal 2022, ARR[1] including StreamSets came to €700.2 million (2021: €585.4 million). The share attributable to StreamSets was €40.2 million. ARR in the Digital Business line rose by 23 percent (acc: 20 percent) year-on-year. Excluding StreamSets, this reflects an increase of 14 percent (acc: 11 percent). ARR shows active contracts as of the end of the reporting period, together with their recurring revenue. ARR is thus an indicator of the recurring annualized product revenue and cash flows, standardized on a twelve-month basis, that can be expected for active contracts that are continued.

CURRENCY IMPACT ON REVENUE

Currency translation had a positive impact on revenue in fiscal 2022, after having had a negative impact on revenue in the previous year. Currency effects came to a total of €53.6 million (6 percent). The main driver was the stronger US dollar (with the US dollar accounting for the largest share among foreign currencies in the Group).

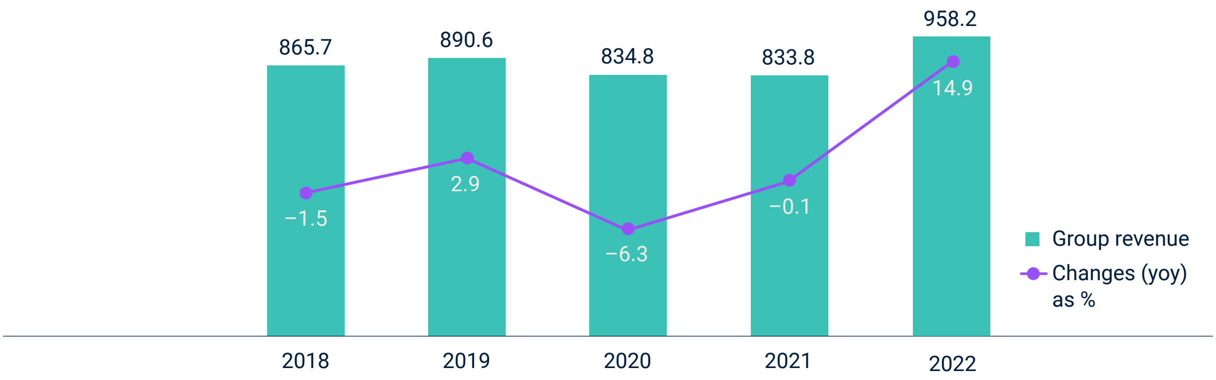
[1] Value of all active contracts at period end (without one-time effects) divided by the contract length in months multiplied by 12.

Currency Impact on Revenue

in € millions	2022	as %
Subscription	17.8	5
SaaS	4.2	6
Perpetual	22.1	7
Support and Services	9.6	6
Total	**53.6**	**6**

The largest percentage of Software AG's total revenue was generated in US dollars (USD), at 32 percent (2021: 31 percent). The euro (EUR) also accounted for a significant share in total revenue, at 28 percent (2021: 31 percent). It is followed by the Israeli shekel (ILS), at 6 percent (2021: 7 percent) and pound sterling (GBP), also at 6 percent (2021: 5 percent). Other currencies accounted for the remaining 28 percent (2021: 26 percent). The broad distribution of currency shares reflects Software AG's highly global focus. Currency effects had a positive impact on all business lines, with subscription models and perpetual licenses causing an impact of +5 percent and +7 percent, respectively. In the cloud and services businesses, currency effects came to +6 percent.

Five-Year Revenue Performance in € Millions



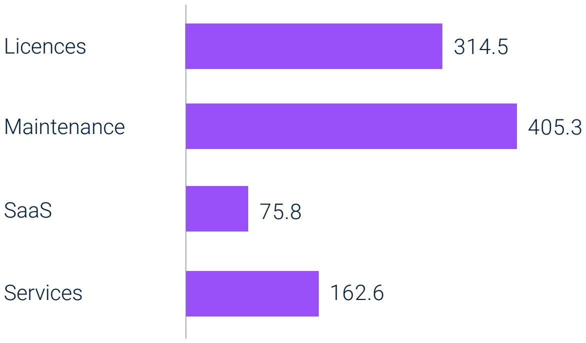
Quarterly Revenue

	Q1		Q2		Q3		Q4	
in € millions	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Group revenue	206.0	183.1	226.9	218.2	221.4	198.0	303.8	234.6
as % of total annual revenue	21	22	24	26	23	24	32	28

TYPES OF REVENUE

Types of Revenue

(2022 in € millions)



Software AG's Group revenue is made up of product revenue—consisting of license, maintenance, and SaaS sales—and services revenue. Product revenue rose to €795.6 million (2021: €684.0 million) in 2022, representing a 16.3 percent increase, or a 10.0 percent increase at constant currency. Excluding StreamSets, product revenue came to €773.4 million. As a percentage of total revenue, product revenue, at 83 percent (2021: 82 percent) was slightly above the previous year's level. License revenue from Digital Business and A&N products, at €314.5 million (2021: €240.5 million), increased by 30.8 percent, or 24.0 percent at constant currency, compared to the previous year. The positive year-on-year performance is attributable to the steady growth in subscriptions in the Digital Business and A&N segments. Maintenance revenue in these two business lines increased during the reporting period to €405.3 million (2021: €399.4 million). This represents an increase of 1.5 percent, or a decline in maintenance revenues of 5.0 percent at constant currency. At 42.3 percent (2021: 47.9 percent), the share of maintenance in total revenue was approximately 5.6 percentage points lower than in fiscal 2021. Here too, the positive trend in comparison to the previous year can be attributed to the steady growth in the subscription business, offsetting the negative impact of the usual perpetual maintenance contract terminations, which were roughly at the previous year's level. SaaS revenue rose 71.9 percent, or 62.0 percent at constant currency, in 2022, to €75.8 million (2021: €44.1 million). The revenue increase is due to the strategic focus and the associated steady growth in the SaaS customer base. Revenue in the Professional Services segment, which will concentrate on high-value projects associated with Software AG's own products, increased in the year under review by 8.5 percent, or by 2 percent at constant currency, to €162.6 million (2021: €149.8 million).

PRODUCT REVENUE BY REGION

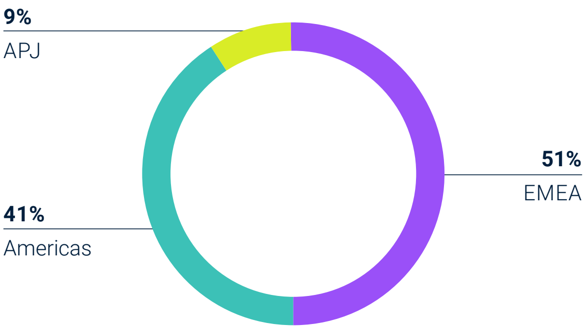
Software AG's global product revenue is allocated to three regions:

Americas (North America, NAM, and **Latin America**, LATAM) generated revenue (excluding StreamSets) of €315.3 million (2021: €278.7 million) in 2022 and thus accounted for 41 percent (2021: 41 percent) of product revenue. Broken down by country, the USA accounted for the largest share of revenue, as expected, followed by Brazil and Canada. North America (NAM) generated total revenue of €274.0 million (2021: €244.7 million). Latin America (LATAM) generated revenue of €41.3 million (2021: €34.0 million).

EMEA (Europe including Germany, Austria, and Switzerland, and Middle East and Africa) posted revenue (excluding StreamSets) of €392.2 million (2021: €349.2 million) and thus accounted for a share in global product revenue of 51 percent (2021: 51 percent). The most important single markets in this region are Germany, the United Kingdom, France, Israel, Turkey, and Spain.

APJ posted product revenue (excluding StreamSets) of €65.9 million (2021: €56.1 million), thus accounting for 9 percent (2021: 8 percent) of Group product revenue. The largest single market in this region was Australia, followed by Japan.

Product Revenue by Region



ORDER BACKLOG AND BOOKINGS

As described in Fundamental Aspects of the Group, order backlog in the Professional Services business line is an especially important company-specific early warning indicator. Software AG's order backlog as of December 31, 2022, continued its positive development and will thus support the expected stable growth in fiscal 2023. At the end of 2022, the forward order book (order backlog/revenue * 365 days) was around six months, and was thus at about the same level as in the previous year.

With the strategic shift from perpetual licenses to subscription business, the bookings indicator is used to ensure that order entries are comparable across the different license and contract models. In fiscal 2022, bookings in the product business amounted to €700.1 million (2021: €517.7 million), representing 35 percent growth year-on-year, or 28 percent at constant currency. Excluding StreamSets, bookings in the product business amounted to €623.4 million, representing 20 percent growth year-on-year, or 15 percent at constant currency. Bookings in the Digital Business line in the amount of €555.6 million (2021: €406.0 million) account for 79 percent (2021: 78 percent) of Software AG's total bookings.

PERFORMANCE OF KEY ITEMS ON THE INCOME STATEMENT AND COST STRUCTURE

Software AG's **cost of sales** increased in proportion to revenue in fiscal 2022 year-on-year. This was mainly due to higher amortization of intangible assets as a result of the StreamSets acquisition and increased personnel costs. The cost of sales amounted to €239.9 million (2021: €188.8 million). **Gross profit** increased by 11.4 percent, or 4 percent at constant currency, to €718.3 million (2021: €645.0 million). The gross profit margin as a percentage of Group revenue, at 75.0 percent (2021: 77.4 percent), declined by 2.4 percentage points and thus remained close to last year's high level. This continued high profitability is due primarily to the high share of the product business.

To further secure Software AG's technology competence in the dynamic digital market, **expenses for research and development (R&D)** increased 20.0 percent to €181.4 million (2021: €151.2 million). R&D expenses as a percentage of product revenue (licenses, maintenance, and SaaS) increased compared to the previous year, from 22.1 percent to 22.8 percent.

Sales, marketing, and distribution expenses increased 22.1 percent year-on-year, coming to €342.0 million (2021: €280.2 million) for 2022 as a whole. These expenses as a percentage of total revenue were thus 35.7 percent (2021: 33.6 percent). This increase particularly reflects the effects of the StreamSets acquisition and the investments in sales and marketing measures as part of the Helix program, which are aimed at strengthening and increasing the Company's presence in key regions.

General and administrative expenses rose by 13.9 percent to €94.3 million (2021: €82.8 million). General and administrative expenses as a percentage of total revenue thus remained at almost the same level, at 9.8 percent (2021: 9.9 percent).

2022 Income Statement

in € millions	2022	2021	+/– as %	+/– as % acc[1]
Licenses	314.5	240.5	30.8	24.0
Maintenance	405.3	399.4	1.5	-5.0
SaaS	75.8	44.1	71.9	62.0
Product revenue	795.6	684.0	16.3	10.0
Services	162.6	149.8	8.5	2.0
Total revenue	**958.2**	**833.8**	**14.9**	**8.0**
Cost of sales	-239.9	-188.8	27.1	22.0
Gross profit	**718.3**	**645.0**	**11.4**	**4.0**
R&D expenses	-181.4	-151.2	20.0	
Sales, marketing, and distribution expenses	-342.0	-280.2	22.1	
General and administrative expenses	-94.3	-82.8	13.9	
Other income/expenses, net	-22.5	-8.7	158.6	
Other taxes	-2.5	-5.3	-52.8	
Operating income	**75.6**	**116.8**	**-35.3**	
Financial income/expenses, net	-10.5	1.0	-1150.0	
Earnings before income taxes	**65.1**	**117.8**	**-44.7**	
Income taxes	-45.9	-33.4	37.4	
Net income	**19.2**	**84.3**	**-77.2**	
thereof attributable to shareholders of Software AG	19.0	83.9	-77.4	
thereof attributable to non-controlling interests	0.3	0.5	-40.0	
Earnings per share in € (basic)	0.26	1.13	-77.0	
Earnings per share in € (diluted)	0.26	1.13	-77.0	
Weighted average number of shares outstanding (basic)	73,979,889	73,979,889		
Weighted average number of shares outstanding (diluted)	73,979,889	73,979,889		

[1] At constant currency.

EARNINGS PERFORMANCE

Software AG's **operating income** declined in the year under review to €75.6 million (2021: €116.8 million). The operating margin, at 7.9 percent (2021: 14.0 percent), was below the previous year's level. This is mainly due to increased R&D and sales, marketing, and distribution expenses (due to the StreamSets acquisition) and to the Helix program. This trend was offset by the high-margin product revenue, accounting for 83 percent (2021: 82.0 percent) of total revenue, and the ongoing strength of the very profitable A&N business.

EBIT (net income plus income taxes plus other taxes plus net financial income/expenses), at €78.1 million (2021: €122.1 million), was down 36 percent year-on-year. This decline was the net result of the following effects: Revenue increased to €958.2 million (2021: €833.8 million). The cost of sales rose by 27.1 percent to €239.9 million (2021: €188.8 million). R&D expenses increased by 20 percent to €181.4 million (2021: €151.2 million). Sales, marketing, and distribution expenses came to €342.0 million (2021: €280.2 million), reflecting an increase of 22 percent. General and administrative expenses increased by 14 percent to €94.3 million (2021: €82.8 million), due among other factors to inflation-related salary adjustments.

Other net income came to -€22.5 million (2021: -€8.7 million) in fiscal 2022, mainly due to a goodwill impairment in the Professional Services segment resulting from the strategic realignment of the services business. Furthermore, income was generated by the sale of an ownership interest. In addition, provisions were set up for restructuring measures and for ongoing litigation in connection with the earlier acquisition of IDS Scheer AG.

Net financial income declined in the year under review, to -€10.5 million (2021: €1.0 million). The difference compared to the previous year was attributable primarily to higher interest rates and to expenses for the convertible bond issue with Silver Lake.

Earnings before income taxes declined by 44.7 percent to €65.1 million (2021: €117.8 million). The income tax expense rose by 37.4 percent, to €45.9 million (2021: €33.4 million). One key issue was the valuation adjustment to deferred tax assets carried out in the fourth quarter in the amount of €21.8 million. As a result, the Group's effective income tax rate rose to 70.4 percent (2021: 28.4 percent).

Net income, at €19.2 million (2021: €84.3 million), was down 77.2 percent year-on-year in the reporting period. Accordingly, **earnings per share** (basic and diluted) were €0.26 (2021: €1.13) with the average number of shares outstanding (basic and diluted) at 73,979,889 (2021: 73,979,889). Of the decline, €54.0 million is attributable to the acquisition and first-time consolidation of StreamSets as of the acquisition date. Unexpected noncash one-time effects such as the goodwill impairment charge recorded in the third quarter in the Professional Services segment in the amount of €25.3 million, and the valuation adjustment to deferred tax assets carried out in the fourth quarter in the amount of €21.8 million, also had a significant impact on net income.

APPROPRIATION OF PROFITS

Software AG adheres to a sustainable dividend policy, which is geared toward long-term, value-oriented development of the Company. Software AG's Management Board plans to propose a dividend of €0.05 per share to this year's Annual Shareholders' Meeting, which will resolve the appropriation of profits for fiscal year 2022. This amount reflects a return to Software AG's payout range of 30 to 40 percent of averaged Group net income and free cash flow.

Subject to the approval of the Annual Shareholders' Meeting and assuming 74.0 million (2021: 74.0 million) dividend-bearing shares outstanding, this would be a total payout sum of €3.7 million (2021: €56.2 million).

2022 Earnings

in € millions	2022	2021	+/– as %
Total revenue	**958.2**	**833.8**	**15**
Cost of sales	-239.9	-188.8	27
Gross profit	**718.3**	**645.0**	**11**
Margin as %	75.0	77.4	-3
R&D expenses	-181.4	-151.2	20
Sales, marketing, and distribution expenses	-342.0	-280.2	22
General and administrative expenses	-94.3	-82.8	14
Other income/expenses (net)	-22.5	-8.7	158
EBIT	**78.1**	**122.1**	**-36**
Margin as %	8.2	14.6	

ADDITIONAL PERFORMANCE INDICATORS

In order to improve the comparability of Software AG with competitors (primarily in the US) which do not use IFRS accounting standards, Software AG also reports non-IFRS performance indicators. (For more information, please refer to Internal Corporate Control System.) These performance indicators are as follows:

Operating Earnings per Share (non-IFRS)

in € millions	2022	2021
Net income	19.2	84.3
Income taxes	45.9	33.4
As % of earnings before income taxes	0.0	0.0
Earnings before income taxes	**65.1**	**117.7**
Other taxes	2.5	5.3
Financing income	-14.9	-7.2
Financing expenses	25.4	6.2
Financial income/expenses, net	**10.5**	**-1.0**
EBIT (before all taxes)	**78.1**	**122.1**
Acquisition-related amortization of intangible assets	59.6	15.8
Acquisition-related reductions in product revenue due to purchase price allocations	1.3	0.0
Other non-operating expenses and acquisition-related effects on earnings	14.1	8.6
Income/expenses resulting from share price-based remuneration	11.7	9.9
Restructuring/severance/litigation	13.6	7.4
Operating EBITA (non-IFRS)[1]	**178.5**	**163.8**
Operating margin (EBITA, non-IFRS) as %	**18.6**	**19.6**
Financial income/expenses, net	-10.5	1.0
Other taxes	-2.5	-5.3
Earnings before income taxes (non-IFRS)	165.5	159.5
Income taxes (non-IFRS) (FY 2022: 70.4%; FY 2021: 28.4%)[1]	-116.6	-45.3
Net income (non-IFRS)	48.9	114.2
Earnings per share (non-IFRS)[2] in €	**0.66**	**1.54**
Average number of shares outstanding (no.)	74.0	74.0

[1] Income tax rates shown are equal to the actual rates for fiscal 2022 and 2021.

[2] Earnings per share (non-IFRS) are calculated by dividing operating net income (non-IFRS) by the average number of shares outstanding.

Operating profit margin (EBITA, non-IFRS) is Software AG's key performance indicator for monitoring profitability. EBITA (non-IFRS) rose by 9 percent to €178.5 million (2021: €163.8 million) in fiscal 2022 year-on-year. EBIT was down 36 percent to €78.1 million (2021: €122.0 million). Expenses for amortization on acquisition-related intangible assets increased by €43.8 million to €59.6 million (2021: €15.8 million). This increase largely resulted from the acquisition of StreamSets and from goodwill impairments in the Professional Services segment.

Another factor was the expenses for stock option plans, which increased by 18 percent to €11.7 million (2021: €9.9 million). Restructuring, severance, and litigation increased by €6.2 million to €13.6 million (2021: €7.4 million).

Other non-operating expenses and acquisition-related effects on earnings increased by €5.5 million to €14.1 million.

Software AG's operating profit margin (EBITA, non-IFRS) based on Group revenue declined to 18.6 percent (2021: 19.6 percent). Excluding StreamSets, the operating margin came to 21.2 percent. The margin was thus in line with the guidance communicated at the start of the year. At the same time, the Group continued to invest in the partner network and to make targeted investments in innovations in the product portfolio. Furthermore, there was temporary pressure on the margin due to the shift in the business model from perpetual licenses to subscription and SaaS. The profit margin continues to solidify the financial foundation for the Company's growth in 2023 and beyond.

Operating net income (non-IFRS) declined by 57 percent to €48.9 million (2021: €114.2 million).

Net financial income declined by €11.5 million, mainly due to expenses in connection with the subscribed convertible bonds with Silver Lake. The increase in income taxes (non-IFRS) by €71.3 million, as well as the increase in operating EBITA (non-IFRS), is attributable to a one-time effect arising from the impairment of deferred tax assets.

Operating earnings per share (non-IFRS), based on the average number of shares outstanding (basic) in the amount of 74.0 million (2021: 74.0 million), were €0.66 (2021: €1.54), representing a decline of 57 percent.

SaaS/usage-based revenue

Recognizing the increasing importance of new licensing models in the software industry, Software AG added the SaaS/usage-based revenue type to the Digital Business segment in fiscal 2018. With SaaS, customers acquire rights of use to the software, including operation of the software (hosting), for a limited period of time. Customers do not own the software; rather, they can only use it online. SaaS/usage-based sales revenue came to a total of €75.8 million (2021: €44.1 million) in fiscal 2022 and was thus up 72 percent over the previous year. Excluding StreamSets, the increase was 42 percent

Multi-Period Earnings Summary

in € millions	2022	2021	2020	2019	2018
Total revenue	**958.2**	**833.8**	**834.8**	**890.6**	**865.7**
thereof product revenue	795.6	684.0	671.1	702.7	682.4
EBIT (before all taxes)	**78.1**	**122.1**	**136.4**	**214.8**	**231.6**
as % of total revenue	8.2	14.6	16.3	24.1	26.8
Net income	**19.2**	**84.3**	**96.1**	**155.3**	**165.2**
as % of total revenue	2.0	10.1	11.5	17.4	19.1

SEGMENT REPORTING

Total revenue for 2022 was distributed among Software AG's three segments, Digital Business, A&N, and Professional Services, as follows:

Revenue Split in 2022

in € millions	2022	as %
Total revenue	**958.2**	**100**
Digital Business	**549.7**	**57**
A&N	**245.9**	**26**
Professional Services	**162.6**	**17**

With its future-oriented products for customers' digital transformation, the Digital Business segment once again increased its share in total Group revenue, to 57 percent (2021: 56 percent). This confirms the business and market relevance of this business line. In particular, revenue from SaaS, which is part of the Digital Business segment, increased significantly by 72 percent (acc: 62 percent) to €75.8 million (2021: €44.1 million). Excluding StreamSets, the increase came to 42 percent (acc: 36 percent).

Revenue in the traditional A&N segment increased by 8 percent at constant currency, to €245.9 million (2021: €214.5 million). The segment thus generated 26 percent (2021: 26 percent) of total revenue. The Professional Services segment accounted for 17 percent, with its share in revenue thus down 1 percentage point year-on-year.

Digital Business

The Digital Business segment generated revenue of €549.7 million (2021: €469.5 million) in 2022, reflecting a 17 percent increase over the previous year. Annual recurring revenue (ARR) in the Digital Business segment came to €516.4 million (2021: €418.5 million) as of the end of fiscal 2022. Digital Business segment earnings came to €38.2 million (2021: €55.8 million). This year-on-year decrease was due to higher cost of sales and higher R&D and sales and marketing investments. Accordingly, the segment margin declined to 6.9 percent (2021: 11.9 percent) in the year under review. Excluding StreamSets, segment earnings came to €70.4 million and the margin to 13.3 percent.

2022 Segment Report for Digital Business

in € millions	2022	2021	+/– as %	+/– as % acc[1]
Subscription	262.3	184.9	42	34
SaaS	75.8	44.1	72	62
Maintenance from perpetual licenses	181.3	209.9	-14	-19
Total recurring revenue	**519.5**	**438.9**	**18**	**12**
Perpetual licenses	30.2	30.6	-1	-5
Total product revenue	**549.7**	**469.5**	**17**	**11**
Cost of sales	-77.8	-62.5	24	22
Gross profit	**471.9**	**407.0**	**16**	**9**
Sales, marketing, and distribution expenses	-284.3	-231.1	23	16
R&D expenses	-149.5	-120.1	24	19
Segment earnings	**38.2**	**55.8**	**-32**	**-42**
Margin as %	**6.9**	**11.9**	**–**	**–**

[1] At constant currency.

Adabas & Natural (A&N)

The mainframe database segment (A&N) generated €245.9 million (2021: €214.5 million) in revenue in fiscal 2022, representing a 15 percent increase, or an 8 percent increase at constant currency. The whole market for traditional database software for mainframes is in decline due to its maturity and saturation. So for the future, Software AG anticipates a stable to moderate decrease in this business. The fact that the decline in this traditional business slowed in recent years reflects the loyalty of the A&N customer base, which continues to rely on Software AG's dependable technology to run their business-critical applications. A key factor in the increased confidence was Software AG's announcement in late 2016 that it would continue development and support for the A&N portfolio beyond the year 2050. The Adabas & Natural 2050+ innovation program has had a positive impact since its introduction and will trigger new impetus for this segment in the medium term. In addition, customers' desire for subscription agreements has grown.

A&N subscription revenue rose 65 percent, or 58 percent at constant currency, to €100.6 million (2021: €61.1 million) in the year under review. Maintenance revenue from perpetual licenses in this segment came to €121.1 million (2021: €126.1 million), representing a decline of 4 percent, or 10 percent at constant currency.

A&N segment earnings increased accordingly to €169.2 million (2021: €145.9 million). A&N's segment margin was 68.8 percent (2021: 68.0 percent), 0.8 percentage points higher than in the previous year.

2022 Segment Report for Adabas & Natural (A&N)

in € millions	2022	2021	+/– as %	+/– as % acc[1]
Subscription	100.6	61.1	65	58
Maintenance from perpetual licenses	121.1	126.1	-4	-10
Total recurring revenue	**221.7**	**187.2**	**18**	**12**
Perpetual licenses	24.3	27.3	-11	-18
Total product revenue	**245.9**	**214.5**	**15**	**8**
Cost of sales	-8.5	-7.7	10	4
Gross profit	**237.5**	**206.7**	**15**	**8**
Sales, marketing, and distribution expenses	-36.4	-29.8	22	15
R&D expenses	-31.9	-31.0	3	3
Segment earnings	**169.2**	**145.9**	**16**	**8**
Margin as %	**68.8**	**68.0**		

[1] At constant currency.

Professional Services

In fiscal 2022, the Professional Services segment generated revenue of €162.6 million (2021: €149.8 million), representing a 9 percent (acc: 2 percent) increase. Excluding StreamSets, the segment posted revenue of €157.4 million, representing an increase of 5 percent (acc: -1 percent). Segment earnings declined by 21 percent, or 28 percent at constant currency, to €21.9 million (2021: €27.8 million). The cost of sales, which accounts for the largest share of expenses in this segment by far, increased by 18 percent, or 11 percent at constant currency, to €127.9 million (2021: €108.6 million). Sales, marketing, and distribution expenses declined 4 percent, or 10 percent at constant currency, to €12.9 million (2021: €13.4 million). The segment margin was 13.4 percent (2021: 18.5 percent). The reasons for the decline in the margin include the investments made in the framework of the PS transformation project and the strategic partnerships established in connection with it. In addition, travel picked up once again in 2022, after the restrictions of the previous year due to the COVID-19 pandemic.

Software AG's strategic consulting services remained highly relevant for customers in fiscal 2022. The Company has set sustainable profitability and high service quality as its objectives for this segment–not rapid growth. The Professional Services business line was again able to support the sustainable success of the other two product-driven business lines. In the third quarter of 2022, the Company expanded its strategic partnership with Persistent, a middleware implementation partner in North America. The partnership entailed subcontracting Persistent as a service partner in the North American market, offering customers tailored solutions on the basis of Software AG products.

2022 Segment Report for Professional Services

in € millions	2022	2021	+/– as %	+/– as % acc[1]
Total revenue	**162.6**	**149.8**	**9**	**2**
Cost of sales	-127.9	-108.6	18	11
Gross profit	**34.7**	**41.2**	**-16**	**-22**
Sales, marketing, and distribution expenses	-12.9	-13.4	-4	-10
Segment earnings	**21.9**	**27.8**	**-21**	**-28**
Margin as %	**13.4**	**18.5**	**–**	**–**

[1] At constant currency.

THE GROUP'S FINANCIAL POSITION

GENERAL PRINCIPLES AND OBJECTIVES OF SOFTWARE AG'S FINANCIAL MANAGEMENT

The primary objective of Software AG's financial management is to support the Group's profitable growth and ongoing optimization of its portfolio through an appropriate financing structure—regardless of short-term fluctuations to capital market conditions. Software AG ensures the solvency of all subsidiaries in the Group through central **liquidity management**. The Company has sufficient liquid assets available for this from net cash provided by operating activities and existing credit agreements.

The Finance department implements financial policy and risk management based on guidelines determined by the Management Board. Software AG's liquidity position is controlled through active **working capital management**. Financial investments are essentially oriented toward the short term, which means that Group funds are invested at near money-market rates. Software AG consistently minimizes its default risk by broadly diversifying investments and using stringent criteria in selecting transaction partners.

Furthermore, Software AG's corporate Finance department also monitors the currency risks for all Group companies, controls internal allocation of currency positions, Including cash pooling, and minimizes remaining balances using derivative financial instruments. In doing so, only existing balance sheet items or expected cash flows are hedged.

FINANCING INSTRUMENTS

Since the shift to subscription and SaaS revenue, Software AG's financing is to be based on ongoing recurring free cash flow. During the ongoing transition phase, the shift in the business model to recurring revenue and cash flows, in particular the granting of term software licenses, tends to lead to later inflows.

In addition, external financing, factoring, and finance leasing models are used for any additional financing needs. A financial risk arises from the possibility that the Company would not be able to satisfy existing financial liabilities, which include loan agreements, leases, and trade accounts payable. The Group limits this risk by means of liquidity control. Financial obligations can be balanced by available cash, bilateral lines of credit, and the syndicated loan. The loans used are at variable and fixed interest rates and have remaining terms to maturity of no more than nine years. Variable interest payments are based on the prevailing interest rate on the reporting date. Liabilities in foreign currency are translated at the exchange rate as of December 31, 2022.

STRATEGIC FINANCING MEASURES

Software AG's free cash flow is the backbone of its financing strategy. In combination with a high equity ratio, it offers financial flexibility for organic and inorganic growth. The syndicated line of credit in the amount of €300 million was refinanced and extended in December 2022, before it had expired. The new term is five years, to December 2027. In addition, the agreement includes an option to increase the credit volume by up to €100 million. This line of credit can be used for general business purposes, including M&A.

As an additional source of financing, Software AG issued €344.3 million in convertible bonds to the Silver Lake Group at the beginning of 2022. The bonds will reach maturity in early 2027. The revenue generated by the transaction was mainly used for the acquisition of StreamSets.

Combined with a comfortable liquidity position and available liquidity lines, the Group achieves a financing structure that is independent of short-term capital market conditions, thereby ensuring the solvency of all subsidiaries and allowing scope for strategic development.

ANALYSIS OF THE FINANCIAL POSITION

Software AG's **net cash position** (cash and cash equivalents less financial liabilities) as of December 31, 2022, was -€240.0 million (2021: €277.2 million). This year-on-year decline resulted mainly from the increase in non-current financial liabilities in connection with the convertible bond issue, the cash flows from operating, investment, and financing activities described as follows, and the resulting cash and cash equivalents as of the end of the year:

Multi-Period Financial Position Summary

in € millions	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018
Cash and cash equivalents	427.1	585.8	480.0	513.6	462.4
Current financial liabilities	31.9	84.8	16.4	96.4	111.9
Non-current financial liabilities	635.2	223.8	243.5	200.2	201.4
Net liquidity	-240.0	277.2	220.1	217.0	149.0
Equity	1,511.2	1,438.2	1,312.5	1,357.5	1,239.1
Equity ratio as %	56	65	64	64	62
Total assets	**2,678.4**	**2,221.4**	**2,039.9**	**2,116.1**	**2,007.9**

Net cash from operating activities declined by €97.8 million, from €116.2 million to €18.4 million. This was mainly a result of the decline in operating profit, as described in the Financial Performance section, and the increase in receivables and assets not due in connection with the gradual shift from customer contracts to subscriptions. During the transition phase, the transformation of the business model is leading to later inflows from customer contracts.

Cash outflows from investing activities rose by €484.5 million, from €28.7 million to €513.2 million. This increased outflow resulted mainly from the acquisition of StreamSets, which led to a net cash outflow of €537.3 million. The sale of the Company's ownership interest in FACT led to a positive one-time effect in the amount of €10.8 million in the third quarter of the year under review.

Cash inflows from financing activities increased by €333.8 million to €316.7 million, mainly in connection with the issue of convertible bonds to Silver Lake.

Cash and cash equivalents as of December 31, 2022, came to €427.1 million, compared to €585.8 million on December 31, 2021. This difference of €158.7 million resulted from the balance of the described cash flows, plus a currency translation adjustment in the amount of €19.3 million.

Statement of Cash Flows in 2022

in € millions	2022	2021
Net cash from operating activities	18.4	116.2
Net cash from investing activities	-513.2	-28.7
Net cash from financing activities	316.7	-17.1
Change in cash and cash equivalents from currency translation	19.3	35.4
Net change in cash and cash equivalents	-158.7	105.8
Cash and cash equivalents at end of period	427.1	585.8
Free cash flow	**-1.1**	**91.4**

Free cash flow—defined by Software AG as cash flow from operating activities minus cash flow from investing activities without inflows and outflows directly related to current financial assets and M&A activities and repayment of lease liabilities—was -€1.1 million in the year under review, compared to €91.4 million in 2021. This performance was largely due to the described change in cash flow from operating activities.

Calculation of 2022 Free Cash Flow

in € millions	2022	2021
Net cash from operating activities	**18.4**	**116.2**
Proceeds from the sale of property, plant, and equipment/intangible assets	3.1	2.1
Purchase of property, plant, and equipment/ intangible assets	-13.5	-11.1
Proceeds from the sale of non-current financial assets	4.9	1.1
Purchase of non-current financial assets	-2.0	-3.9
Repayment of lease liabilities	-12.0	-13.0
Free cash flow	**-1.1**	**91.4**

Shareholders' equity was €1,511.2 million (2021: €1,438.2 million) at the end of the year under review, representing an increase of €73.0 million year-on-year. With an equity-to-assets ratio of 56 percent (2021: 65 percent), Software AG remains on a solid financial foundation. The decline in the equity-to-assets ratio is mainly attributable to the balance sheet extension in connection with the StreamSets acquisition and to the issue of the convertible bonds.

ASSET STRUCTURE ANALYSIS

Assets as of December 31, 2022, increased by €457.0 million, from €2,221.4 million to €2,678.4 million.

On the **assets** side, **current assets** declined by €105.0 million, from €874.9 million to €769.9 million. This was driven primarily by the following changes:

- Cash and cash equivalents declined as described in the Financial Position section, by €158.7 million to €427.1 million.
- Current trade receivables, contract assets, and other receivables rose by €53.3 million to €251.8 million, mainly due to increased receivables and contract assets. The latter represent payments due from customers for underlying services that have been rendered by Software AG but, due to contractual provisions, will be invoiced later, particularly in connection with the granting of temporary software licenses through subscription agreements.

Non-current assets increased by €562.0 million, from €1,346.5 million to €1,908.5 million. This increase was primarily driven by higher intangible assets (less ongoing amortization) due to the StreamSets acquisition and by goodwill, which was also impacted by currency exchange fluctuations (net increase as of December 31, 2022, by €529.9 million, of which €134.2 million was attributable to intangible assets and €395.7 million to goodwill). The additions arising from the StreamSets acquisition were allocated to the Digital Business segment. Moreover, a goodwill impairment for the Professional Services segment was recognized in the amount of €25.3 million. Further changes were as follows:

- Property, plant, and equipment and investment property remained largely unchanged compared to December 31, 2021. Netted changes relate to amortization, ongoing replacement investments in the framework of regular business operations, and exchange rate fluctuations.
- Non-current other non-financial assets increased by €43.7 million to €52.8 million, of which €33.2 million was attributable to the impact of the adjusted measurement of pension provisions and the corresponding plan assets, due to the changed interest rate environment and the actuarial assumptions based on it.

On the **liabilities** side, **current debt** declined slightly by €36.2 million to €454.6 million, mainly due to the decline in current financial liabilities by €53.0 million as a result of repayments of external financing and to the increase in current other provisions by €15.6 million. The increase in current other provisions relates mainly to the recognition of a restructuring provision and to increased provisions for litigation.

Non-current debt increased by €420.3 million, from €292.3 million to €712.6 million. The increase was largely due to the following changes:

- Non-current financial liabilities increased by €411.5 million to €635.2 million, of which €311.2 million is attributable to the convertible bond issue. Furthermore, a long-term loan with a nominal amount of €120.0 million was taken out.
- As in the case of non-current other non-financial assets as described, the decline in provisions for pensions and similar obligations by €23.3 million to €11.8 million largely reflects the impact of the changed interest rate environment.
- Finally, deferred tax liabilities increased by €36.3 million, from €6.4 million to €42.7 million, which is mainly due to the acquisition of StreamSets.

The change in **shareholders' equity**[1] by a total amount of €73.0 million resulted from the increase in capital reserves by €33.2 million in connection with the convertible bond issue. In addition, retained earnings declined by €37.2 million, while other reserves increased by €77.8 million. The change in these items is due to net income in the amount of €19.2 million, to valuation adjustments in the amount of €77.8 million (of which €37.0 million is attributable to currency effects and €41.4 million to actuarial effects relating to pension commitments) which, in accordance with IFRS rules, must be recognized directly in equity, and to dividend payments in the amount of €56.2 million. Finally, in connection with the sale of the FACT ownership interest, the non-controlling interests were fully derecognized.

OFF-BALANCE SHEET ASSETS

In addition to the assets reported in the Consolidated Balance Sheet, Software AG has significant off-balance sheet assets. The significant off-balance sheet assets include the Software AG brand and internally developed software products. Employees, their skills, and their dedication are also critical to Software AG's success.

[1] Disclosures pursuant section 160(1), no. 2 of AktG are included in the Notes to the Consolidated Financial Statements.

Multi-Period Assets Summary

in € millions	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018
Assets					
Current assets	769.9	874.9	758.0	776.0	724.9
Non-current assets	1,908.5	1,346.5	1,281.9	1,340.1	1,283.0
	2,678.4	**2,221.4**	**2,039.9**	**2,116.1**	**2,007.9**
Equity and liabilities					
Current liabilities	454.6	490.9	392.1	468.2	488.4
Non-current liabilities	712.6	292.3	335.3	290.4	280.4
Equity	1,511.2	1,438.2	1,312.5	1,357.5	1,239.1
	2,678.4	**2,221.4**	**2,039.9**	**2,116.1**	**2,007.9**

SOFTWARE AG'S FINANCIAL POSITION AND PERFORMANCE

ANNUAL FINANCIAL STATEMENTS FOR THE PARENT COMPANY

The annual financial statements of Software AG (parent company) were prepared pursuant to the provisions of the German Commercial Code.

Financial position of Software AG

Software AG's **total assets** rose by €300.3 million from €1,022.8 million to €1,323.1 as of December 31, 2022.

The following table depicts the primary changes compared with the prior year:

in € millions	2022	2021	+/−
Intangible assets	20.1	23.8	-3.7
Property, plant, and equipment	38.2	37.7	0.5
Financial assets	1,027.6	685.6	342.0
Inventories	0.1	0.0	0.1
Receivables and other assets	114.9	98.8	16.1
Cash and cash equivalents and short-term securities	77.6	164.4	-86.8
Prepaid expenses	44.5	11.1	33.4
Difference in assets arising from offsetting	0.1	1.4	-1
Assets	**1,323.1**	**1,022.8**	**300.3**
Equity	265.5	248.4	17.1
Provisions	114.0	113.4	0.6
Convertible bonds	344.3	0.0	344.3
Liabilities to banks	328.7	288.3	40.4
Remaining liabilities	270.5	372.6	-102.1
Deferred income	0.1	0.1	0.0
Equity and liabilities	**1,323.1**	**1,022.8**	**300.3**

- **Intangible assets** decreased by €3.7 million, due primarily to amortization.
- **Financial assets** increased by €342.0 million. This was mainly due to the granting of a loan to the affiliated company Software AG USA, Inc. to finance the acquisition of StreamSets within the Group.
- **Receivables and other assets** rose by €16.1 million to €114.9. This development corresponds to the increase in total revenue.
- **Cash and cash equivalents** went down by €86.8 million. Software AG predominantly generates liquidity based on intra-Group royalties, dividends, financing, and cost allocations to the subsidiaries. For this reason, the development of Software AG's cash and cash equivalents depends to a great extent on decisions regarding the subsidiaries' dividend payouts and financing arrangements between the parent company and subsidiaries. A cash flow statement for Software AG alone would therefore have little meaning, for which reason it does not prepare such a statement.
- Software AG's **equity** increased by €17.1 million year-on-year. This rise resulted from the balance of €39.5 million in net income, €56.2 million in equity-reducing dividends paid out to Software AG shareholders in 2022, and the €33.8 million increase in capital reserves in connection with the issue of convertible bonds. The last item led to the recognition of **convertible bonds** at their face value of €344.3 million.
- **Liabilities to banks** went up by €40.4 million This is primarily in connection with the net balance of new investment loans.

- **Remaining liabilities** went down by €102.1 million primarily due to internal cash-management measures which led to a decline in liabilities to affiliated companies.

Software AG's financial performance

The key items of the income statement are as follows:

in € millions	2022	2021	+/– as %
Licenses	73.4	51.9	41.4
Maintenance	103.3	101.1	2.2
Software as a Service	8.9	4.7	89.4
Services	150.5	123.7	21.7
Total revenue	**336.1**	**281.4**	**19.4**
Operating income and expenses	-397.2	-346.5	14.6
Income from financial assets and profit transfers	122.2	77.5	57.7
Operating earnings before interest and taxes	**61.1**	**12.4**	**392.7**
Net financial income/ expenses	-17.5	-1.0	1650.0
Earnings before taxes	43.6	11.4	282.5
Taxes	-4.1	-3.5	17.1
Net income for the year	**39.5**	**7.9**	**400.0**

- **Licenses** resulted from license-related royalties from subsidiaries and from Software AG's own license sales, primarily in Germany.
- **Maintenance** includes primarily maintenance-related royalties from subsidiaries.
- **SaaS** revenue resulted from SaaS-related royalties from subsidiaries and from Software AG's own SaaS sales in Germany.
- **Services** include management fees crossed-charged to the subsidiaries as well as services rendered by central support and cross-charged research and development costs.
- **Operating income and expenses** include other operating income and expenses, expenses for purchased goods and services, personnel expenses, and write-downs on intangible fixed assets as well as on property, plant, and equipment. The rise resulted mainly from higher expenses for services purchased from subsidiaries and higher expenses associated with purchased hosting services.
- **Income from financial assets and profit transfers** includes dividends from subsidiaries, income from long-term loans to affiliated companies, income and expenses arising from profit transfer agreements, and write-downs of financial assets and marketable securities. Compared with the previous year, the balance went up mainly due to higher profit transfers and distributions from the operational German companies.
- **Net financial income/expenses** is the result of offsetting other interest and similar income against interest and similar expenses. The year-on-year change resulted primarily from the €17.2 million rise in interest expenses mainly due to the convertible bonds.

Forecast

Software AG's future financial performance depends upon the financial standing of the Software AG Group and decisions regarding the distribution of intra-Group dividends. For more information, please refer to the Group Forecast.

Combined Non-Financial Statement

FUNDAMENTAL ASPECTS

REPORTING SYSTEM

Software AG's Combined Non-Financial Statement (hereinafter referred to as the Non-Financial Statement) relates to the fiscal year from January 1 to December 31, 2022. The report has been published in this format as part of the Combined Management Report since fiscal 2017.

The Non-Financial Statement contains the information required by section 289c of the German Commercial Code (HGB) to enable readers to understand the Company's business development, financial results, its situation, and the effects of its activities at a minimum on the aspects stated in section 289c(2) of HGB. Per section 289d of HGB, Software AG prepared the Non-Financial Statement based on the Global Reporting Initiative (GRI), an international standards framework, as well as the industry standards of the USA's Sustainability Accounting Standards Board (SASB).

The contents of the Non-Financial Statement relate to Software AG and the Software AG Group. The Group's non-financial indicators are based on data that generally correspond to the scope of consolidated financial reporting. Any deviations are explained accordingly. The measures presented for the individual aspects are ongoing unless stated otherwise.

External audit of the Non-Financial Statement

Software AG's Non-Financial Statement is audited by the auditing firm Deloitte GmbH Wirtschaftsprüfungsgesellschaft (Deloitte). Auditing was conducted with the goal of attaining a limited level of assurance, based on the International Standard on Assurance Engagements (ISAE) 3000 (revised).

EXPLANATION OF THE BUSINESS MODEL

As a global technology provider, Software AG delivers software solutions and services to its customers. The Company's founders laid the groundwork for Software AG's value-oriented actions, ultimately forming its corporate culture. To this day, Software AG is the innovative, independent force guiding some of the world's best brands on their digitalization journey. For more information on Software AG's business operations and business model, please refer to Fundamental Aspects of the Group in the Combined Management Report.

DISCLOSURE REQUIREMENTS PER THE EU TAXONOMY REGULATION

Software AG is required to provide information about non-financial interests per regulations set forth in sections 289b et seq./sections 315b et seq. of HGB that are based on Directive 2013/34/EU. In this context, the Company must explain in its Non-Financial Statement in accordance with Article 8 of Regulation (EU) 2020/852 from June 18, 2020 (Taxonomy Regulation), how and to what extent it carries out economic activities that could be characterized as environmentally sustainable in the sense of the Taxonomy Regulation.

An economic activity is defined as taxonomy-eligible if it is listed in the Taxonomy Regulation or in one of the delegated legislative acts and contributes on its merits after realization to at least one of the following environmental objectives:[1]

[1] The Climate Delegated Act, which was formally adopted in June 2021, establishes technical screening criteria for the first two of the six environmental objectives and serves to define and identify sustainable activities. The technical screening criteria for objectives three through six are slated to be adopted in 2023. Subsequently, only the first two environmental objectives are applicable in fiscal year 2022.

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems

An economic activity is considered taxonomy-aligned if it meets the technical screening criteria, meaning that it contributes substantially to one of the environmental objectives and does no significant harm (DNSH) to any of the other environmental objectives. Furthermore, compliance with a minimum safeguard must be observed to ensure taxonomy alignment regarding alignment with frameworks for respecting human rights as well as social and labor standards.

The Taxonomy Regulation defines the three performance indicators required to be reported—revenue, capital expenditure (CapEx), and operating expenditure (OpEx)—that demonstrate the scope of economic activities that are classified as environmentally sustainable in the sense of the Taxonomy Regulation.

The European Commission established the Delegated Regulation (EU) 2021/2139 (Climate Delegated Act) to define the screening criteria for taxonomy eligibility and alignment for the first two of the six environmental objectives.

Software AG must apply the requirements of the Taxonomy Regulation in fiscal 2022 for the second time. For the Company's first-time reporting per the EU taxonomy in fiscal 2021, simplified requirements were imposed. First, economic activities were only considered with regard to the first two environmental objectives—climate change mitigation and climate change adaptation—and second, key performance indicators—revenue, CapEx, OpEx—were only disclosed for taxonomy-eligible economic activities. Thus, taxonomy alignment was not taken into consideration. Software AG made use of these simplifications.

In reporting for fiscal year 2022, once again only the first two environmental objectives were taken into consideration. However, information on taxonomy alignment must be disclosed. Furthermore, the tables from Annex II (2021/2178/EU) must be used for reporting of taxonomy quotas for the first time.

Determining taxonomy-eligible economic activities

To collect the mandatory information for reporting, Software AG initiated an EU taxonomy project that involved the participation of relevant internal units and an external service provider. In the first step, the portfolio was screened with regard to the economic activities listed in Annexes I and II of the Climate Delegated Act.

The screening results showed that there were no revenue-relevant economic activities that are fundamentally taxonomy-eligible with regard to the environmental objective of climate change mitigation (Annex I of the Climate Delegated Act). This assessment is based on the following supplemental considerations:

- With regard to the first environmental objective, climate change mitigation, classification of activity 8.1. "Data processing, hosting, and related activities" by Software AG as taxonomy-eligible is precluded for the following reasons in particular: Although Software AG operates its own data center at its headquarters in Darmstadt, Germany, this center as well as backup servers at other locations are used exclusively to provide internal services. Generating external revenue with these data centers and servers is not part of Software AG's business model. Rather, the provision of cloud infrastructure services is subcontracted with the sale of Software as a Service (SaaS). It is imminent that the provision of SaaS is a case of single performance obligations in the sense of IFRS 15, meaning that a potential third-party hosting component is not separable from the software provided for use as well as supplemental services (for instance, maintenance and support).
- Regarding the first environmental objective, climate change mitigation, classification of activity 8.2 "Data-driven solutions for GHG emissions reductions" by Software AG as taxonomy-eligible is precluded for the following reasons: Software AG provides software solutions and services for its customers, who then utilize the products and services accordingly for their own business activities. Software AG's products distinguish themselves by enabling companies to integrate IT systems and data, optimize business processes, and make better decisions in order to operate more efficiently and save resources. However, whether Software AG's activities in detail are in fact taxonomy-eligible is measured by how the Company's customers use its products and services, which is not in Software AG's scope of responsibility, influence, or knowledge.

The screening results showed that there were potentially existing CapEx and OpEx in specific economic activities that are fundamentally taxonomy-eligible with regard to the environmental objective of climate change mitigation (Annex I of the Climate Delegated Act):

- 6.5. Transport by motorbikes, passenger cars, and light commercial vehicles
- 7.7. Acquisition and ownership of buildings

The taxonomy-eligible CapEx concerns additions to the Group's vehicle fleet and buildings. The taxonomy-eligible OpEx includes spending for short-term leases as well as servicing and maintenance for the vehicle fleet and buildings. Software AG does not generate any revenue from economic activities 6.5. and 7.7. Rather, they cover the purchase of products or investments in economic activities that are taxonomy-eligible or aligned.

With regard to the second environmental objective, climate change adaptation, Software AG's economic activities cannot be subsumed under any of the economic activities in Annex II of the Climate Delegated Act. The reason here is the same: Software AG's products and services do not implement physical solutions, for instance, that can be used to significantly reduce the most important climate risks. Furthermore, there are no expenditures (CapEx or OpEx) in fiscal 2022 to be reported for business activities with regard to climate risks.

Reviewing the substantial contribution as well as doing no significant harm

Next, Software AG reviewed the previously identified taxonomy-eligible economic activities within the scope of consolidation. The goal of this review was to determine the type and extent of relevant CapEx and OpEx regarding taxonomy-eligible economic activities for each company in the consolidated Group.

Per the Taxonomy Regulation, the technical screening criteria as well as compliance with minimum safeguards must be reviewed to assess taxonomy alignment for each of Software AG's economic activities that were determined to be taxonomy-eligible.

After Software AG's taxonomy-eligible economic activities were assessed with regard to their substantial contribution to climate change mitigation, the subsequent DNSH assessment was conducted for the remaining environmental objectives. For this task, Software AG performed an alignment survey of the identified suppliers regarding confirmation of DNSH criteria and minimum safeguards. The information requested from suppliers could not be provided or compliance with the criteria could not be confirmed. That demonstrates that there is insufficient comprehension of Taxonomy Regulation requirements along Software AG's entire supply chain. Due to the lack of direct supplier and service relationships with upstream manufacturers, Software AG exhausted its possibilities for confirming the presence of DNSH criteria for fiscal 2022. For this reason, Software AG's CapEx and OpEx are simply categorized as taxonomy-eligible.

Reviewing the minimum safeguards

As the final step, taxonomy alignment must be reviewed with regard to compliance with minimum safeguards. As previously mentioned, compliance with minimum safeguards could not be demonstrated for fiscal 2022 regarding Software AG's upstream supply chain due to a lack of relevant statements by the suppliers. Please refer to the alignment survey conducted on this matter. Company-wide compliance with the minimum safeguards in the sense of the Taxonomy Regulation is currently undergoing a broad review at Software AG. Since Software AG has not previously had distinct, original taxonomy-eligible economic activities, this is considered of secondary importance to its suppliers' compliance with the minimum safeguards. Completion of the internal review will be followed by a corresponding revision of Software AG's Codes of Conduct for Suppliers and Partners in 2023. There were no violations in the form of final judgments regarding the minimum safeguards during the reporting period. There were no incidents in the areas of human and labor rights, bribery, corruption, taxation, and fair competition.

Calculating the taxonomy-eligible and taxonomy-aligned percentages

Based on the process steps conducted and knowledge gleaned, no taxonomy-aligned amounts were determined for CapEx and OpEx of Software AG's identified taxonomy-eligible economic activities. For this reason, the calculation of the quotients is limited to determining the denominators. All key performance indicators are found in the reporting sheet per the Commission Delegated Regulation (EU) 2021/2178 of July 6, 2021, as an appendix to the Non-Financial Statement.

SUSTAINABILITY MISSION STATEMENT

Software AG developed a sustainability strategy in 2021 and adopted the following sustainability mission statement:

Sustainability and responsible action are guiding principles that are central to our mission at Software AG. We are certain that moral principles and economic success belong together. To protect future generations and our planet, we are committed to creating not only economic, but also ecological and social value.

MANAGING SUSTAINABILITY AND TRANSPARENCY

Sustainability is an integral part of Software AG's DNA. Its sustainability strategy is anchored with the Chief Executive Officer (CEO). Software AG's internal Sustainability Steering Committee (SSC) guides, monitors, and advises the Company on implementing the sustainability strategy. The strategy and SSC are led by the Corporate Communications department, which reports to the CEO. The ultimate objective is transparent communication both inside and outside of the Company. This enables Software AG to ensure that its stakeholders are proactively, continuously, and efficiently informed about the topic of sustainability, its goals, and progress.

SUSTAINABILITY MISSION STATEMENT

Software AG developed a sustainability strategy in 2021 and adopted the following sustainability mission statement: Sustainability and responsible action are guiding principles that are central to our mission at Software AG. We are certain that moral principles and economic success belong together. To protect future generations and our planet, we are committed to creating not only economic, but also ecological and social value.

Our Sustainability Program 2025 guides us in achieving our ambitions in five key action areas.

Leadership & Governance

We are committed to anchoring sustainability as an integral part of our business activities and delivering on our environmental, social, and governance (ESG) commitments. Through responsible corporate management and governance, we target long-term goals geared towards growth and best-in-class external ESG recognition. As a software company, we commit to the highest level of information security and data protection—entirely in the interests of our customers and partners. We firmly believe that our employees are the key to our success as a sustainable company.

Our Employees

We aspire to promote and role-model a corporate culture based on people, passion, and products, and the core values of inclusion, integrity, and innovation. We continue to focus on attracting and retaining the best talent for Software AG, nurtured through employee engagement and an inclusive and equitable working environment in which all employees can thrive and unleash their potential.

Customers & Technology

We are committed to being a reliable partner for our customers in providing high-quality and individually adjustable software solutions. Our services support digital transformation. Digital transformation can help to mitigate or even reverse the consequences of climate change. We want to play an active part in this with our solutions, enabling and helping our customers to operate sustainably.

Value for Society

We aspire to effectively assist people in building expertise in the area of modern technologies. Our focused involvement in universities and schools is aimed at supporting the IT experts of the future. We offer new learning opportunities and meaningful development prospects for students and young professionals. Since technological advancement plays a crucial role in developing a sustainable world, we participate in collaborative research projects that promote the global sustainable development goals (SDGs).

Impact on Environment

We are working to keep our environmental footprint as small as possible. To reduce the impact of our business activities on the planet, we are preparing to become climate neutral as quickly as possible. With the help of our technology and our solutions, we will join forces with our customers and partners to tackle significant environmental challenges and help shape a more sustainable future.

STAKEHOLDERS

Software AG has internal and external stakeholders. The internal stakeholder groups comprise the employees, the Management Board, the Supervisory Board, the Compliance Board, and the Works Council. The external stakeholder groups include the customers, investors, partner network, suppliers and service providers, graduates and (potential) future employees, universities and research institutions, social actors in local communities, governments and associations, non-governmental organizations (NGOs), and key multipliers such as analysts and the media.

MATERIAL NON-FINANCIAL TOPICS

Determining material non-financial topics

Software AG comprehensively updated its materiality analysis most recently in fiscal year 2021. The result was a clearer focus on topics that have the strongest effects on the economy, environment, and society as well as the highest business relevance for Software AG. Software AG's sustainability strategy that was drafted in 2021 builds on this foundation. There was no need to conduct a reevaluation in fiscal 2022. No new or divergent topics were identified as material.

A multi-phase process was conducted in fiscal years 2020 and 2021 to identify material non-financial topics and issues for the Non-Financial Statement. During the first step, selected internal stakeholders from sustainability-relevant areas at Software AG participated in qualitative interviews. Furthermore, external stakeholders were also surveyed regarding Software AG's sustainability challenges. In a second step, a preliminary analysis was performed that included an evaluation per the GRI sustainability reporting standards, the industry recommendations for software companies from the SASB, and the non-financial statements from other companies in the industry. During a joint workshop, Software AG's leaders subsequently validated and evaluated the identified issues.

Prioritizing material topics by business relevance and impact analysis

In fiscal year 2021, the 26 material topics defined in the previous year were once again comprehensively validated and prioritized. Initially, a blind spot analysis was conducted to ensure that all of the topics relevant to Software AG's stakeholders were being taken into consideration. Related topics were summarized and the remaining 18 topics categorized into Software AG's five action areas. Finally, a business relevance and impact analysis was conducted. Software AG worked on this process with an external consulting company specialized in materiality analyses and sustainability strategies.

Results of the materiality analysis

The materiality analysis conducted by Software AG in fiscal year 2021 follows the understanding of the GRI as well as the requirements of the CSR Directive Implementation Act (CSR-RUG). As in the previous year, the eight topics listed in the following table were classified as material for the Company:

Action area	Material topic
Leadership and Governance	• Sustainable economic growth • Information security and data protection
Our Employees	• Corporate culture and diversity • Employer attractiveness
Customers and Technology	• Product and service quality • Innovation and impact of our products
Value for Society	• Tech for good
Impact on Environment	• Energy and CO_2 emissions

In addition to the eight material topics, Software AG reports on two additional topics, respect of human rights and combating corruption and bribery, which result from the requirements in section 289c of HGB. Topics that are classified as not material for Software AG in the context of the materiality analysis will not be addressed in this Non-Financial Statement. In addition to the material topics, the Non-Financial Statement Index and the Non-Financial Key Indicators provide a full overview by including selected topics that are not discussed further as well as key indicators relevant for some stakeholder groups.

Minimum aspects (according to HGB) and other aspects deemed to be material

At a minimum, the Non-Financial Reporting Statement must refer to the aspects of environmental matters, employee concerns, social matters, respect of human rights, and combating corruption and bribery according to section 289c(2) of HGB. Software AG has established concepts for all of the aspects defined in HGB, and these are covered in the Company's specified action areas. Respect of human rights and combating corruption and bribery are addressed in the action area Leadership and Governance. The aspects environmental matters, employee concerns, and social matters are covered in the action areas Impact on Environment, Our Employees, Customers and Technology, and Value for Society. In addition to the aspects stated in HGB, Software AG has also defined customer concerns as material, and these are mainly assigned to the Customers and Technology action area.

Business Relevance and Impact Analysis

Relevance of the issue to Software AG's business / Impact on the environment, economy and/or society	rather low	moderate	slightly high	high	very high
very high		B4. Employer attractiveness	A4. Sustainable economic growth	A3. Information security and data protection B1. Corporate culture and diversity	C1. Product and service quality
high		A1. Business ethics and CDR C2. Customer satisfaction and loyalty D2. Stakeholder dialogue and government relations	B2. Employee promotion and development	C3. Innovation and impact of our products D3. Tech for good E1. Energy and CO_2 emissions	
slightly high		A4. Sustainable supply chains and human rights	B2. Occupational health and safety B3. Work-life balance E2. Natural resources and circularity		
moderate			D1. Support of local communities		
rather low	E3. Use of water				

A: Leadership and Governance; **B**: Our Employees; **C**: Customers and Technology; **D**: Value for Society; **E**: Impact on Environment

NON-FINANCIAL STATEMENT INDEX

The following Non-Financial Statement (NFS) Index highlights Software AG's eight material topics by color. All other topics were classified as non-material and are reported voluntarily.

Material topics and other topics	Summarized significance of topic content for Software AG	Aspects per HGB (section 289c(2))	Assignment to reporting standards (GRI & SASB)
Leadership and Governance action area			
Sustainable economic growth	Business performance and growth, brand visibility and reputation, management of non-financial risks and opportunities	n/a	n/a
Information security and data protection	Information and data security, protection of employee and customer data, privacy, prevention of malware attacks	Employee concerns (section 289c(2), no. 2), customer concerns	SASB TC-SI-230a
Business ethics and digital responsibility	Responsible, moral, ethical, fair, and sustainable behavior, compliance, combating corruption and anti-competitive behavior, protection of intellectual property	Combating corruption and bribery (section 289c(2), no. 5)	GRI 205, GRI 206, SASB TC-SI-520a
Sustainable supply chains and human rights	Respect and protection of human rights (human rights due diligence), environmental laws/standards/policies, Code of Conduct, global sourcing process, supplier assessment	Respect of human rights (section 289c(2), no. 4)	GRI 412
Our Employees action area			
Corporate culture and diversity	Transparent, respectful, trusting corporate culture, diversity, equity, and inclusion, combating discrimination, support of women, flat hierarchies, codetermination, freedom of association and collective bargaining	Employee concerns (section 289c(2), no. 2)	GRI 405, SASB TC-SI-330a
Employer attractiveness	Recruiting global, diverse, and qualified teams, active sourcing concept, war for talent	Employee concerns (section 289c(2), no. 2)	GRI 401
Additional topics in the NFS key indicator table	Work-life balance, employee promotion and development, staff attrition	Employee concerns (section 289c(2), no. 2)	GRI 404
Customers and Technology action area			
Product and service quality	Certified management systems; regular software releases, updates and improvements, adding value for customers (efficient use of resources, better process results, competitive advantages)	Customer concerns	n/a
Innovation and the impact of our products	Monitoring of competitors and disruptive trends, innovation capacity, research & development, impact of products on society, environment, and businesses	Customer concerns	n/a
Value for Society action area			
Tech for good	Develop digital competencies, mentoring/seminars for students and future IT managers, engagement in research projects, foster education	Customer concerns, social matters (section 289c(2), no. 3)	n/a
Additional topics in the NFS key indicator table	Employee engagement and support of local communities	Social matters (section 289c(2), no. 3)	n/a
Impact on Environment action area			
Energy and CO_2 emissions	Energy management, energy efficiency, CO_2 emissions, expansion of renewable energies, carbon footprint, climate strategy	Environmental matters (section 289c(2), no. 1)	GRI 302, GRI 305, SASB TC-SI-130a
Additional topics in the NFS key indicator table	Natural resources and circularity	Environmental matters (section 289c(2), no. 1)	GRI 306

CODE OF CONDUCT AND INTERNATIONAL CONVENTIONS AND GUIDELINES

The majority of Software AG's concepts and due diligence processes regarding the aspects listed above are described in detail in the Company's various Codes of Conduct. For that reason, they are summarized below:

Code of Conduct

Software AG's Code of Conduct contains policies for sound and responsible corporate governance. It sets out what Software AG considers to be ethically correct conduct in its day-to-day business. The relationships of Software AG employees with customers, partners, and competitors follow these guidelines. All employees must read and understand the contents of the Code of Conduct. To this end, all new employees attend mandatory online training programs and receive certification upon completion. The Code of Conduct is currently available in eight languages and is updated on a regular basis. In addition, the Company has established other specific guidelines for conduct with partners and suppliers, and has made a voluntary commitment to respecting human rights.

The Code of Conduct covers the following topics, among others:

- Software AG's values and professional conduct
- Staff health and safety
- Equal treatment and combating discrimination
- Software AG's responsibility for environmental protection
- Data protection and trade secrets
- Fair competition and antitrust law
- Compliance and anti-corruption
- Combating money laundering
- Protection of Company property
- Conduct in the event of conflicts of interest and for clarification of ethical issues

Compliance with the Code of Conduct and the Compliance Board

Software AG established a Compliance Board, which is responsible for introducing, implementing, and monitoring the Compliance Program. This Board reviews and assesses compliance issues and concerns and strives to ensure that employees behave in compliance with the law, that internal rules and processes are followed, and that behavior complies with Software AG's Code of Conduct. Software AG has introduced various mechanisms to help its employees comply with the Code of Conduct. For example:

- All new employees must complete an online training program, which integrates hands-on examples, to familiarize them with the different aspects of Software AG's Code of Conduct as well as its voluntary commitment to respecting human rights.
- The online training is offered through Software AG's learning management system, which checks that employees complete the training.
- At the end of the online training program, employees complete a multiple-choice test. After passing the test, they are issued a certificate.
- The Compliance Board can be contacted (also anonymously) regarding all questions and approvals. Software AG has set up an email reporting system[1] at complianceboard@SoftwareAG.com for reporting incidents.

The essential duties and responsibilities of the Compliance Board include:

- Refining, regularly reviewing, and updating the Code of Conduct to ensure its sustainable application worldwide
- Monitoring the implementation and application of the Code of Conduct
- Conducting training programs on compliance issues and on the Code of Conduct
- Advising employees on compliance issues and on the Code of Conduct
- Investigating compliance violations and making recommendations for appropriate measures in response to non-compliance
- Confidential, if necessary, anonymous handling of those who report on non-compliance (whistleblowers)
- In the event of non-compliance, the Compliance Board also examines whether the compliance rules (including the Code of Conduct), procedures, training, and organizational framework conditions need to be adjusted.

In fiscal year 2022, Software AG's Compliance Board received and processed a total of 82 (2021: 43) inquiries from employees. Seven of those referred to potential compliance violations, and 75 were general compliance inquiries. For more information on the Compliance Board, please refer to the Statement on Corporate Governance.

[1] This process will be replaced by a reporting platform pursuant to the legal requirements of the German Whistleblower Protection Act (HinSchG) in 2023.

Scope

The Code of Conduct applies to Software AG worldwide, including, but not limited to, external staff and agents acting on behalf of Software AG. Violations of the Code of Conduct can be sanctioned by disciplinary measures (in addition to possible legal penalties).

Partner Code of Conduct

Software AG's business relationships with its partners are regulated by its Partner Code of Conduct, which includes a compliance self-assessment. It requires business and sales partners to provide information and commit in writing to comply with Software AG's Code of Conduct. In this context, the Compliance Board plays a regulatory and auditing role.

Supplier Code of Conduct

There are also conduct guidelines for suppliers. Software AG's binding Supplier Code of Conduct must be confirmed in writing by all suppliers of the Software AG Group. An enforcement guideline regulates the process for existing and new suppliers. The Compliance Board reviews compliance with the Code on a regular basis.

International conventions and guidelines

In addition to the laws and regulations in the countries where Software AG operates, there are several conventions and recommendations by international organizations. They are primarily addressed to the member states and not directly to individual companies. However, they are a very important guideline for the conduct of a multinational company and its employees. Software AG therefore allots high importance to compliance with these guidelines worldwide. The most important agreements of this kind are listed below:

- Universal Declaration of Human Rights of the United Nations, 1948
- European Convention for the Protection of Human Rights and Fundamental Freedoms, 1950
- Tripartite Declaration of Principles of the ILO (International Labor Organization) on Multinational Enterprises and Social Policy, 1977
- ILO Declaration on Fundamental Principles and Rights at Work, 1998 (especially regarding the following topics: elimination of child labor, abolition of forced labor, prohibition of discrimination, freedom of association, and right to collective bargaining)
- Convention of the Organization for Economic Cooperation and Development (OECD) on Combating Bribery of Foreign Officials in International Business Transactions, 1997
- OECD Guidelines for Multinational Enterprises, 2000

LEADERSHIP AND GOVERNANCE

The Leadership and Governance action area comprises the material topics **Sustainable economic growth** and **Information security and data protection**. In addition, this area also covers the aspects Combating corruption and bribery (required aspect per section 289c(2), no. 5 HGB) and Respect of human rights (minimum aspect per 289c(2), no. 4 HGB). These aspects were not defined as material in the context of the Software AG's materiality analysis. Reporting on these topics is supplementary.

Software AG aims to anchor sustainability as an integral component in its business activities and to meet its obligations in the ESG (environmental, social, and governance) areas. With its responsible management approach, Software AG is pursuing long-term goals that target growth and external recognition for first-class ESG achievements. As a software company, it is committed to information security and data protection at the highest level—entirely in keeping with its customers and partners. Furthermore, the Company leadership is firmly convinced that Software AG's employees are essential for its success as a company that embraces acting sustainably.

SUSTAINABLE ECONOMIC GROWTH

Basic understanding

Software AG considers sustainability core to its business strategy and aspires to be a leader with regard to ESG topics. Sustainable economic growth is extremely relevant to Software AG's business because it contributes to the Company's stability by having a positive impact on employees, investors, and customers. Software AG's leadership is convinced that having a sustainable business strategy not only promotes economic growth, but is also essential in order to live up to the Company's own requirements pertaining to the environment, social matters, and corporate governance. For more information on Software AG's strategy, please refer to the Strategy and Goals section in the Combined Management Report. For more information on corporate strategy risks and opportunities, as well as ESG-related opportunities and risks, please refer to the Opportunity and Risk Report.

Targets and management

Sustainable economic growth is essential to Software AG's ability to realize its ambitions. Accordingly, the Company controls long-term economic growth with its corporate strategy. At the conclusion of its transformation phase, Software AG will realign its corporate strategy in 2023. Software AG reports on financial targets and strategic KPIs in the Strategy and Goals section of the Combined Management Report.

Software AG's ESG strategy is a cornerstone of its sustainable economic growth. Based on feedback from its shareholders, Software AG has identified the ESG ratings from MSCI and ISS as most relevant for investors and has set itself the following targets:

- Achieve an ISS ESG Rating of C by 2023 and B by 2025
- Achieve an MSCI Rating of AA or better by 2025

Software AG manages the ISS ESG Rating results through the ISS Quality Score. With the help of this management tool, the collected data is reviewed and updated continuously.

Progress and actions

The newly constituted Supervisory Board, particularly the election of a Supervisory Board chair who is classified as independent, was assessed as a significant improvement by MSCI in its ESG Rating update in October 2022. MSCI's ratings are heavily weighted towards corporate governance and social issues. Software AG's cleantech product range, employee engagement strategy, and solid data protection and data security initiatives continued to earn strong scores. As a result, Software AG's rating was raised to the top score of AAA (2021: AA). The target level for 2025 was therefore met ahead of schedule in 2022—and is intended to be retained.

Sustainability initiatives in 2021 also had a positive impact on Software AG's ISS Corporate ESG Rating with its score improving from D+ to C- (max. A+) in 2022 after the regular update in February. The approach used for the ISS Corporate ESG Rating is, however, heavily based on emissions data compiled by the Carbon Disclosure Project (CDP). Because Software AG assessed its carbon footprint for the first time in the first half of 2022 and participated in the CDP survey for the first time in July 2022, its CDP participation could not yet be factored into the 2022 ISS ESG Rating. It can, however, be assumed that this rating will improve when assessed in early 2023; the target is a solid C with which Software AG would achieve prime standard. Regarding the ISS Quality Score (min. 10, max. 1), Software AG showed a year-on-year improvement, significantly in two areas: governance improved to 1 (2021: 6), environment to 4 (2021: 5), and social to 1 (2021: 3).

As part of its strategic risk and opportunity management, Software AG started reporting on the strategic ESG risk separately in the 2022 fiscal year. The corresponding opportunities and risks are thus assessed on a half-yearly basis. The risks comprise potential negative impacts such as the loss of or inability to acquire employees and customer orders, increased costs of capital, decreased market value, and penalty fees for not meeting legal requirements.

Software AG expanded its ESG website which provides investors and interested parties with current ESG-related data and information. In addition to reports on the Company's social engagement, the ESG website presents products and sustainable IT solutions that were realized using Software AG products. It also showcases research projects that are aligned with the United Nations' SDGs. Furthermore, visitors to the site will find Software AG's Human Rights Commitment Statement which was drafted in 2022, its updated Code of Conduct, and articles on health programs and initiatives for greater diversity, equality, and inclusion at the corporate level.

INFORMATION SECURITY AND DATA PROTECTION

Basic understanding

As a software company, Software AG delivers information security and data protection at a very high level—entirely in keeping with customers and partners. With its comprehensive information security management program, including various information security management systems (ISMS), Software AG aims to manage information resources in a holistic way, so they are secure and protected.

According to the report on IT security in Germany for 2022 from the Federal Office for Information Security, the risk situation in cyberspace once again reached an all-time high.

To best protect itself from the severe effects of such attacks, Software AG assesses the existing risk for the Company, its customers, and society and conducts appropriate risk minimization. This includes continuously measuring information security, making the necessary improvements mentioned below, and keeping it up to date in order to successfully defend itself against cyberattacks and reduce the risk accordingly. For more information on legal risks associated with information security, please refer to the Opportunity and Risk Report.

The protection of personal data is a fundamental right of all individuals. Article 8 of the Charter of Fundamental Rights of the European Union (EU) defines the protection of personal data as a fundamental right; the protection of personal data is also part of the EU data protection laws in accordance with the EU Data Protection Regulation (GDPR). Software AG respects the privacy of its customers' and their customers' personal data and therefore takes appropriate measures. Overall, and specifically with respect to measures implemented for the protection of customer data, the Company classifies the risk situation as low.

Targets and management

Software AG aims to continuously manage information resources and data in a holistic way, so they are secure and protected. A variety of security measures are utilized throughout the entire Company. Software AG's security awareness program addresses issues including IT security, phishing, security incident training, and data protection. These include, for instance, annual employee training on information security and biannual training on data protection. The Company defined the following objectives:

- At least 85[1] percent of employees trained on information security
- At least 85[1] percent of employees trained on data protection

For Software AG, implementing a comprehensive security strategy means proactively ensuring the security of business-critical data and important information resources. As a provider of maintenance and support, customer cloud services, professional services as well as product delivery, Software AG processes personal and confidential customer data in the role of processor. In the role of data controller, the Company processes personal data, in particular about employees, customers, prospective customers, partners, suppliers, and other business partners.

Software AG has appointed a Data Protection Officer and formed a Data Protection team to advise the business lines on data protection. The Management Board receives comprehensive information in the annual data protection report. The Data Protection Officer as well as the Data Protection team participate in regular training sessions regarding the latest regulations and court rulings as well as the reasonable and customary implementation of data protection measures.

An integrated data protection management system (DMS) was implemented in accordance with the requirements of the GDPR. The system documents, monitors, and, if necessary, adapts the data protection aspects. The general processes for handling data protection incidents and violations are integral components of the DMS, and thus include those that affect data from Software AG customers or other business partners. Software AG has implemented this DMS with its own products ARIS, ARIS Risk & Compliance Manager, Alfabet, and webMethods AgileApps.

The effectiveness of the data protection processes is reviewed within the scope of the ISO 9001 and ISO-27018 (for customer cloud services) external certifications. The results and findings are documented, and progress is measured in a central audit system. Management is regularly informed in relevant meetings.

[1] The 85 percent target accounts for expected attrition through hires and leavers as well as long-term absences.

Progress and actions

In fiscal year 2022, the employee training rate for information security reached 81 percent (2021: 86 percent). The employee training rate for data protection reached 80 percent (2021: 53[1] percent).

Software AG implemented appropriate measures to minimize the probability of security incidents and further improve its ability to react:

1. An outside assessment of IT security is an integral component of the security program.
2. Internal organizational and technical measures for security monitoring were established and are continually improved by the globally operating Security Operation Center.
3. Software AG's IT strategy enhanced the focus on IT security as the top priority, with the core "Security by Design" approach reflected in both daily operations as well as in future projects and services.
4. The Company-wide security awareness program was supplemented with regular anti-phishing campaigns.
5. The information security strategy program was revised to improve the coordination and tracking of security projects.
6. Moreover, the security incident process is continually reviewed, tested, and improved.

The ISMS for the customer cloud services is certified for compliance with ISO/IEC 27001, 27017 and 27018. The independent audit by third-party auditors confirms compliance with the standard and certifies that the Software AG Customer Cloud ISMS is comprehensive and reflects best practices in the industry. In addition, the independent audit reports on service organization audits (SOC 2) give Software AG customers detailed information about how the Company audits the security and availability of the cloud services as well as regulatory compliance.

Software AG received the Trusted Information Security Assessment Exchange (TISAX) certification label and established a central ISMS in 2022. The TISAX certification further confirms that the Company's information security management system meets the defined security levels. Common use of the TISAX assessment results is enabled via the corresponding platform.

[1] The new data protection training was introduced in September 2021 and had a completion rate of 53 percent by the end of 2021.

Relevant certifications and in-depth information about cloud security can be found on the corporate website.

Since the third quarter of 2020, Software AG has been focusing comprehensively on implementing the requirements for data protection resulting from the Schrems II decision handed down by the Court of Justice of the European Union. According to the decision, the personal data of EU citizens can only be transferred to third countries outside the European Economic Area (EEA) if this country provides protection essentially equivalent to that of the EU. Third-country transfers of personal data can be performed with respective additional measures in compliance with data protection regulations after a legal analysis and risk assessment.

On June 4, 2021, the European Commission released updated standard contractual clauses (SCCs) for data transfers from companies or contractors responsible for processing data that are located in the EU/EEA to others located in third countries that do not offer an appropriate level of data protection. These updated SCCs replace the three SCCs passed under Data Protection Directive 95/46. For that reason, Software AG has changed its processes and contract agreements to align with the new SCCs. In accordance with the deadlines defined by the European Commission, Software AG uses the new SCCs as the mechanism for transferring (or forwarding) personal data to third countries that do not provide a suitable level of data protection.

In this context, Software AG conducted a review of existing contracts for data processing both with customers as well as data processors in 2022. Contracts that did not yet include the relevant modules of the new SCCs were updated accordingly or new contracts were concluded, or new contracts were provided to customers to sign.

COMBATING CORRUPTION AND BRIBERY

Basic understanding
Software AG aims to ensure that all employees act with integrity and in a responsible, ethically correct manner as well as in accordance with legal regulations—especially with regard to competition and antitrust law.

The relevant principles are defined in Software AG's Code of Conduct. The topics covered by the Code of Conduct can be found in the Fundamental Aspects of the Non-Financial Statement. All employees need to know the Code of Conduct, understand its contents, and follow it in their day-to-day work.

The aspect Combating corruption and bribery was identified as a relevant topic in the Business ethics and digital responsibility area as part of Software AG's materiality analysis, but is not defined as material in direct comparison with other topics in the business relevance and impact analysis.

Risks from corruption and anti-competitive behavior arise in international business activities due to differences in understanding regarding ethical and moral business practices from one country to the next. This risk is curbed through the described measures and is therefore not considered material.

In addition, adherence to compliance provisions is reviewed and their effectiveness monitored through the activities of the Compliance Board as well as the Internal Audit department. For more information on legal risks associated with compliance, please refer to the Opportunity and Risk Report.

Governance
Software AG's Compliance Board helps ensure that all employees behave in compliance with the law as well as follow internal rules and procedures. Employees with any relevant questions can consult the Legal department responsible for the respective region or the Compliance Board. If potential compliance violations are suspected, the Compliance Board can commission audits. These are approved by the CEO or, depending on the subject, by the entire Management Board and carried out by Internal Audit. External resources are consulted depending on the focus of the audit. The findings of the audit and the resulting corrective measures are reported to, reviewed, and evaluated by the Compliance Board and the CEO or the full Management Board.

Software AG's Senior Vice President for Audit & Compliance regularly reports to the Supervisory Board's Audit Committee on the results of internal audits, as well as on audits requested by the Compliance Board, about the ongoing improvement of compliance instruments and the effectiveness of internal controls.

Progress and actions
The clear rules of the Code of Conduct and mandatory training anchor integrity and fair business practices at Software AG. In fiscal 2022, a total of 712 (2021: 790) new Software AG employees completed the training on the Code of Conduct and received the required certification.

No significant violations of competition law were identified in 2022.

RESPECT OF HUMAN RIGHTS

Basic understanding
Software AG is a global software company that is active in many different countries and thus cultures as well. Gaining the trust of customers, partners, and shareholders is of key importance for Software AG's work. This can only succeed with a shared obligation to handle that trust responsibly. Software AG is aware of the great responsibility it bears in relation to preserving human rights mutually with and for its employees, customers, business partners, suppliers, and the community.

The Company values of inclusion, integrity, and innovation emphasize Software AG's clear affirmation of protecting human rights in keeping with the following international human rights standards, among others:

- International Bill of Human Rights of the United Nations
- International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work

In 2022, Software AG also signed the UN Global Compact and announced its clear commitment to respecting human rights.

To ensure that the supply chain respects and protects human rights, Software AG introduced a Code of Conduct for both suppliers and partners respectively.

The aspect Respect of human rights was identified as a relevant topic as part of Software AG's materiality analysis, but is not defined as material in direct comparison with other topics in the business relevance and impact analysis. Software AG currently believes that its worldwide operations cannot and do not pose a significant risk, nor that its activities have a serious negative impact on human rights. Since both its suppliers as well as business partners are committed through the respective Codes of Conduct, Software AG believes that the risk of its business partners violating human rights and infringing on the rights of children and young people is very low. An academic background or several years of training are an absolute prerequisite for people working in the IT industry and in turn, for the vast majority of Software AG employees. The Company therefore sees no risk of child labor to be considered within its own business operations or in connection with the use of Software AG's products and services.

Governance

All of Software AG's Supplier Code of Conduct's suppliers are required to sign the Company's Supplier Code of Conduct, or in exceptional cases they may provide evidence of their own comparable code of conduct. The Compliance Board assesses and decides on the exceptions to this rule on a case-by-case basis. A corresponding guideline defines application and a checklist serves to ensure compliance with all requirements. This enables Software AG to ensure that its suppliers adhere to ethical principles of conduct that go beyond the legislation of the respective countries.

In the context of a comprehensive management approach, the Code of Conduct refers to major international agreements and recommendations of international organizations, and defines the following points:

- Interaction with employees (includes child labor, discrimination, forced labor, employee rights, compensation and working hours, health protection and occupational safety)
- Environmental laws
- Conduct in business situations (includes combating corruption, avoiding conflicts of interest, and complying with the rules of free competition)

Software AG and its subsidiaries purchase goods and services necessary for internal processes from a large number of suppliers in different countries according to clearly defined guidelines. Operational purchasing is handled locally by the relevant subsidiary. The central Purchasing department analyzes all procurements in the Group and verifies compliance with the defined guidelines such as having all new suppliers sign the Supplier Code of Conduct. In turn, Internal Audit reviews the effectiveness of this process. The goal is to ensure that all procurements are preceded by a corresponding approval. Ethical and economic aspects are evaluated equally for the approval.

The provisions of the procurement process are defined in Software AG's Investment and Expenditure policy. This policy describes purchasing principles, rules for ordering and selecting suppliers, and the global approval process.

Progress and actions

Software AG employs targeted methods to rule out human rights violations and child labor. Software AG mitigates the risks arising from working with partners and suppliers by requiring them to commit to excluding child labor and respecting human rights in the Partner Code of Conduct and Supplier Code of Conduct, respectively.

Software AG is not aware of any cases in the reporting year or previous years where products or product components have been linked to human rights violations. In 2022, Software AG began preparing for compliance with the requirements of the German Supply Chain Act (LkSG), which will become mandatory for the Company on January 1, 2024.

Global Sourcing Process

Request	Approval	Purchase	Reporting + Evaluation
Request for goods and services needed by a department	**Approval matrix** • Role • Cost type • Commodity group • Limit	**Investment and expenditure policy** • Selection of supplier • Order/contract • Purchase principles **Supplier Code of Conduct**	**Report generation** • Purchase volumes • Relative savings • Absolute savings • Supplier evaluation • Order processing times

OUR EMPLOYEES

The action area Our Employees includes the material topics: **Corporate culture and diversity** and **Employer attractiveness**. The action area corresponds to the employee concerns aspect per section 289c (2), no. 2 of HGB.

Software AG's leadership aspires to promote and role-model a corporate culture based on people, passion, and products, and the core values of inclusion, integrity, and innovation. The Company strives to attract and retain the best talent for Software AG, nurtured through employee engagement and an inclusive and equitable working environment in which all employees can thrive and unleash their potential.

CORPORATE CULTURE AND DIVERSITY

Basic understanding

A company's values and norms—its corporate culture—is the glue that holds it together. Corporate culture drives performance and enables business targets to be met. It is supported by a framework that sets direction in terms of individual behavior, beliefs, actions, and decisions. Software AG launched its Culture Framework in March 2022 around three core Ps: people, passion, and products. These determine how Software AG operates. The Culture Framework defines inclusion, integrity, and innovation as the core values that guide leadership practices, which unite the Company and provide practical guidance on communication, interaction, and decision-making. Diversity, equity, and inclusion (DE&I) is an integral part of Software AG's Culture Framework. Because corporate culture, employee satisfaction, and engagement are mutually supportive, Software AG has implemented a variety of initiatives to better understand the correlations and to positively impact the corporate culture.

The commitment shown by Software AG's employees, paired with their professional and personal skills, all contribute decisively to the Company's success. Therefore, ignoring employee concerns poses a fundamental risk of (generally indirect) negative impacts on business performance. Examples of this include situations when low employee satisfaction leads to attrition and a loss of company-specific expertise, or when a lack of diversity in the corporate culture leads to reduced innovation. For this reason, Software AG deploys a variety of initiatives that contribute to high employee satisfaction and an innovative and diverse corporate culture while measuring employee engagement. For more information on personnel risks and opportunities, please refer to the Opportunity and Risk Report.

Targets and management

The Management Board considers DE&I to be a fundamental component of an open and innovative corporate culture and strives to maintain a work environment that encourages employees to contribute their different perspectives.

Since 2020, Software AG has been a member of The Valuable 500, a global business collective of companies innovating for disability inclusion. In Germany, Software AG is a signatory to the Charta der Vielfalt confirming its commitment to promote the recognition, appreciation and integration of diversity into Germany's business culture.

Another of Software AG's objectives in this context is hiring women and promoting their professional development. The Company is a member of the Initiative Women into Leadership (IWiL), a non-profit association that facilitates long-term mentoring and promotion of women at the top level, and regularly nominates participants for the program.

Software AG has set itself the following targets:

- Maintain or improve the Q12 Engagement Score in the annual employee survey compared to the previous year
- Maintain or improve the results from the question on DE&I in the annual employee survey
- Promote DE&I awareness throughout the Company: 85[1] percent of employees should complete a global DE&I training program by 2025

Software AG conducts an annual employee survey (MyVoice) to evaluate employee engagement and satisfaction. It uses a standardized set of questions to assess corporate culture, employee engagement, accountability, and staff development. The Q12 Engagement Score consists of a questionnaire that is evaluated annually allowing Software AG to compare its results with those of industry peers. For Software AG, the Q12 Engagement Score is a strategic KPI that is reflected in the Management Board's targets and at business

[1] The 85 percent target accounts for expected attrition through hires and leavers as well as long-term absences.

line level. Additionally, current topics can be addressed and included in the annual employee survey, e.g., DE&I, leadership, wellbeing, and sustainability.

The survey results are communicated internally and taken into consideration in company-wide activities within the People & Culture area. Managers are responsible for discussing their results with their teams and implementing measures for improvement.

All employees should be able to contribute to the Company's success with their individual personalities and strengths, and in doing so, develop their full potential. The Change Network supports leaders in this and anchors the cultural shift at all locations worldwide. It was established in 2020 and consists of a diverse team of employees across different regions and functions. It is aimed at promoting employee engagement and reinforcing change management and the Culture Framework.

In the context of a comprehensive management approach, the Code of Conduct sets out what Software AG considers to be ethically correct conduct in its day-to-day business and addresses, among others, the topics of equal treatment and anti-discrimination. The Code of Conduct is complemented by the Culture Framework that highlights Software AG's three core principles (people, passion, and products) and values (inclusion, integrity, and innovation).

With the Company's HR Engagement Model, the Human Resources department has committed to supporting and handling strategic and operational personnel matters and concerns as effectively as possible. Managers receive consultation and support on issues regarding the development of individual employees as well as the organization. HR programs, processes, and initiatives are being developed and revised to address and drive a range of local and global topics. Establishing a relationship with employees and managers based on trust is a priority targeted by these efforts.

Progress and actions

In 2022, 86 percent (2021: 82 percent) of employees took part in the annual global MyVoice survey. The Q12 Engagement Score, which measures employee engagement based on twelve standardized questions, improved over the previous year by 0.07 points to 4.21 (2021: 4.14). Employee satisfaction once again increased over the previous year.

Software AG continues to foster a DE&I Ambassador Network, orchestrated and managed by a global DE&I contact person for the continued success of the Company's global DE&I strategy. In addition, a comprehensive, needs-based DE&I training course and concept for raising awareness was developed for Software AG in collaboration with a global DE&I consulting firm. In 2022, the focus was on key stakeholder groups, including the Management Team, Executive Leadership Team, the DE&I Ambassador Network, and HR employees. For employees and managers, customized training is planned to be rolled out in 2023. A series of DE&I awareness campaigns likewise highlighted and promoted various facets of diversity in the year under review.

The results from the questions on DE&I in the annual employee survey improved by 0.03 over the previous year to a DE&I score of 4.56 (2021: 4.53).

Software AG participated in various projects to boost the interests of women and young talent in IT professions and their appeal as a career path. Software AG hosted Girls' and Boys' Day events in 2022. In addition, Software AG India continued with the SoftwareAGain program that specifically supports women who have temporarily left the workforce and want to return. Internal women's networks in India and the DACH region continued to provide a space where experiences could be shared.

Software AG's own Give Back to the World initiative engaged in 15 projects (2021: 8), which due to the COVID-19 pandemic, took place in small groups in the year under review. Under the Software AG#StandsWithUkraine motto, colleagues from Slovenia, Bulgaria, and Germany supervised nine aid projects, focusing on supporting people experiencing extreme war crisis. The Longridge Activity Centre in Marlow (UK) received donations contributing to efforts in restoring their organization. The 1,000 trees that were planted by Software AG employees in the Darmstadt Forest (Germany) in 2019, were further maintained in 2022 through environmental and forestry protection programs. In Derby (UK), colleagues collected trash and debris, clearing up the local park and adjoining rivers. In India, the Software AG Cares employee volunteering initiative raised donations from which in 2022 the school fees for 14 students were sponsored and the family of a deceased employee was supported.

Software AG's MoveYourFeet campaign is building a bridge between Company sports, team spirit, and charitable and athletic commitment. Software AG, the employee representatives of the Supervisory Board, and the Software AG Foundation donate a fixed amount of money for each kilometer completed by employees at official competitions. In 2022, staff members covered a total distance of 6,865 kilometers (2021: 10,177) and raised a donation of €28,500 (2021: €22,000).

EMPLOYER ATTRACTIVENESS

Basic understanding

The expertise and personal skills of Software AG's employees are a key factor in the Company's success. For that reason, the Company always seeks to attract and retain the best talent.

The race for talent has become one of the biggest challenges for companies everywhere—and Software AG is facing the same obstacle. Risks emerge when succession planning is neglected and the Company is unappealing to rising talent and qualified professionals, or when it neglects continuing education and training for employees in a competitive market. Employee recruiting and retention are therefore crucial aspects of securing Software AG's business activities and success. Promoting young talent and hiring innovative employees are also promising criteria that lead investors and business partners to choose Software AG. Ultimately, employer attractiveness and branding play an important role in retaining talent. Today's applicants take a holistic view of a company and its perspectives when it comes to deciding whether to join an organization. For more information on personnel risks and opportunities, please refer to the Opportunity and Risk Report.

Targets and management

Software AG seeks to attract and retain the best talent over the long term. For that reason, Software AG has set itself the following target:

- By the year 2023, the Company aims to achieve an average global minimum rating of 4.2 out of 5 points on the international Glassdoor platform, and 4.3 by the year 2025.

In addition to outside evaluations, Software AG observes and assesses further internal key indicators including employee satisfaction, attrition, and tenure to take appropriate measures where necessary. The attrition rate is a key metric for measuring employee satisfaction and Software AG's appeal for young talent and trained professionals. It is calculated as the number of leavers in the past fiscal year in relation to the average number of employees and analyzed regularly for different departments and regions. The numbers of voluntary and non-voluntary employee leavers are also analyzed.

The Talent Acquisition department has used its own active sourcing concept since mid-2020 to manage activities for identifying qualified external candidates and approaching them about open positions.

As a founding member of the Allianz der Chancen (Alliance for Opportunities), Software AG champions a transformation in the labor market as well as sustainable employment prospects to counter a shortage in trained professionals. Furthermore, Software AG provides targeted promotional and educational measures for high school and university students as well as for rising talent to support young people early in their professional development. In Germany, the Company offers a variety of educational and training programs in the areas of office management and computer science as well as cooperative study programs in computer science and business administration.

Progress and actions

Software AG works to continually adapt its programs to meet its employees' needs and improve the high ratings it receives on employer evaluation platforms like Glassdoor and Kununu. Software AG achieved a score of 4.2 (2021: 4.11) on Glassdoor, a global employer rating platform, on a scale from 0.0 (very dissatisfied) to 5.0 (very satisfied) in the year under review. On Kununu, Germany's rating platform, Software AG achieved a score of 3.8 (2021: 3.8) on a scale from satisfactory (1–2) to very good (4–5).

The total attrition rate at Software AG in fiscal 2022 was 16 percent (2021: 14 percent). Of that, the involuntary attrition rate was 3 percent. While the increase in total attrition rate is still below the industry benchmark of 20 percent, it is also a result of the "great resignation," which has hit many companies globally, presenting them with an urgency to attract and retain good talent. On the one hand, Software AG addressed this challenge with various initiatives. On the other, Software AG is also managing involuntary attrition, which is beneficial to the organization in that it offers the possibility to bring in new talent.

[1] 2021 score of 4.1 corrected due to rounding differences (previously: 4.0).

Software AG continued to offer its Employee Assistance Program (EAP) which provides employees with around-the-clock and free-of-charge professional counseling. To prevent virtual fatigue and support employees in handling mental strain and stress, the Company continued Meeting-Free Mondays as well as no-cost access to a meditation and mindfulness app. Furthermore, Software AG introduced Virtual Office Mobility programs, for exercise and relaxation on the job. To further accommodate employee wellbeing and to ensure maximum flexibility, the hybrid work model is still in place, empowering all staff members to make the best use of time and location. The 2022 MyVoice work-life balance score was up by 0.08 and reached 4.70 (2021: 4.62).

CUSTOMERS AND TECHNOLOGY

The action area Customers and Technology includes the material topics: **Product and service quality** and **Innovation and the impact of our products**. Software AG has defined the customer concerns aspect as material beyond the aspects specified in section 289c of HGB.

Software AG aims to be a reliable partner delivering high-value, individually customizable software solutions for its customers. The Company supports the digital transformation with its services. Digital transformation can help to mitigate or even reverse the consequences of climate change. Software AG wants to actively help people and the planet with its solutions by enabling its customers to create the conditions for doing business sustainably. The Company aims to implement its technology with the best possible use of resources for its customers in every way.

PRODUCT AND SERVICE QUALITY

Basic understanding

A key objective of Software AG is to promote innovation and competitive differentiation among its customers and to support their successful digital transformation—and thereby make a key contribution to their success. Since Software AG products are primarily built-in solutions that design, inform, analyze, or manage business-critical processes, the high quality of products and services is essential. Thus, aside from innovative capability, quality is the crucial topic in the development of products and delivery of services.

For Software AG's customers, smooth operation of products is the key prerequisite for successful business operations. Software is becoming increasingly important in the context of digitalization and is indispensable in day-to-day work. Nearly all operational processes are managed by software solutions. For that very reason, secure, flawless operation of solutions without downtime is of the utmost importance. Every downtime event has an immediate impact on the processes of Software AG customers or their customers, depending on the scenario in which Software AG's solutions have been deployed.

Targets and management

Software AG introduced the net retention rate (NRR) metric in 2021. This key indicator is helpful in the subscription and Software as a Service (SaaS) business model because it expresses whether the annual recurring revenue (ARR) within the same customer group has increased or decreased over a specified twelve-month period. At the same time, NRR is an indicator of the successful implementation of solutions purchased by customers. The implementation and adoption process is closely monitored by a Customer Success Manager (CSM) to ensure that customers can reap the anticipated benefit and value from the delivered software. Fast execution and implementation can significantly improve a solution's success with the customer. To this end, the Professional Services team has developed 30 Fast Track Services that customers can access upon their CSM's recommendation by using success credits they have purchased.

Accordingly, Software AG has set itself the following target:

- Achieve an NRR of at least 105 percent by the year 2025

Additionally, Software AG measures customer satisfaction in support cases based on the Net Promoter Score (NPS). For Software AG, NPS represents a strategic performance indicator, which is reflected in the Management Board targets and broken down into business lines.

Furthermore, clearly documented processes and performance indicators (for example, quality goals, routine quality management reviews) coupled with a quality-oriented corporate culture and certification of management systems ensure Software AG's high quality standards. The entire development process is monitored through product standards. These include qualitative requirements for the products and services being developed, which are also used as a basis for release decisions. Whether these requirements have been met is reviewed as part of quality gates and serves as the foundation for the release process.

Software AG's most important management systems are certified according to ISO standards and centralized in an integrated management system (IMS):

- Software AG secures its first-rate support services and software solutions with its ISO 9001-certified quality management system (QMS). Customer feedback is systematically captured and processed in the QMS. Thus, the QMS is the basis for an ongoing improvement process and high customer satisfaction.
- Software AG's ISO 22301-certified business continuity management system enables the Company's excellent support services. Continuity management permits—through important infrastructure redundancies, for instance—that systems and services needed by customers remain available in crisis situations.
- The ISO 27001-certified cloud ISMS includes comprehensive, holistic security management for Software AG's cloud services and provides a suite of information security measures—for example, protection from unauthorized access and identification of security risks. Software AG is certified for compliance with ISO/IEC 27001:2013, ISO/IEC 27017:2015, and ISO/IEC 27018:2014.

Software AG provides global 24/7 support to ensure the continuity of its customers' core business systems. The Company's global support is certified according to ISO 9001, ensuring high quality. With the Enterprise Active Support model, Software AG provides fast, agile, and proactive customer support for all of its products. Customers benefit from industry-leading performance and fast response times in any time zone. Depending on business criticality, other support models with fewer services can be selected (standard support), especially regarding regional coverage and response times. Every customer who uses global support is asked to provide feedback on the service and on Software AG in general. The feedback is used to improve customer service and incorporated in product development.

In addition to Global Support, there are other teams (New Product Introduction Teams) that specialize in supporting customers with introducing new products and reporting feedback gathered during the product introduction process to the development department.

Moreover, the different aspects of product and service quality are measured and tracked with the help of performance indicators by means of an internal management reporting system. Using the performance indicators—which measure the number of support notifications per customer or processing time, for example—it is possible to identify internal problems early on and resolve them. Software AG has established Escalation Management to ensure that targeted solutions are developed as quickly as possible in critical customer situations. This team intervenes temporarily to identify all kinds of challenges and find a solution. These can include project, organization, and product problems as well.

Progress and actions

NRR was first introduced as a key indicator in fiscal 2021 to measure the extent to which Software AG's software products are deployed by customers over the long term and deliver the anticipated optimization contributions. Software AG achieved an NRR of 100 percent in 2022 (2021: n/a). With an NPS of 61 (2021: 56[1]), the Company reached an all-time high in 2022. The NPS goal for the reporting year was 52. Software AG has set an NPS goal of 60 for 2023. For years, the NPS has been determined after closing a support incident.

Meanwhile, Software AG has also been measuring the NPS at other points during the product life cycle. NPS surveys are now conducted and followed up on during product usage directly from end users as well. These are captured and reported as separate values.

[1] The NPS value for 2021 covers the period from March to December 2021.

INNOVATION AND IMPACT OF OUR PRODUCTS

Basic understanding

Software AG's goal is to support its customers with innovative products to help them solve problems for the long term and achieve their objectives. Extremely fast innovation cycles are the norm in the software industry because the realities of life in diverse national economies continue posing new challenges for companies. For that reason, it is essential to recognize customer needs—meaning the business problems and challenges facing Software AG's customers—to be able to offer technological solutions. To that end, the Company monitors current developments and disruptive trends in different industries. For more information on market trends and monitoring as well as on Software AG's differentiators, please refer to the Competitive Situation section in Fundamental Aspects of the Group in the Combined Management Report.

Software AG's products support customers in making decisions based on various data that can lead to more efficient use of financial or natural resources. Using process images, data provisioning and exchange, data analysis, device connectivity, and process data analyses, customers can make smart data-driven decisions that contribute to better process results and enable competitive advantages.

Software AG believes that technological innovations are a key means of solving the social challenges of our time. Real-time data provision and analysis are essential to optimize resource usage, detect process errors, and quickly realize improvements. If Software AG's customers are not successful in improving their resource usage, they are exposed to both competitive and environmental risks. Consistent use of existing and new data is the only way to learn efficiently and make the best possible decisions for the benefit of society. Software AG could not identify any significant risks with regard to the Customers and Technology action area. For more information on the product portfolio and innovation risks, please refer to the Opportunity and Risk Report in the Combined Management Report.

Targets and management

As a software company, Software AG believes innovations are key to attracting new customers. Furthermore, the Company wants its solutions to help its customers establish more efficient and sustainable business processes. To make certain this happens, Software AG has set itself the following targets:

- The percentage of R&D investments will remain—at a minimum—at 15 percent of total revenue through 2025.
- Software AG will set its sales focus on new customers and successively gather information about the impacts that the solutions, which customers implement with its technology, have on sustainability. By 2025, the Company aims to know what the long-term impacts of its technology are for at least 50 percent of new customers with regard to efficiency improvements and resource savings.

Progress and actions

Software AG was able to exceed its goal of a minimum of 15 percent of R&D investments of total revenue with a percentage of 18.9 (2021: 18.1 percent) in the year under review. For more information on R&D expenditures, please refer to the Research & Development section in the Combined Management Report.

Software AG's technological innovations are expanding its customer portfolio and improving efficiency for itself and its customers. For instance, the Company succeeded in 2022 in increasing the number of deals closed to 1,810 (2021: 1,792) through better sales management and a programmatic qualification of business opportunities.

Moreover, Software AG evaluates the success of its innovations based on revenue growth and the number of new customers. During the year under review, Software AG signed 293 (2021: 312) new customers for its solutions. In 2022, independent market research firms once again confirmed Software AG's innovative power, market success, and product and service quality. For more information about their assessments, please refer to the Industry Recognition section in Fundamental Aspects of the Group in the Combined Management Report.

As an initial step to better understand the long-term impacts of Software AG's technology on its customers, a sustainability data gathering roadmap was developed by the Global Customer Success Management (CSM) community in 2022. They focused on primary research methodologies and followed a five step approach:

- 1. Develop knowledge within the CSM team on what sustainability is and how to start sustainability discussions with customers.
- 2. With customers, identify from secondary research what the customer is doing for sustainability.
- 3. Identify individuals and/or teams at customers with a sustainability focus.
- 4. With digital tools, assess and record customers who are using Software AG services to measure or improve their sustainability goals.
- 5. Analyze and record feedback from customers on a quarterly basis.

In 2022, Software AG signed 293 logos and completed ESG surveys with 223 customers (76 percent).

VALUE FOR SOCIETY

The Value for Society action area corresponds to the social concerns aspect per section 289c(2), no. 3 of HGB and includes the material topic **Tech for good**.

Software AG aspires to effectively assist people in building expertise in the area of modern technologies. The Company's targeted involvement in universities and schools focuses on the IT experts of the future. It opens up new learning opportunities and meaningful development prospects for students and young professionals. Since technological progress plays a key role in developing a sustainable world, Software AG participates in collaborative research projects that promote the UN's global SDGs.

TECH FOR GOOD

Basic understanding

Digitalization is a comprehensive economic and social topic, and a central field for action in the German government administration's agenda for education. Software AG addresses Tech for good primarily at a regional level. Across the entire Group, the Company pursues the goals of networking with the different communities where it operates and contributing to their well-being as a good corporate citizen.

Software AG aims to counter the shortage of IT professionals and managers in Germany. For that reason, the Company fosters digital expertise at universities and educational institutions at both the national and international levels.

Software AG is aware of the transformative power and positive impact of technologies and therefore wants to contribute to achieving the UN SDGs through participation in collaborative research projects. In this respect, the Company is involved in projects that contribute to innovation and to social, environmental, or economic improvement—with a focus on Germany and Europe.

Software AG could not identify any significant risks with regard to the Society action area. Rather, the Company sees the opportunity here to live up to its corporate social responsibility and make an economic and social contribution—especially to the local communities of its operations.

Targets and management

Software AG has set itself the following targets in the Tech for good area:

- For many years, participating in publicly funded joint research projects has been a matter of course for Software AG. In the past, the technological direction and level of innovation regarding Software AG's business lines was the deciding factor for project selection. In the future, the focus of research projects and their contribution to fulfilling the SDGs will be another key criterion. Software AG's goal is for at least 80 percent of its research projects to support accomplishing the SDGs by 2025.
- Software AG aspires to expand its University Relations Program worldwide and increase its reach to 250,000[1] students by 2025.

The University Relations Program promotes the development of digital competencies by providing software and teaching materials free of charge in education packages, including the opportunity to earn a free certification for the knowledge gained.

[1] Students who have benefited from the University Relations Program during their studies, primarily in the form of free use of software provided by the program. The figures have been collected cumulatively on an ongoing basis since the program's induction in 2007.

The University Relations Program fulfills an important aspect for addressing one of Software AG's key target groups: the next generation of talent. It stimulates a steady stream of applications, especially for jobs for graduates in technology fields. According to an internal study from 2016, half of the Company's recent graduate hires in Germany can be traced back to a previous contact via the University Relations Program. Finding graduates in the job market with Software AG skills is also very important for Software AG's partners and customers.

By the same token, Software AG is a founding member of Software Campus. Launched in 2011, the program is supported by ten industry partners and eleven research partners and funded by the German Federal Ministry of Education and Research. It focuses on outstanding students in computer science and related fields and qualifies them through mentoring and seminars for leadership positions in the IT industry. By participating in the program, Software AG hopes to counter the shortage of IT experts and managers in Germany.

In addition, the Company is driving further social initiatives—such as the SoftwareAGain program in India—at its international locations. Regional corporate governance works to develop measures for local issues. In addition, the Company supports local associations and initiatives through donations and sponsorships.

Progress and actions

In 2022, 13 research projects out of 22 in total contributed to the SDGs, which corresponds to 59 percent (2021: 52 percent). REIF (Resource-Efficient, Economic and Intelligent Food chain) is one example of Software AG's participation in a project. This project investigates the potential of artificial intelligence (AI) for optimizing the planning and control of value creation in the food industry. The goal is to establish an AI ecosystem that integrates stakeholders from all stages of the value chain to reduce food waste sustainably and holistically with the help of AI. For more information about Software AG's engagement in research projects, please refer to the Research & Development section in Fundamental Aspects of the Group in the Combined Management Report.

Since 2007, Software AG has provided software free of charge for teaching and research purposes to more than 2,100 universities in 104 (2021: 101) countries through its University Relations Program. The offering covers the needs of more than 1,750 educators and is integrated into curricula on a recurring basis. Since the program began in 2007, more than 247,682 (2021: 225,349) students have benefited from it, the majority with free licenses. These numbers are based on an updated data collection system, which in 2022 led to an adjustment of the target value by the year 2025 as well as a correction of the collected key indicators. Software AG has been offering students free online certifications as part of the University Relations Program since 2017. More than 4,500 young experts can document their knowledge with this certificate when applying for jobs.

IMPACT ON ENVIRONMENT

The Impact on Environment action area includes the material topic of **Energy and CO_2 emissions**, and corresponds to the environmental matters aspect per section 289c(2), no. 1 of HGB.

Software AG is working to keep its environmental footprint as small as possible. To minimize the effects of its business activities on the planet, the Company is preparing to become climate neutral as quickly as possible. With the help of its technology and solutions, Software AG will join forces with its customers and partners to tackle significant environmental challenges and help shape a more sustainable future.

ENERGY AND CO_2 EMISSIONS

Basic understanding

The Environment action area focuses on reducing CO_2 emissions since these represent Software AG's most significant environmental impact. Software AG takes responsibility for the environmental impact of its own business operations. The Company is determined to become climate neutral and reduce its impact on the environment.

In Software AG's industry, CO_2 emissions are generated in particular via energy consumption of buildings, operating data centers, and employee mobility. Accordingly, the environmental impacts of Software AG's business model come largely from energy consumption and the associated emissions.

Targets and management

Software AG has set the following target for itself in the energy and CO_2 emissions area:

- Development of a reduction path to net zero CO_2 emissions by the end of 2022

Software AG takes a holistic approach to all aspects of energy management, demand, and procurement for all its operations and is working toward reducing its carbon footprint by using more renewable energies. To control power consumption for all its locations, Software AG continually implements energy-saving measures, such as retrofitting lighting systems, replacing motors, and upgrading building technology. When planning the construction of new buildings, the Company pays close attention to making use of natural light, installing shading systems, and state-of-the-art building technology. Software AG is also looking for ways to improve the energy efficiency and performance of its data centers and to reduce energy consumption through innovative technologies. As part of its IT strategy, Software AG has adopted the two strategic goals, Move to Cloud and Application Harmonization. Both objectives contribute to optimized use of resources through standardizing applications and improving usage efficiency in the cloud.

In the area of mobility, Software AG offers employees in Darmstadt a public transportation pass as well as leasing opportunities for bikes and e-bikes. Likewise, it also has charging stations for electric and hybrid vehicles.

Progress and actions

Electricity is the most important source of energy for the Company. Software AG contributes significantly to reducing its own emissions by using electricity from renewable sources. Locations in Germany are supplied with 100 percent green electricity. In addition, waste heat from the servers at corporate headquarters in Darmstadt is used to heat the building.

All in all, Software AG reduced its energy consumption at the locations under review from last year to 7,662,965 kWh (2021: 7,827,925 kWh[1]). Energy consumption per employee (EMP) decreased accordingly to 1,969 kWh/EMP (2021: 2,132 kWh/EMP). Energy consumption per square meter of floor space was 90 kWh/m^2 (2021: 90 kWh/m^2). Here it must be taken into consideration that the Munich and Nuremberg locations changed from leased office space to need-based external office solutions (serviced offices) and thus were no longer recorded.

To move closer to its goal of net zero CO_2 emissions, a project team that was launched at the end of 2021 determined the Company's global carbon footprint for 2021 in collaboration with an external partner. These results were disclosed in July 2022 as part of the CDP survey. However, the Scope 3 emissions under the heading “Use of sold products” could not be determined for Software AG's customers, so the planned reduction path to net zero emissions could not be developed during the reporting year. At the time the report was prepared, the decision on how the Company would deal with the set goal was still outstanding.

Software AG consistently pursued its IT strategy during the reporting year. This included measures for consolidating its data centers, reducing the on-premises footprint, and a smart transition of the workload to the cloud while taking efficiency perspectives into consideration.

[1] 2021 energy consumption numbers were corrected retrospectively due to a transmission error.

Non-Financial Key Indicators

LEADERSHIP AND GOVERNANCE

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Sustainable economic growth				**SDG 8**
ESG ratings				
MSCI (target: at least AA by 2025)	AAA	AA	AA	
ISS ESG (target: at least C by 2023, at least B by 2025)	C-	D+	D+	
Information security and data protection				
Information security training rate				
Number of employees who participated in information security training	4,152	4,458	n/a	
Percentage of employees trained on information security (target: at least 85%)	81	86	n/a	
Data protection training rate				
Number of employees who participated in data protection training	4,099	2,743	n/a	SASB TC-SI-230a.2
Percentage of employees trained on data protection[1] (target: at least 85%)	80	53	n/a	
Data protection				
Number of data breaches[2]	0	0	1	SASB TC-SI-230a.1
Number of data breaches[3] involving personally identifiable information	0	0	1	
Percentage of data breaches involving personally identifiable information	0	0	100	
Number of users affected[3]	0	0	403	
Business ethics and corporate digital responsibility, sustainable supply chains and human rights				**SDG 8, 16**
Code of Conduct				
Number of (new) employees trained on the Code of Conduct[4]	712	790	622	GRI 205-2, GRI 412-2
Percentage of new employees trained[5]	102	112	96	
Number of available languages	8	8	8	
Year of last update	2022	2015	2015	
Competitive behavior and corruption				
Total number (and nature) of confirmed incidents of corruption	0	0	0	GRI 205-3
Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	0	0	0	
Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption	0	0	0	
Number of pending or concluded litigation cases for anti-competitive behavior and violations of antitrust and anti-monopoly law in which the Company was identified as a participant during the year under review[6]	1	1	1	GRI 206-1, SASB TC-SI-520a.1

1 Training introduced in September 2021.
2 As per Article 33 GDPR.
3 As per Article 34 GDPR.
4 Training on Code of Conduct includes topics such as anti-corruption and human rights.
5 The total number of confirmed training courses includes repeats from the previous year as well as courses completed voluntarily.
6 Software AG Spain appealed the decision by the Spanish Antitrust Authority (Comisión Nacional de los Mercados y la Competencia, CNMC) from July 31, 2018. The case has been ongoing since 2018.

OUR EMPLOYEES[1]

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Corporate culture and diversity				**SDG 5, 8, 10**
Number of employees (worldwide)	5,107	5,158	n/a	
Number of FTE (worldwide)	**4,674**	**4,806**	**4,628**	
Nationalities (worldwide)	89	88	n/a	
MyVoice Annual Employee Survey				
Participation (as %)	86	82	82	
Q12 Engagement Score (target: maintain or improve compared to the previous year)	4.21	4.14	3.92	
Q12 Engagement Score (as %)	84	54	n/a	SASB TC-SI-330a.2
DE&I score (target: maintain or improve compared to the previous year)	4.56	4.53	4.42	
Accountability index	4.25	4.10	3.71	
Employees by gender				
Male employees	3,265	3,341	3,273	GRI 405-1
Female employees	1,410	1,464	1,354	
Diverse employees	0	1	1	
Employees by region				
NAM	600	614	643	GRI 405-1
LATAM	103	110	118	
DACH	1,353	1,417	1,314	
thereof in Germany	1,304	1,366	n/a	
thereof in Darmstadt	734	787	881	
EMEA	1,274	1,303	1,271	
APJ	1,345	1,362	1,282	
Employees by employment type and gender				
Full-time employees	**4,437**	**4,553**	**4,390**	GRI 405-1
Male employees	3,195	3,268	3,202	
Female employees	1,242	1,284	1,187	
Diverse employees	0	1	1	
Part-time employees	**238**	**253**	**238**	
Male employees	70	73	71	
Female employees	168	180	167	
Diverse employees	0	0	0	

[1] FTE, adjusted for dormant employment contracts. Not including employees of FACT AG and StreamSets. There were no significant changes or seasonal fluctuations in the number of employees during the year.

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Gender distribution of employees				
Percentage of women in leadership positions (worldwide)	**22**	**21**	**21**	SASB TC-SI-330a.3
Percentage of women in leadership positions in the second tier of management (worldwide)	14	28	27	
Percentage of women in leadership positions in the third tier of management (worldwide)	18	21	23	
Percentage of women out of total number of employees (worldwide)	**30**	**31**	**29**	
Supervisory Board by gender and age group (as %)				
Male	**40**	**50**	**83**	GRI 405-1
<30	0	0	0	
30-50	20	0	0	
>50	20	50	83	
Female	**60**	**50**	**17**	
<30	0	0	0	
30-50	20	17	0	
>50	40	33	17	
Diverse	**0**	**0**	**0**	
Management Board by gender and age group (as %)				
Male	**100**	**75**	**80**	GRI 405-1
<30	0	0	0	
30-50	60	25	40	
>50	40	50	40	
Female[1]	**0**	**25**	**20**	
<30	0	0	0	
30-50	0	25	20	
>50	0	0	0	
Diverse	**0**	**0**	**0**	
Employees by gender and age group (as %)				
Male	**70**	**70**	**71**	GRI 405-1
<30	10	10	11	
30-50	40	40	41	
>50	20	19	19	
Female	**30**	**31**	**29**	
<30	6	7	6	
30-50	17	17	17	
>50	7	7	6	
Diverse	**0**	**0**	**0**	
Age group trend (as %)				
<30	17	17	17	GRI 405-1
30-50	57	58	58	
>50	26	26	26	
Comparison of CEO's remuneration with worldwide average full-time employee remuneration[2]				
CEO remuneration in € thousands	1,770	2,237	2,214	
Average salary in the second tier of management (worldwide) in € thousands	339	327	312	
Average employee salary (worldwide) in € thousands	89	84	83	
CEO pay ratio (CEO remuneration to average employee salary)	20:1	27:1	27:1	

[1] Reporting date value as of Dec. 31, 2022; the CHRO position on the Management Board was held by a female from Jan. 1, 2022, to Oct. 31, 2022.
[2] For further information, please refer to the Remuneration Report.

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Employer attractiveness				
Number of new hires	698	707	651	GRI 401-1
Attrition rate (as %)	16	14	10	
External ratings				
Glassdoor (target: 4.2 by 2023 and 4.3 by 2025)	4.2	4.1	3.9	
Kununu	3.8	3.8	3.7	
New hires by region				
NAM	107	106	n/a	GRI 401-1
LATAM	7	12	n/a	
DACH	105	122	n/a	
EMEA	184	198	n/a	
APJ	296	269	n/a	
New hires by region (as %)				
NAM	15	15	n/a	GRI 401-1
LATAM	1	2	n/a	
DACH	15	17	n/a	
EMEA	26	28	n/a	
APJ	42	38	n/a	
Next generation of talent				
Trainees and coop program students	79	79	65	
Interns and degree candidates (Bachelor's and Master's)	97	79	51	
Student employees	61	68	51	
Work-life balance				**SDG 3**
Work-life balance score	4.70	4.62	4.55	
Employee promotion and development				**SDG 5**
Growth Days				
Total number of training courses (iLearn)	2,040	1,800	1,700	
Satisfaction (average) with training courses[1] (iLearn)	90.6	90.1	86.6	GRI 404-1
Growth Days registrations	59,421	76,500	59,000	
Growth Days learning time (hours/net)	276,354	253,500	175,000	
Growth Days learning time/employee (hours, net)[2]	59.1	52.7	38.1	
Employee development discussions (EDD)[3]				
Total EDDs	4,230	4,226	n/a	GRI 404-3
Concluded EDDs	3,458	3,390	n/a	
Completion rate (as %)	82	80	n/a	

[1] Average satisfaction is rated on a scale from 0 (completely dissatisfied) to 100 (completely satisfied).
[2] Employees who left the Company are not taken into account in the calculation of this metric.
[3] EDD forms were automatically rolled out to all employees in February. Exceptions include: a) Employees on maternity or parental leave, those on extended sick leave and semi-retired employees; b) Student interns and trainees; c) Consultants working for Software AG in Israel and for Software AG Government Solutions America who invoice their services.

CUSTOMERS AND TECHNOLOGY

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Product and service quality				
Starting 2022: net retention rate (as %) (target: 105% by 2025)	100	n/a	n/a	
Net Promoter Score in support cases[1]	61	56	54	
Satisfaction with handling of support incidents (number of 5-star ratings on a scale of 1 to 5)	77.6	76.0	78.0	
Innovation and the impact of our products				**SDG 9, 12**
Ratio of R&D investments to total revenue (as %) (target: at least 17% by 2025)	19	18	17	
Starting 2022: rate of new logos that provide sustainability information (as %) (target: 50% by 2025)	76	n/a	n/a	

[1] The NPS for 2021 includes the months of March through December. The NPS score for 2020 includes the months of January through September 2020.

VALUE FOR SOCIETY

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Tech for good				**SDG 4, 9**
University Relations Program				
Number of universities, colleges, and vocational schools worldwide	2,126	2,026	1,700	
Number of countries	104	101	80	
Number of students reached in universities, colleges, and vocational schools worldwide (target: 250,000 students by 2025)	247,682	225,349	n/a	
Research projects				
Percentage of research projects that align with the SDGs (target: at least 80% by 2025)	59	52	n/a	
Employee engagement and support of local communities				
Distance in kilometers through "MoveYourFeet"	6,865	10,177	4,341	
Donations raised through "MoveYourFeet" (in €)	28,500	22,000	22,500	
Donation funds				
Monetary donations in India[1] (in €)	55,000	233,000	96,385	
Monetary donations and donations in kind in other countries[2] (in €)	697,603	216,016	160,363	

[1] Mandatory CSR levy, recorded after the actual donation payment date.
[2] Recorded for: Bulgaria, Denmark, Germany, United Kingdom, Israel, Netherlands, Sweden, Spain, South Africa.

IMPACT ON ENVIRONMENT

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Energy and CO_2 emissions[1]				**SDG 12**
Key indicators of energy consumption[2]				
Total number of employees	3,892	3,672	3,584	GRI 302-1
Floor area in m²	84,920	86,838	88,145	
Energy consumption in kWh/year	7,662,965	7,827,925	8,303,691	
kWh/m²/year	90	90	94	
kWh/EMPL/year	1,969	2,132	2,317	
Environmental footprint of the hardware infrastructure: energy				
Total energy consumption (gigajoules)	27,587	28,181	n/a	SASB TC-SI-130a.1
Purchased electricity (gigajoules)	13,506	14,099	n/a	
Percentage of electricity	49	50	n/a	
Consumption of renewable energy (gigajoules)	14,080	14,081	n/a	
Percentage of renewable energy	51	50	n/a	
Scope 1 emissions				
Software AG's direct CO_2 emissions[3] through heating buildings with gas for Darmstadt HQ				
Number of employees	734	787	881	GRI 305-1
Gas consumption in m³/year	88,465	117,009	92,532	
m³/EMPL/year	120.5	149.8	105.0	
t CO_2/year	178	234	185	
t CO_2/EMPL/year	0.2	0.3	0.2	
Scope 2 emissions				
Indirect energy-related CO_2 emissions[3] from energy consumption from Company-owned buildings[2], including energy consumption for Company-owned data centers (scope 2)				
Number of employees	3,892	3,672	3,584	GRI 305-2
Floor area in m²	84,920	86,838	88,145	
t CO_2/year	2,111	1,527	1,622	
t CO_2/EMPL/year	0.5	0.4	0.5	

[1] Due to the limitations imposed by the COVID-19 pandemic in fiscal years 2020 to 2022, the data provided here is only comparable with previous years to a limited extent.
[2] Locations for which no separate account data is available are not included. The data collected represents about 90 percent of Software AG's total floor area.
[3] Conversion to tons of CO_2 using the CO_2 calculator from klimaneutral-handeln.de (2020 and 2021) and carbonfootprint.com (2022).

	2022	2021	2020	Assignment to reporting standards (GRI, SASB) and the UN SDGs
Scope 3 emissions[1]				
CO_2 emissions from business travel[2] **(scope 3)**				
Air travel (t CO_2)	532	52	155	GRI 305-3
Train[3] (t CO_2)	0	0	0	
Rental car (t CO_2)	4	16	22	
Average number of leased vehicles	218	239	240	
Kilometers driven	4,100,000	n/a	n/a	
Total emissions for leased vehicles in t CO_2	809	711	605	
Energy consumption and energy-related CO_2 emissions at external data centers				
Total number of external data centers	2	2	3	
Total energy consumption of external data centers in kWh	609,010	614,274	575,357	
Total emissions for external data centers[4] in t CO_2	235	14	231	
Natural resources and circularity				**SDG 12**
Hardware waste[5] **in Germany**				
Number of old devices	n/a	670	313	GRI 306-3
Refurbishment rate as %	n/a	69	86	
Recycling rate as %	n/a	31	14	
Savings through remarketing in t CO_2	n/a	111	65	

1 Due to the limitations imposed by the COVID-19 pandemic in fiscal years 2021 and 2020, the data provided here is only comparable with previous years to a limited extent.
2 Figures are based on means of transportation booked by all employees in Germany.
3 Since Jan. 1, 2020, all local and long-distance train travel utilizes 100 percent green energy (zero CO_2 emissions).
4 For the 2021 financial year, there is proof from the provider that the data center in question was operated with green electricity. This proof was not provided for the 2020 and 2022 fiscal years.
5 Hardware waste disposal in Germany is handled entirely by certified waste management companies. They are responsible for lawful, audit-compliant and certified deletion of data and destruction of data carriers in compliance with all data protection and security aspects. The process is monitored seamlessly up to recycling or refurbishment. Software AG had not received the waste management company's environmental report for 2022 by the date this report was prepared.

Rounding could lead to deviations in a few cases.

Annex to the Combined Non-Financial Statement

Template Pursuant to the Commission Delegated Regulation (EU) 2021/2178 of July 6, 2021

				Substantial contribution criteria						DSNH criteria (Do No Significant Harm)									
Economic activities (1)	Code(s) (2)	Absolute in thousands €	Proportion as %	Climate change mitigation (5) %	Climate change adaptation (6) %	Water and marine resources (7) %	Circular economy (8) %	Pollution (9) %	Biodiversity and ecosystems (10) %	Climate change mitigation (11) Y/N	Climate change adaptation (12) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Biodiversity and ecosystems (16) Y/N	Minimum safeguards (17) Y/N	Taxonomy-aligned proportion 2022 % (18)	Category (enabling activity) (20) [E]	Category (transitional activity) (21) [E]
Revenue																			
A. Taxonomy-eligible activities		0	–																
B. Taxonomy-non-eligible activities		958,180	100.0																
OpEx																			
A. Taxonomy-eligible activities																			
A.1. Environmentally sustainable activities (taxonomy-aligned)		0	–																
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned)																			
Transport by motorbikes, passenger cars, and light commercial vehicles	6.5	1,489	0.8																
Acquisition and ownership of buildings	7.7	5,580	2.9																
OpEx of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned) (A.2)		7,069	3.7																
Total (A.1 + A.2)		7,069	3.7																
B. Taxonomy-non-eligible activities		184,913	96.3																
Total (A + B)		191,982	100.0																
CapEx																			
A. Taxonomy-eligible activities																			
A.1. Environmentally sustainable activities (taxonomy-aligned)		0	–																
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned)																			
Transport by motorbikes, passenger cars, and light commercial vehicles	6.5	3,374	1.8																
Acquisition and ownership of buildings	7.7	7,977	4.2																
CapEx of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned) (A.2)		11,351	6.0																
Total (A.1 + A.2)		11,351	6.0[1]																
B. Taxonomy-non-eligible activities		177,598	94.0																
Total (A + B)		188,949	100.0																

[1] In the previous year, a taxonomy-eligible CapEx ratio of 43.6 percent was reported. The change to this year's ratio of 6.0 percent is mainly due to the fact that intangible assets of €163,675 thousand were acquired as part of the StreamSets acquisition, which had to be included in the total CapEx for 2022 in accordance with the requirements of Commission Delegated Regulation (EU) 2021/2178 of July 6, 2021. Excluding the StreamSets acquisition, the taxonomy-eligible CapEx ratio for 2022 would have been 44.9 percent.

Forecast

ECONOMIC CONDITIONS IN UPCOMING FISCAL YEARS

FUTURE MACROECONOMIC SITUATION

Many factors that had a stabilizing effect on the world economy in 2022 will lose relevance in 2023. Production normalized in contact-intensive sectors of the economy after many restrictions from the COVID-19 pandemic were lifted. However, according to experts at the Kiel Institute for the World Economy (IfW), that potential is gradually depleting. Additional savings that had accumulated during the peak of the COVID-19 crisis will dwindle and no longer be able to boost consumption as significantly. Robust labor markets had also had a stabilizing effect on consumption and income. But with rising unemployment rates, this effect is also likely to wane. Analysts ultimately expect new orders to decrease in industry. At the same time, interest rate hikes are having a negative impact in many areas. They are hampering investments and private consumption and have already left a substantial mark on the previously-booming construction industry. Researchers at the IfW expect global economic production to grow by 2.2 percent in 2023, and somewhat more in 2024 at 3.2 percent.

In the **United States,** economic output is expected to shrink in 2023 according to the IfW. Especially private consumption, which was recently the largest economic driver, is likely to see a strain. Unemployment is expected to increase to 4.9 in 2023 after the expected 3.7 percent in 2022. At the end of 2021, researchers were under the assumption that unemployment was in decline and would drop to pre-pandemic levels. They anticipate the recent robust rise in wages to weaken noticeably. This could bring inflation back to its target of 2.0 percent. According to the IfW's forecast, the GDP will contract by 0.4 percent in 2023, and recover moderately with 0.5 percent growth in 2024.

High inflation, rising interest rates, and the weakened global economy will negatively impact the **eurozone**'s economy in 2023. However, because pressure on energy prices should ease, the IfW expects a recovery to set in over the course of the year. Consumer prices are expected to remain historically high after a 5.6 percent rise in 2023, but the increase will slow significantly compared with 2022. According to IfW's economic outlook for 2023, the GDP will only grow by 0.6 percent. Researchers therefore anticipate unemployment to go up to 7.1 percent in 2023, compared with 6.7 percent in 2022. In 2024, they expect an economic recovery with growth of 1.5 percent. The IfW remains pessimistic about the unemployment rate for the time being with a forecast of 7.4 percent. The rise in consumer prices is expected to continue shrinking, though at a rate of 2.6 percent, growth will still be above the European Central Bank's medium-term inflation target of 2.0 percent.

Massive energy and gas subsidies along with falling energy prices should provide some relief in **Germany** in 2023, according to the IfW. Nevertheless, the sustained high rates of price growth will dampen consumption. Energy prices will also continue to weigh heavily on German companies, particularly energy-intensive ones. Researchers from the IfW estimate that the GDP will only grow by 0.3 percent in 2023. In 2024, they expect an economic recovery with growth of 1.3 percent. The consumer price situation should also ease with increases of 5.4 percent (2023) and 2.2 percent (2024). The IfW points out, however, that the lower inflation rates will come at the cost of high government deficits. Additional spending to curb energy and gas prices will amount to €87 billion in 2023 and €17 billion in 2024. The labor market is expected to develop robustly, however, with unemployment rates of 5.5 percent (2023) and 5.4 percent (2024).

Key Data on Germany's Economic Development

2021 to 2024[1]	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast
GDP, price-adjusted	2.6	1.9	0.3	1.3
GDP, deflator	3.1	4.7	3.4	3.7
Consumer prices	3.1	8.0	5.4	2.2
Labor productivity (hourly concept)	0.9	0.2	0.2	1.3
Employed domestically (1,000 people)	44,980	45,535	45,635	45,543
Unemployment rate as %	5.7	5.3	5.5	5.4

[1] Gross domestic product, consumer prices, labor productivity: changes compared with the previous year in percent; unemployment rate: determined by the German Federal Employment Agency.
Source: Institute for the World Economy (IfW), Economic Reports, German Economy in Winter 2022 No. 98 (2022 | Q4), Dec. 14, 2022.

GDP and Consumer Prices in Advanced Economies (selection)[1]

	GDP			Consumer Prices		
	2022 Forecast	2023 Forecast	2024 Forecast	2022 Forecast	2023 Forecast	2024 Forecast
European Union	3.5	0.7	1.7	8.9	6.2	2.9
Eurozone	3.4	0.6	1.5	8.3	5.6	2.6
United Kingdom	4.3	-0.6	1.5	9.1	7.6	2.8
Switzerland	2.0	0.5	1.3	3.0	2.5	1.2
USA	1.9	-0.4	0.5	8.0	4.1	3.3
Canada	3.6	1.8	1.4	5.8	4.4	2.5
Japan	1.4	0.7	1.6	2.3	2.1	1.0
South Korea	2.8	1.5	2.7	5.3	3.8	3.0
Australia	3.6	2.3	2.7	6.5	4.5	3.0

[1] GDP: price-adjusted, change year-on-year; consumer prices: year-on-year change.
Source: Institute for the World Economy (IfW), Economic Reports, Global Economy in Winter 2022 No. 97 (2022 | Q4), Dec. 21, 2022.

Forecast of Global IT Spending

in $ billions	2022 Spending	2022 Growth as %	2023 Spending	2023 Growth as %
Software	783	7.1	856	9.3
IT services	1,245	3.0	1,313	5.5
Total IT	4,385	-0,2	4,491	2.4

Source: Gartner Forecasts Worldwide IT Spending to Grow 2.4% in 2023. www.gartner.com/en/newsroom (January 18, 2023)

Sector development

Following a slight decline in 2022, Gartner analysts have returned to optimism about 2023 and predict growth in global IT spending of 2.4 percent to $4.5 trillion. The software segment is expected to see the strongest growth, at 9.3 percent, to $856 billion. Hardware sales will remain weak, with revenue expected to drop 5.1 percent to $686 billion.

Despite multiple crises, experts at the industry association Bitkom are also optimistic about the current year. Sales in IT, telecommunications, and consumer electronics in Germany could break the €200 billion mark for the first time (+3.8 percent). Aside from challenges such as climate protection, growth drivers are new digital business models, for example in healthcare, education, and mobility. The number of people working in these sectors is likely to grow by 3.4 percent to 1.352 million.

Information technology (IT) remains the sector's undisputed top performing segment and, according to Bitkom, will see a rise of 6.3 percent to €126.4 billion. Within this segment, software—Software AG's area of activity—ranks first. Growth of 9.3 to €38.8 billion is expected. Artificial intelligence platforms (+41.8 percent), collaborative applications (+15.6 percent), and security software (+11.4 percent) are performing especially well. According to forecasts, products in the hardware segment, primarily wearables, security appliances such as firewalls, and servers, will account for growth of 5.3 percent to €39.7 billion in 2023. The third IT segment, IT services, should see an increase of 4.7 percent to €47.8 billion.

In the telecommunications segment, sales will increase slightly, by 0.8 percent to €69.5 billion, due mainly to investments in telecommunications infrastructure and 5G-enabled smart phones. The third segment, consumer electronics, will remain the industry's underdog. Bitkom expects losses for the third year in a row. Revenue of €7.6 billion would reflect a 7.3 percent decline for 2023. Consumer restraint due to high inflation and economic insecurity are particularly evident in this segment.

THE GROUP'S FOCUS

The Helix transformation, which was launched in 2019, is aimed at better meeting changing market and customer demands and capitalizing on growth opportunities. In 2022, Software AG continued to concentrate on the three pillars of its Helix transformation—Focus, Team and Execution—to build the right momentum towards higher predictability and scale of its global business.

Based on the transformation's progress to date, the lessons learned, and the macroeconomic outlook, Software AG will continue its efforts and lay the foundation for the next phase of growth in 2023, with a focus on the following five operational priorities:

- **Accelerate the transition to cloud-first:** The Company will prioritize specific SaaS sales motions for growth products like webMethods.io and StreamSets to capitalize on the high demand for cloud products.
- **Double down on innovation in integration:** Software AG will direct resources to this area in which it has product leadership, current growth, and future growth opportunity, accelerating innovation in its key products, webMethods.io and StreamSets.
- **Increase sales specialization to drive efficacy and efficiency:** Applying experience gleaned from the past years of transformation, Software AG will specialize its sales force to realize greater impact from its growth products, starting in North America. This will increase go-to-market efficacy and also drive further sales efficiency.
- **Leverage the value of A&N:** The Company will continue the ongoing shift to subscription which offers an important pathway to cloud rehosting and interaction between A&N customers and Software AG's wider Digital Business portfolio.
- **Optimize operational efficiency:** Software AG plans to increase the Company's efficiency and productivity through a program that improves operational leverage and delivers sustainable benefits to increase efficiency. This is anticipated to affect around 200 employees, or 4 percent of full-time equivalents (FTE).

EXPECTED FINANCIAL PERFORMANCE

ANTICIPATED REVENUE AND EARNINGS

The current macroeconomic environment is characterized by a high degree of insecurity and volatility. Given these general conditions as well as those described above, the Management Board currently anticipates revenue and earnings to develop as described below.

As communicated on January 31, 2023, Software AG's Management Board expects year-on-year Group product revenue growth between 6 and 10 percent at constant currency (based on 2022 exchange rates) for the 2023 fiscal year. Operating margin (EBITA, non-IFRS) is expected to be between 16 and 18 percent.

As part of the Helix strategy, the product bookings metric was introduced to paint a more transparent picture of actual sales successes. Due to the extremely successful implementation, nearly all product bookings had a direct effect on the ARR metric in 2022. A further result of the successful transition to subscription and SaaS licenses is that payments are booked for these customer relationships on an annual basis; ARR is a very good indicator of future cash flows in this context. Accordingly, the Management Board decided to update product bookings as a key financial guidance metric to ARR, both for Digital Business and Adabas & Natural (A&N), in 2023. In the Digital Business segment, ARR growth of between 10 and 15 percent at constant currency is expected year-on-year, and in A&N, between -2 and +2 percent at constant currency year-on-year.

OUTLOOK FOR SOFTWARE AG (FINANCIAL STATEMENTS FOR THE PARENT COMPANY)

Software AG's future financial performance depends upon the financial standing of the Software AG Group and is determined by profit transfers and decisions regarding the payout of Group-internal dividends. Therefore, please refer to the forecast on expected financial performance of the Software AG Group.

Outlook for Fiscal Year 2023

	FY 2022 in € millions	Outlook FY 2023 as of Jan 31, 2023 as %
Digital Business ARR	516.4	+10 to +15[1]
A&N ARR	183.8	-2 to +2[1]
Product revenue	795.6	+6 to +10[1]
Operating margin (EBITA, non-IFRS)[2] as %	19	16 to 18

[1] At constant currency.
[2] Before adjusting for non-operating factors (see non-IFRS definition of earnings in Key Financial Performance Indicators).

MANAGEMENT'S GENERAL STATEMENT ON THE ANTICIPATED DEVELOPMENT AND POSITION OF THE GROUP

Helix, the extensive transformation strategy that was kicked off four years ago, laid the foundation to further evolve Software AG's strategy. Based on the five identified strategic priorities, the Company continues to drive its growth strategy in 2023 while increasing operational effectiveness through efficient scaling of the business. The plan for 2023 will more clearly structure the business and ensure that the defined targets can be met, even in a challenging macroeconomic environment. The Management Board is certain that the initiated measures have charted a course to sustainable profitable company growth.

Opportunity and Risk Report

GOALS

Software AG's primary goal is to generate sustainable profitable growth and thereby increase enterprise value. To that end, the Company combines established business activities with an involvement in promising new market segments and regions. Its sales models were and continue to be adapted successively from one-time sales revenue recognition at the beginning of a contract to annual revenue recognition (subscriptions and Software as a Service, SaaS). The shift is associated with a temporary decrease of operating margin (EBITA, non-IFRS), but in the medium and long term, higher overall earnings will result from successful customer relationships. In favor of long-term sustainable development, Software AG forgoes short-term earnings growth and the potentially resulting short-lived positive effects on share price. In addition, Software AG is seeking strategic partnerships that will help meet the goal of sustainable profitable growth and strengthen its extremely important ecosystem. With a strategy that is based on sustainable long-term success, the Company strives for a balance between opportunities and risks and takes on risks only if the business activities associated with them have a relatively high probability of enhancing the value of Software AG. It is always a prerequisite that Software AG can evaluate risks and that they remain manageable and controllable. Furthermore, risks and opportunities associated with ongoing operations are systematically monitored, for example, by keeping a constant eye on product and service quality and managing exchange rate developments.

ORGANIZATION

A Group-wide opportunity and risk management system enables Software AG to identify potential risks early to assess and minimize them to the greatest extent possible. Risks are to be understood as possible deviations from planned values. Strictly speaking and in accordance with customary spoken language, risks are defined as negative deviations and opportunities as positive deviations from planned values. By continuously monitoring risks, Software AG can always evaluate the overall status systematically and in a timely manner and better assess the effectiveness of appropriate countermeasures.

This includes operational risks, e.g. risks associated with cyber incidents, as well as financial, economic, legal, and market risks. Opportunities are generally congruent to the operational and functional risk structure in all risk areas. Software AG uses various controlling tools to monitor the identified risks on an ongoing basis; these relate to the development of the Company as a whole and to department-specific issues. The Management Board receives continuous updates on current and future risks and opportunities as well as the aggregated risk and opportunity situation via established reporting channels.

Risks and opportunities throughout the world are managed and controlled by teams at corporate headquarters responsible for pursuing opportunities and preventing risks for Software AG. Corporate headquarters compiles risk and opportunity reports, initiates further development of the risk management system, and elaborates risk-mitigating guidelines for the entire Group. It constantly reviews the functioning and reliability of the system as well as the reporting.

STRUCTURE

Controlling

The Controlling department—which is under uniform global leadership—monitors risks arising from business operations in a timely manner. In addition, both operational and strategic risks are analyzed by means of a structured reporting system. It shows developments in all relevant departments using KPIs and reports them continuously, monthly, and quarterly (depending on KPI) to the Management and Supervisory Boards. Furthermore, if exceptional circumstances relating to potential business opportunities or risks arise, ad hoc analyses are conducted and reported to the Management Board.

Finance

The Finance department is responsible for establishing all guidelines for financial reporting in accordance with International Financial Reporting Standards (IFRS) and for Software AG's annual financial statements in accordance with the German Commercial Code (HGB). All accounting decisions relevant to the Company's financial statements as well as the revenue calculation process are monitored and/or executed by the global Corporate Finance department. This ensures compliance with IFRS accounting regulations throughout the Group.

Treasury

Software AG’s Corporate Treasury team generates a daily finance status report, weekly assessments of foreign currency transactions, as well as summaries of derivatives outstanding. The European Monetary Infrastructure Regulations Report (EMIR) is generated once per month. The CFO receives weekly reports on the Software AG Group’s finance status and a summary of credit default swaps for all banks with which the Software AG Group engages in transactions, especially cash investments. The CFO also receives a monthly summary of short and long-term financing. All high-risk foreign-currency and hedging transactions may be conducted only by the Corporate Treasury team, which is directly below the CFO. A global treasury policy prohibits the national subsidiaries from engaging in any high-risk transactions with derivatives.

General Services

Another component to opportunity and risk management is the transfer of operating risks to insurance carriers. This is coordinated globally by the General Services department at corporate headquarters.

Internal Audit

Software AG’s Internal Audit is an active component of the Company's risk management. Through a systematic and targeted approach, it ensures the effectiveness of risk management along with the evaluation and continual improvement of the internal control systems (ICS) and the management and supervision processes. It is also geared to the creation of added value for Software AG by rating the efficacy and efficiency of business processes. Internal Audit reports to Software AG’s Chief Information Security Officer on a disciplinary basis, but has additional reporting lines to the CEO and the chair of the Audit Committee of the Supervisory Board. This department operates globally.

INTERNAL CONTROL SYSTEM

Software AG’s ICS is based on policies, guidelines, and measures introduced by the Management Board to support the organizational implementation of the Management Board’s decisions. Together with the risk and opportunity management (ROM) system, the ICS comprises management of risks and opportunities relating to the achievement of business targets, the validity and reliability of internal and external financial reporting, and compliance with standard legal policies and regulations including the continuously evolving requirements in the area of non-financial reporting. The ICS also includes a compliance management system (CMS) geared to the Company’s risk situation.

Software AG's ICS is an established component of internal controlling and monitoring processes. It consists of internal policies on business practices as well as Group guidelines on effective internal controls. These policies regulate internal procedures and areas of responsibility at global and local levels. They are designed to provide information to leadership and to monitor the operating business risks of the Software AG Group. In order to enhance transparency, these policies are approved, published, and managed centrally. Compliance with them is assessed on an ongoing basis by Internal Audit as part of a risk-oriented review plan. Individual key Group business processes are managed centrally using software applications based primarily on Software AG technology and monitored using preventative automated control mechanisms.

With respect to the accounting process, the focus of the ICS is on ensuring that Software AG's accounting is correct, appropriate, and effective as well as the financial data reported on its basis. In particular, the aim is to minimize the risk of false statements in Group accounting and other external reporting and to prepare compliant consolidated and annual financial statements. The following processes and control mechanisms were implemented to that end:

- Detailed Group accounting, valuation, and account allocation policies are in place which are continuously updated and complied with; these include an IFRS-based accounting guideline as well as a separate revenue recognition guideline. There are also guidelines on bookings, annual recurring revenue (ARR), and net retention rate. Application is mandatory.
- Compliance with these guidelines is ensured and monitored by Corporate Finance as well as locally and regionally responsible Finance, Controlling, and Administration (FC&A) managers and audited by Internal Audit.
- The national subsidiaries report their figures monthly to Corporate Accounting within the Corporate Finance department using the management information system (MIS). The figures from the national subsidiaries are consolidated using the SAP BCS software tool and fed back into the MIS. Corporate Controlling and the Corporate Finance team then analyze these monthly reporting results. Any deviations that may arise are communicated monthly to the national subsidiaries and/or Corporate Accounting and corrected via the most efficient channel.
- Worldwide separation of the functions of generating and reviewing accounting figures is guaranteed by segregation into two areas: Corporate Finance and Corporate Controlling. The two departments are led by different managers who report independently of each other to the CFO.
- All internal Group supplier and service relationships are centrally coordinated and legally regulated through cooperation agreements. Central departments within Corporate Finance and Corporate Controlling handle internal service allocation. In addition, an intercompany transactions policy standardizes internal Group approval processes throughout the world.
- The revenue calculation process is rigorously monitored by means of globally managed approval processes as of the commencement of contract negotiations. The Global Deal Desk is a preventative internal control system and is employed worldwide. All quotes associated with the intent to close a sale with a customer go through this approval process, in which the Legal department as well as Corporate Finance, Corporate Controlling, the CFO, and the CRO are also involved.
- Internal Audit continually reviews all key customer contracts worldwide with a view to compliance with the approval process and correct representation in accounting.
- Access rules for the local and central accounting programs are uniformly regulated and monitored by the corporate IT department.
- Only employees of Corporate Accounting have access to data stored in SAP BCS.
- All Group reports are reviewed by a second person in Corporate Finance in accordance with the dual-control principle.
- Software AG regularly commissions external experts to evaluate complex matters such as stock option plans, pension provisions, legal risks, and purchase price allocations.

RISK AND OPPORTUNITY MANAGEMENT

ROM is composed of a central interdisciplinary core team of directors from Corporate Finance, Internal Audit, and Legal who report to the CFO in this function. A manager from the relevant field of expertise serves as risk advisor and is responsible for Group-wide assessment, monitoring, and management of the identified risks. The risk advisors are recommended by the core team and chosen by the responsible member of the Management Board. The risk advisors conduct biannual risk evaluations with the core team.

Risks are evaluated according to a uniform valuation system. The system determines the risk category based on the potential impact on Group EBIT for the next three years. This impact is calculated taking into account the risk-mitigating measures taken by management.

Expected impact on EBIT in the next 3 years (cumulative)	Risk category
€20 to €50 million	low
€50 to €200 million	medium
> €200 million	high

The impact on EBIT over the next three years is divided into three categories. An impact of up to €50 million on Group EBIT in the next three years is categorized as low risk. An impact on EBIT between €50 and €200 million is categorized as medium risk. And, risks affecting EBIT by more than €200 million in the next three years are categorized as high risk.

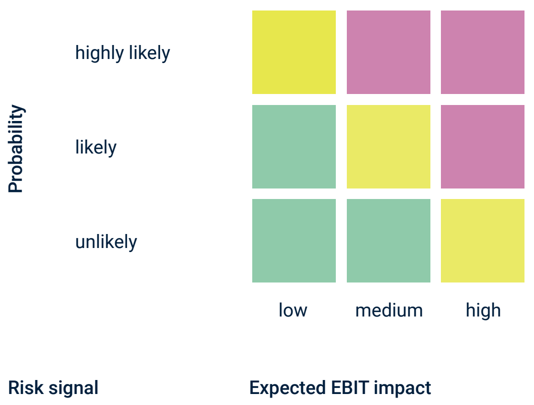
In a separate step, these impacts on EBIT in the next three years are categorized according to the risk advisors' estimated probability into three risk levels.

Probability	Risk level
0% to 33%	unlikely
34% to 66%	likely
>66%	highly likely

Probability between 0 and 33 percent is rated at an unlikely risk level, between 34 and 66 percent at likely and above 66 percent at highly likely. The risk categories and levels are aggregated and assigned an equivalence marker based on expectation values. These are then assigned to one of three cumulative risk signals.

Risk signal	Risk relevance
green	insignificant
yellow	medium
red	significant

This results in the following risk matrix according to which all risks are uniformly assessed:



All Software AG managers must report newly identified risks and opportunities to the core team at corporate headquarters. The team then informs the Management Board to discuss possible areas. The core team reports to the Management Board regularly about the ongoing development of the identified risks and opportunities.

The Management Board regularly presents the ROM to the Audit Committee of the Supervisory Board and discusses with it the level of the identified risks and opportunities as well as appropriate measures for managing the risks and opportunities.

Based on the risk advisors' submitted EBIT impact for the next three years as well as their probability of occurring, the expectation values are calculated taking into account risk-mitigating measures for the individual risks, but without offsetting risks and opportunities. The overall interdependency between individual strategic risks is then evaluated and aggregated with the sum of expectation values for all strategic risks. The result is the total expectation value for all risks. This value is compared against Software AG Group's determined risk-bearing capacity; risk reserves are also calculated. This ensures the effectiveness of the ROM and the ICS.

Internal Audit regularly reviews the effectiveness of the ICS. When necessary, suggestions for improvement are prepared and implemented. This is monitored centrally. Corporate Finance and Corporate Controlling regularly conduct internal reviews of accounting-relevant control processes and modifies them for new developments.

POSITION TAKEN BY THE MANAGEMENT BOARD IN ACCORDANCE WITH THE 2022 GERMAN CORPORATE GOVERNANCE CODE[1]

In accordance with recommendation A.5 of the 2022 German Corporate Governance Code (GCGC), the Management Board examined the appropriateness and effectiveness of the ROM and ICS. Based on that, the Management Board has no indication that the ROM and ICS were not appropriate or effective in their respective entirety as of December 31, 2022.

[1] Not reviewed as part of the external audit of the Management Report since this information persuant to recommendations of the GCGC is above and beyond that which is legally required of the Management Report.

KEY INDIVIDUAL RISKS AND OPPORTUNITIES

Software AG presents key risk and opportunity areas and individual risks and opportunities discerned from the totality of risks and opportunities identified through the ROM in the Risk and Opportunity Report.

Environment and sector risks/opportunities

Macroeconomic environment

The business of a globally operating company like Software AG depends heavily on economic developments worldwide. A global economic downturn—especially in the markets Software AG serves—can result in failure to meet revenue and earnings guidance. Furthermore, risks could arise from political and societal changes, particularly in countries where Software AG markets its products.

Geopolitical risks increased significantly in the 2022 fiscal year, primarily due to the war in Ukraine, which drastically worsened the predictability of economic developments. The war in Ukraine is causing risks and limitations that impact Software AG both directly (e.g., higher energy costs) and indirectly, through changes in customers' purchasing behavior. In addition, the sanctions against Russia represent a challenge for Software AG, just as for all companies with global operations and cross-border projects in Eastern Europe.

If the conflict situation were to extend beyond Ukraine, the risk of a global economic recession would increase additionally. Rising inflation and interest rates can also result in a considerable decline in consumption and increased operating and financing expenses.

Customs disputes and trade restrictions, for example between the USA and China, as well as the current conflict over Taiwan can affect global trade and thus world economic growth. This could have a major impact on Software AG's revenue and earnings performance.

The global government debt situation was further exacerbated for the long term by the effects of the COVID-19 pandemic and of the war in Ukraine. Regardless of the scenarios and possible responses assessed by Software AG in this complex risk area, these developments could negatively impact the business, the assets, and the financial performance and position of the Company.

Market risks

Market risks are related, among other things, to the varying economic developments in individual countries or regions. The technological evolution of different sectors of the IT industry can impact the business potential of the individual business lines positively or negatively.

Software AG's balanced revenue mix reduces dependency on a specific geographical or professional IT submarket. Software AG markets technologies that are not specific to certain industries, ruling out a dependency on individual industries or customers. Thanks to its technological innovations, ongoing R&D investments, and procurement of new technologies as part of technology-driven acquisitions, the Company significantly expanded its product portfolio and will continue to do so in the future. That enables greater flexibility for customers' existing IT infrastructures and significant cost savings. And, it can ensure a long-term broad customer base for Software AG.

In Software AG's view, the Company's new products are a logical way to cope with market-related cost pressures even in weak economic periods. Many customers use Software AG software for business-critical applications for years and often decades when running satisfactorily. This results in a largely stable flow of returning revenue in this business line.

Market opportunities

Software AG sees itself as a technology leader in enterprise digitalization software. Due to its strategic focus, Software AG will continue to concentrate on technologies and regions with high-growth markets. Furthermore, Software AG will continue its Adabas & Natural 2050+ program. And, because of the significance of its ecosystems in successful software sales, it will also further expand its partner model. These measures may lead to better-than-average opportunities for Software AG to grow and claim market share in core markets.

United States

The USA is Software AG's most important sales market. Software AG operates its own sales organization in the USA, and key portions of corporate departments are based there, such as Marketing and R&D. Furthermore, significant local intellectual property rights are located in the USA, resulting in a substantial royalty payments from the Group to the USA. A large percentage of Group profits is generated and taxed in the USA.

Because Software AG's business volume with China is relatively low, no substantial risks to its global business resulting from US foreign trade policies with regard to China are expected.

The extent of the negative impact of ongoing trade conflicts between the USA and China, Russia, and the EU on the Software AG Group's global development is not clear. Software AG is technologically independent of large US-based software platform companies. Growth of the US economy depends on a variety of factors. Nevertheless, future market opportunities should outweigh risks. The dynamic success of the cloud business in the USA offers significant growth potential for Software AG's cloud products, especially StreamSets and webMethods.io.

COVID-19

The COVID-19 pandemic has been affecting the global economy for three years. Multiple lockdowns in most countries of the world initially had a negative impact on the global economy. Many companies froze, postponed, or extended investment activities. In addition, nearly all organizations placed extensive restrictions on business travel. These circumstances made contract negotiations with customers difficult because nearly all meetings could only be conducted online. The lack of customer events and meetings made it difficult to generate new project opportunities which continues to affect Software AG's business today.

The COVID-19 pandemic forced companies and government agencies to move large portions of their administrative work to the home office. This has resulted in the permanent establishment of hybrid work. The pandemic shed light on the lack of digitalization in business processes, which had and continues to have an accelerating effect on digitalization. In the meantime, new means of business collaboration have been established. The positive effect of this is that the initially feared risk of a pandemic-related decline in business did not manifest. Regardless, many companies and government agencies still have a need for optimization. This is resulting in new business opportunities for Software AG, particularly in the Digital Business segment, which could compensate, or even overcompensate, for the negative effects of a global economic recession.

Corporate strategy risks and opportunities

Product innovation and portfolio

The software sector is subject to very fast innovation cycles with respect to new products as well as go-to-market models, such as usage-based models (pay per use) in the IoT and cloud markets. These are based on constantly changing customer, market and integration requirements. Software AG is rapidly converting its customer contracts to subscriptions and, increasingly, SaaS models as well. New innovation trends are very difficult to predict and are sometimes identified too late. Due to the uncertainty of future developments in the software market, Software AG considers itself exposed to risks and the associated impacts when it comes to the following points, among others:

- New innovation trends are not recognized or are recognized too late
- Company resources such as R&D, Product Marketing, Marketing, Sales, and Mergers & Acquisitions (M&A) are not allocated or not in the appropriate scope to the right products
- Insufficient focus on future growth-relevant products
- Key competitors' large financial resources can have a negative impact on business success
- Lack of balance between fast product innovation on the one hand and product quality on the other

Software AG's product portfolio consists primarily of software tools and platforms whose value for customers is maximized through customized solutions. This translation of platform technology to customized solutions is the Company's key success factor. Software AG took measures to counter the described risks:

- Organization of the product business in market-defined business units that are clearly geared to competition and customers
- Regularly scheduled innovation competitions (TechInterrupts) to promote ideas and identify possible applications for new tech trends
- Ongoing exchange with leading experts from the field of (business) information technology in the context of a Scientific Advisory Board
- Ongoing exchange with specific customers in Customer Advisory Boards
- Regularly scheduled in-depth discussions with leading industry analysts such as Gartner and Forrester
- With the goal of shortening time-to-market, Software AG's

products are also augmented by acquisitions when it comes to newer development trends
- Because the IoT and webMethods.io products are still relatively new, a considerable amount of resources have been and will be dedicated to quality assurance

Product quality investments were further increased in webMethods.io (integration Platform as a Service solution). These investments allow product defects to be corrected as early as possible. Software AG also ensures product quality through implementation of product standards, the Chief Quality Officer, and the ISO 9001 certified quality management system. Product quality and user-friendliness as well as customer support are monitored using these mechanisms on an ongoing basis.

Growing the SaaS business (cloud business) is extremely challenging and cost-intensive. In this context, Software AG is exposed to risks and impacts when it comes to the following points, among others:
- Insufficient scaling in the cloud business and the associated inadequate margin growth
- Technical and legal risks regarding data protection and data security
- Competitive advantages of new startups without a long history in the on-premises business

Software AG took measures to counter these risks, for example:
- Monitoring through a dedicated, externally ISO 27001-certified information security management system and cross-departmental response teams for failures in data protection and information security
- Expanded work with external IT forensic specialists
- Ongoing monitoring and optimization of cloud infrastructure usage

In particular, the expansion of the IoT business and the recognition achieved in the Digital Business line by distinguished technology analysts like Gartner and Forrester are generating major market opportunities for Software AG. As digitalization continues to advance—fueled by the COVID-19 pandemic—in companies' administrative units and production (IoT) activities as well as in government organizations, Software AG can influence the development of markets and drive its own growth.

The product portfolio and innovation risks described above were rated at risk signal yellow at the end of 2022 (2021: green).

Market risks and opportunities in the Digital Business segment

The comprehensive Digital Business segment is streamlined into product offerings based on API Management, Integration & Microservices, Business Transformation, and IoT & Analytics. This structure ensures the right roadmap prioritization of customer and market requirements for product development. It improves opportunities for further expanding the competitive advantages of Software AG products and receiving outstanding ratings by the relevant technology studies. A more streamlined R&D focus is also improving customer satisfaction and business success. Software AG is exposed to risks and the associated impacts in the following contexts, among others:
- Inadequate consideration of agile customer requirements in product development
- Undesirable developments in product sales revenue in the Digital Business segment
- Insufficient visibility and awareness in the USA, Software AG's largest single market
- Suboptimal availability and robustness of cloud services
- Too dependent on individual large-scale deals

The occurrence of each of these risks could have a negative impact on business development in the Digital Business segment.

Software AG took measures to counter the described risks, for example:
- Regularly scheduled customer feedback events for the entire R&D organization
- Permanent monitoring of product revenue development by the general managers of the product lines
- Ongoing marketing activities with a focus on the USA and the goal of improved pipeline generation and market visibility
- Close control of cloud services by the Operations teams
- Expansion of subscription license model which will lead to a stabilization of revenue in the medium term
- Ongoing support for cloud customers through Customer Success Managers to improve customer satisfaction and reduce termination risks

The relatively new time-to-value model was developed and introduced in connection with the sustainable subscription and SaaS sales models. With this model, customer benefits, and in turn customer satisfaction, grow over time.

These efforts are intended to reduce sales complexities and shift the focus to the strength of the individual product offerings. The Management Board sees opportunities in raising the visibility of products with existing and target customers, sharpening Software AG's identity, and significantly improving customer satisfaction and success. In the Management Board's estimation, this will all contribute to significantly increasing the Company's share in the high-growth API Management, Integration & Microservices, Business Transformation, and IoT & Analytics markets. The complete Digital Business line holds major opportunities for Software AG's future business development. This is especially due to the fast pace of the IoT market's growth, as well as the ever clearer digitalization trend, which drives growth in the API Management, Integration & Microservices product line.

Growth in API Management, Integration & Microservices

The API Management, Integration & Microservices product line in the Digital Business segment generates the largest volume of business of all Software AG product lines. Software AG's growth depends on the growth of this product line. The intensity level of competition is very high in this business. The Company therefore considers itself to be exposed to the following risks and impacts, among others:

- Insufficient balance between development speed and quality assurance
- Insufficient competitiveness in the market for specialized R&D talent
- Too little product brand awareness, especially in the USA
- Insufficient leveraging of synergy effects between subproducts

The following measures were taken to manage the strategic risks in this product line:

- Market observation and trend tracking, including collaboration with leading tech analysts, Gartner and Forrester
- Proactive marketing campaigns to grow the pipeline and generate new business as well as improve Software AG's visibility in key markets
- Intensified cross-selling activities for products in the API Management, Integration & Microservices product line with customers in the IoT & Analytics and Business Transformation product line to generate new business
- Allocated more R&D and other resources to cloud solutions
- Dedicated measures to improve long-term recruitment and retention of R&D talent, e.g. expansion of share-based remuneration components

It is anticipated that the digitalization of enterprise processes and administration—including the public sector—will drive development of the API Management, Integration & Microservices product line. This product line holds major opportunities for Software AG's future business development.

Due to the measures described above, including in the context of the intensified digitalization trend, the risk rating remained unchanged at green at the end of 2022 (2021: green).

Development of Business Transformation

The Business Transformation product line in the Digital Business segment consists primarily of the ARIS and Alfabet products. This market is characterized by intense innovative competition. To keep up with this competition, Software AG delivered new functionality for its process mining products in the previous year and is continuously introducing product innovations.

Like all major Software AG products at present, the products in this product line are cloud-ready. To accelerate this product line's growth and transition to the cloud business, Software AG introduced the option for customers to purchase standard software packages online. In addition, specialist consulting teams and the Customer Success Management organization are being built on an ongoing basis; their task is to expand customer relationships and the respective business volume as well as to support the Sales organization in growing this field of business. Furthermore, customer support during the term of cloud agreements serves to increase customer satisfaction and minimize the risk of termination.

The Business Transformation products are particularly well suited as entry products for Software AG technology. Because average deal sizes tend to be smaller than in other Software AG product lines, efficiency is also lower in direct sales. Software AG's sales focus for these products is aimed more at other channels such as partner and direct online sales.

Expansion of the partner ecosystem is necessary to boost the success of this product line. A higher number of implementation partners is needed to support customers in the implementation of these software products. These were not and are not yet available to Software AG to the extent necessary and are currently being increased, e.g. through the strategic partnership formed with Persistent in 2022. Competition for human resources has also intensified considerably in this product line. Software AG enhanced its recruitment and staff development programs to address potential fluctuation in this area.

These risks were given a green risk signal at the end of 2022 (2021: green).

Ongoing development of IoT & Analytics

Business in the IoT & Analytics product line within the Digital Business segment (cloud & IoT business) is growing faster than the rest of Software AG. IoT is a rapidly growing market subject to intense competition. The market is being driven by hyperscalers (computing networks to achieve major scaling in cloud computing and big data), systems integrators, and industrial companies that are developing their own IoT system landscapes.

In this context, Software AG is exposed to risks and impacts when it comes to the following points, among others:

- Inconsistencies in product quality due to the proportionally low level of product maturity and to high speed of development
- Insufficient attention to technical challenges and necessary product enhancements
- Underestimation of challenges regarding customer growth and economic relevance
- Attempts by competitors to poach highly qualified employees
- Insufficient sales and consulting capacities in smaller regions
- Because the products in this line are increasingly sold as SaaS offerings, there is a growing risk that service level agreements will not consistently be met.

Any of these circumstances could have a negative impact on business operations in this segment. Software AG therefore took measures to counter these risks, for example:

- Introduction of the Continuous Integration and Continuous Delivery concept in the R&D process
- Amplified training options in modern cloud technologies
- Strengthening and automation in Cloud Operations, to enable better scalability of cloud solution operations
- Introduction of modern team-building and management methods
- Intensification of partnerships with consulting firms and hyperscalers
- Expansion of proactive support and de-escalation measures

The risks associated with the IoT business were rated at risk signal yellow (2021: yellow).

Market risks and opportunities in the Adabas & Natural business

Software AG's traditional Adabas & Natural (A&N) products is currently in an advanced stage of the product life cycle. The age structure of A&N employees poses a challenge for Software AG—in R&D, Presales, Sales, and Professional Services—and its customers. The necessary generational shift across all customer-oriented functions must be well organized. Otherwise, there is a risk of losing customer contacts and expertise with the corresponding negative effects on sales opportunities.

There is hardly any new customer business in this segment. The product portfolio is based on existing customers. Growing cost pressure on customers has the effect of more migration of mainframes to open system platforms. But resources are tight when it comes to supporting customers with this migration. There is also the risk of customers changing to new competitor products, which would have negative effects on revenue and profit margin. It would also reduce the cross-selling potential of other Software AG products. Software AG's strategy is based in part on extending customers' existing A&N license rights and/or selling add-on products. The potential offered by renewing licenses continued to drop compared to past years. Software AG's A&N customers have nevertheless been very loyal up to now. In Software AG's view, this is because A&N products are highly valued for their:

- High availability
- Low operating costs
- Strategic relevance for operation of customer applications running on A&N
- Future guarantee

This presents the opportunity to attract customers with positive Software AG experiences to long-term maintenance and modernization of their IT infrastructure while keeping A&N technology. Software AG is the best partner for that. Retaining and acquiring product expertise make this possible. Ongoing innovation and R&D activities lead to significantly better prospects for the A&N business line. Software AG began communicating its Adabas & Natural 2050+ program in 2015 and is fundamentally willing to continue developing A&N and providing A&N customers installation support through the year 2050 and beyond. This initiative resonated extremely well with customers and increased the level of loyalty among the customer base. The transition to subscriptions in the A&N segment also opens up additional revenue potential.

Software AG is countering the described risks with the following additional measures:

- The Adabas & Natural 2050+ program can significantly delay the anticipated long-term revenue decline
- Ongoing development of hosting and private cloud availability for A&N products can lead to new business
- Through the sale of new products, the Freedom for Legacy initiative can lead to incremental revenue and enable existing A&N customers to integrate their legacy applications with modern software environments
- Customer support for migration of mainframes to Linux platforms with the help of A&N technology (rehosting) to cut hardware costs for customers and prolong maintenance periods
- Expansion of A&N service capacities to support local partners and their re-hosting activities
- Generation change training programs for young A&N staff in R&D and Presales working for Software AG and customers
- Extended application support to serve customers
- Expansion of offshore R&D and support centers
- Focus on key operating system platforms like z/OS®, Linux®, and Windows®
- A&N modernization to extend the product life cycle, e.g. enhancement and sale of Adabas encryption and auditing products as well as zIIP™ functionality for online transactions and Adabas for zIIP
- Regular customer satisfaction surveys
- Increased marketing budget

These measures can significantly slow the downward trend of A&N sales while providing opportunities for generating additional sources of revenue.

Customer evaluations show that the majority of all A&N installations are business-critical for customers. This means that many customers' economic livelihood depends on the performance and availability of their A&N installations. After having invested heavily over the past decades, these customers cannot and will not forgo this technology. There is thus an opportunity that this business line will continue generating high revenues in the future.

There are significant opportunities associated with product innovation and A&N modernization/digitalization packages; this type of offering can make the need for large, cost-intensive projects to replace A&N technology superfluous. In this way, A&N remains a future-proof technology, which can make a positive impact on A&N customers' investment decisions. The macroeconomic environment as described also had barely any negative effects on business performance in this segment. In times of crisis, customers rely on proven technology and do not undertake activities to try out new technologies.

These risks were assigned risk signal yellow at the end of 2022 (2021: green).

Acquisitions

Software AG complements its technology offering to further expand its market share in relevant core markets worldwide through targeted acquisitions. Acquisitions are an opportunity to participate in waves of innovation, to expand the product portfolio, and increase relevance in the market and with prospective customers. Acquisitions can help shorten time-to-market significantly for new products that address the latest trends. The uncertainty of future market and technology trends poses a risk associated with determining the right target companies that are well matched to the Company's future strategic focus. The selection of an unsuitable target company leads to management resources and investment funds being tied up without sufficient return on investment. This can result in risks associated with possible impairments, the unnecessary use of Software AG's cash, and a decrease in the Company's competitiveness and growth potential.

The prolonged period of low interest rates, high liquidity in the market, and heightened interest among strategists and investors in digital business models caused a sharp rise in the price of potential target companies in the software market, which reflected unfavorably on the profitability of potential acquisitions. A slight decline in prices was recently observed in light of interest rate developments, increased inflation forecasts, and the uncertain macroeconomic outlook. Regardless, potential target companies remain highly valued or do not yet have the right relevant size or profitability. Companies with cutting-edge technologies that are already successful in the market and offer an attractive financial profile are often highly priced due to the intensity of competition. This market situation can pose a considerable obstacle in the acquisition of new technologies and limit Software AG's non-organic growth and innovation capabilities. A risk therefore exists of acquiring unsuccessful business models or suboptimal products lacking in market maturity. There is always a residual risk inherent to due diligence processes of not having correctly assessed strategic risks or synergy potential.

The following risk-mitigating processes were defined for the time prior to and after acquisitions:

Pre-acquisition phase

To mitigate the risk associated with the selection of potential target companies, the Mergers & Acquisitions (M&A) department is continuously observing and evaluating the relevant market segments. Software AG expanded and optimized its process for identifying investment areas, target companies, and potential divestitures. In this context, potential companies are identified using a sophisticated screening process and assessed based on acquisition criteria. To reduce risks associated with due diligence processes, Software AG conducts a critical business model and business plan analysis of all potential target companies. Its current due diligence process identifies problems, rejection criteria, and uncontrollable risks early, as well as validates the opportunities associated with the acquisition. In-depth due diligence is carried out with respect to technological, sales, staff, strategic, and operational integration. Prior to a takeover, an intensive review is conducted to ascertain whether the technologies of the target company in question efficiently strengthen and/or supplement Software AG's product portfolio, how market access and market penetration will improve, and what potential synergies can be realized. Every acquisition is preceded by a detailed analysis of the target company's economic fitness as well as a validation of the combined business plan and synergy potential with the help of experienced due diligence teams. These teams consist of a core team and experienced specialists from the relevant business units as well as external consultants. They assess whether the target company's corporate culture can be harmonized with that of Software AG. In order to ensure consistent integration coordination regarding business plan implementation, staff members who will be responsible for integration later are included in due-diligence processes at an early point in time.

As in the previous year, the risks associated with the pre-acquisition phase were given a green risk signal at the end of 2022.

Post-acquisition phase

There is also a risk that an acquired company will not be successfully integrated and the strategic goals of the acquisition will not be achieved.

Insufficient integration could result in growth and profitability issues as well as failure to achieve combined business plan targets. It would become difficult to quickly exploit revenue and cost synergies. There is an additional potential risk associated with the loss of key specialists when not enough attractive positions are created quickly. Especially smaller-scale acquisitions pose the challenge that managers who have worked as generalists must transition to the role of specialist in a larger organization following an acquisition. The main challenges relate to the integration of the product portfolio, the sales/go-to-market model, the processes, the people, and the different corporate cultures. The risk of insufficient integration also has a negative effect on the integration of future acquisitions.

Due to these risks. Software AG established a Post-Merger Integration (PMI) team with a dedicated PMI manager to lead the unit; they are responsible for integration of past and future acquisitions and report to the COO.

Through established control mechanisms, any possible integration risks or opportunities are identified during the due-diligence stage. The established integration processes clearly define roles for centrally managed sales, development, and administrative tasks. This ensures integration across all departments and enables quick generation of revenue and cost synergies. Possible areas of employment for future employees are assessed at the beginning as well as ways for ensuring knowledge transfer.

The acquired company's budget for the post-acquisition period is detailed and approved by stakeholders as part of the purchase process in order to guarantee continued business operations. Specific KPIs are identified and monitored for each integration. A key component of these activities is the integration of sales. In due course, the new sales models and product offerings are integrated with the Software AG sales organization to leverage revenue synergies. This enables the sale of acquired products to Software AG's existing customers (upselling) and sale of existing products to new customers (cross selling). The acquired sales organization can act as an overlay function for the existing sales organization.

Due to the learning and experience curve in connection with the recent StreamSets acquisition, these risks were rated at risk signal green at the end of 2022 (2021: yellow).

Environment, social, governance

As part of its strategic risk and opportunity management, Software AG started reporting separately on the strategic risk associated with environment, social, and governance (ESG) aspects in the 2022 fiscal year. In light of growing global challenges, particularly regarding climate protection, Software AG rolled out a new Group-wide sustainability strategy in the 2021 fiscal year, defining sustainability as a strategic priority. Software AG joined the United Nations Global Compact (UNGC), the world's largest corporate sustainability initiative, in the first half of 2022, representing a decisive commitment to corporate responsibility.

Sustainability plays a central role in Software AG's strategic focus. It strives to lead the global search for technology solutions to the most pressing social and environmental challenges and aims to help its customers and partners in their sustainability efforts. Software AG's Management Board is of the conviction that sustainability is a prerequisite to long-term business success.

The basis for Software AG's sustainability strategy is its Sustainability Roadmap 2025. It provides the direction on how the Company will meet its targets in five key action areas. In addition to anchoring ESG criteria in its corporate governance, Software AG is committed to fostering a respectful, transparent, and inclusive corporate culture for its employees and always attracting the best talent for the Company. With its technology solutions, Software AG aspires to play an active role in enabling customers to operate their organizations sustainably. Furthermore, technology solutions are being developed through research projects that are making a positive impact on society and environment and promote the UN sustainable development goals. When it comes to environmental impact, the Group's global carbon footprint is assessed to develop a reduction path to achieving net zero CO_2 emissions.

Achieving its sustainability targets is essential for Software AG's success as an attractive employer and with customers and investors, as these target groups increasingly link ESG criteria explicitly (e.g. for financing) or implicitly to a company's rating. If Software AG were not able to fully or partially meet its sustainability targets, possible negative impacts would be the loss of or inability to obtain employees and customer orders, increased costs of capital, decreased market value, and penalty fees for not meeting legal requirements.

The ESG risks were assessed for the first time and given a yellow risk signal at the end of 2022.

Corporate strategy risks and opportunities

The strategic realignment (Helix), which began in 2019, contributed to Software AG surpassing its target of 90 percent of product sales revenue in recurring revenue one year earlier than planned (end of 2022) at 93 percent. This means that a core goal of this strategic realignment was achieved. The strategic projects carried out under Helix were coordinated by a dedicated Transformation Office that reports to the CHRO. The high number of measures meant that a clear transformation focus was lost and the transformation was being driven forward in too many separate activities at the same time, which in turn increased the number of resources involved. With the transfer of the Transformation Office to the COO's Management Board area of responsibility, all projects were reviewed for transformation relevance and many were terminated. Three key projects were identified and completed in the third quarter of 2022. Further transformation projects are planned.

Additionally, work is currently underway to refine the strategy so as to leverage the major shift in market trends and conditions that emerged since the pandemic and ensure Software AG's maximal success in upcoming years. There are many opportunities associated with a refined strategy in the form of an update of the current strategic direction. Helix has already improved

Software AG's adaptation speed. And in light of the highly dynamic development of the IT sector—especially integration software—this must continue to be accelerated if the Company is to maintain its lead which is confirmed by outstanding analyst ratings.

Product distribution risks and opportunities

Sales efficiency and sales risks and opportunities

The complexity of Software AG's products together with the complexity of the requirements of its customers alike require a well-trained and highly specialized sales force and lead to relatively long sales cycles. Because sales expenses are the largest single item in Software AG's consolidated income statements, profitability targets can only be met if the sales organization is as efficient and effective as possible.

An ineffective sales organization can be an indication of an inadequate sales approach, inadequate capabilities, uncompetitive prices or products, or unscalable product solutions. A sales model has to increase efficiency and remove inefficiency. One approach is to drive sales of standard, repeatable product solutions. This can also shorten sales cycles. In this context, Software AG's land-and-expand sales strategy must be further refined and developed.

In addition, the sales organization must be more streamlined into one unit that generates new deals with annual recurring revenue and another unit that carries out efficient renewal of existing recurring customer contracts. If Software AG does not decisively optimize its sales efficiency and sales approach in key markets, its growth and profitability targets will be difficult to meet. Software AG's shift to the subscription model from the previous sales model based predominantly on perpetual licenses could mean that customers terminate agreements more quickly when products do not fully address their wishes. Higher average deal size and better scalability can improve sales efficiency. A sales focus on the expansion of relationships with strategic customers as well as signing new logos is essential. However, business with large customers increases the dependency of license revenue on a smaller number of large customer contracts though.

Insufficient average deal sizes closed by the Direct Sales organization with full administrative support from Legal and Finance and insufficient use of standard agreements and processes have a negative impact on sales efficiency and profitability. Some of the smaller country subsidiaries have too few technology consultants (Presales staff) and skills to provide customers with technical consulting on the entire Digital Business product portfolio. Not enough standard contracts are used—even for small-scale deals—due to the "customer-first" approach in place. The impact of COVID-19 and the macroeconomic environment caused customers to delay their purchasing behavior.

Software AG intends to continually increase sales efficiency and thereby further accelerate deal size growth in the Digital Business segment through the following measures:

- Accelerate the transition to recurring license models such as subscriptions, usage-based licenses, and SaaS in all product lines with better scalability and forecast accuracy
- Further develop the Customer Success organization to provide ongoing care and consulting to customers in areas such as the renewal and expansion of existing contracts
- Handling of customer contract renewals based on subscriptions and SaaS by specialized teams, while the Direct Sales organization concentrates on generating new recurring customer contracts
- Further reduce complexity of product offerings and pricing with simpler product bundles
- Further simplify administrative processes to increase sales efficiency

As in the previous year, these risks were rated with a green risk signal at the end of 2022.

Partnership risks and opportunities

Software AG's growth strategy is also anchored in the expansion of its partner ecosystem to broaden vertical and regional market reach. The partner ecosystem must be further expanded to generate additional growth in markets that have not yet been addressed.

Global systems integrators and consulting firms play a key role in the strategic transformation projects in Software AG's customer target groups. Their expertise and assessment of Software AG products have a significant impact on Software AG's sales success. For this reason, close collaboration with globally operating systems integrators and consulting firms is of strategic importance. Close collaboration with leading cloud providers like Amazon Web Services (AWS) and Microsoft

Azure is also essential as customers are increasingly moving their applications to the cloud and relying on the strategic support of cloud providers.

Sales channel conflicts between direct and indirect sales or inadequate remuneration and incentive structures for partners can be an obstacle to a successful partner business. Successful partner sales require the establishment of a partner-friendly culture in the organization. This will work if, for example, the right targets are set for Software AG Sales, the technology consultants (Presales), the Professional Services organization, as well as Sales leadership.

It should be noted that Software AG products are not yet sufficiently ready for business with original equipment manufacturers (OEMs). Therefore, too many adjustments still need to be made to products and specific product support provided when it comes to OEM partner contracts which has a negative impact on profitability in this area.

The implementation of a global partner strategy, standardized partner business processes, collaboration between direct and indirect sales as well as the necessary compensation structures with a focus on incremental rather than existing business remain a focal point. The following measures were introduced to grow the success of the partner business:

- Optimize the global partner management team with a focus on evolving strategy and expanding relationships with strategically key partners and with the ecosystem network in general
- Establish suitable incentives for collaboration between direct and indirect sales
- Simplify partner-related processes and systems on all levels
- Allocate a dedicated marketing budget to accelerate generation of new partner business
- OEM-enable products and introduce standard processes for certification of OEM solutions by R&D
- Sharpen focus on signing new customers

The risks associated with partnerships were rated at risk signal yellow at the end of 2022 (2021: green).

Personnel risks and opportunities

Employer appeal

Software AG's most valuable asset are its people along with their knowledge, personal skills, and enthusiasm for their work. In an increasingly competitive environment and employee market in which every organization is trying to attract the best talent for itself, one of Software AG's main challenges is to attract, foster, and retain talent. The Company must ensure that a sufficient number of appropriately qualified, highly motivated employees is available at all relevant locations at all times. Uncertainty about Software AG's future success could have a negative impact on its image as an employer both among prospective and existing talent. This can increase attrition risks. Attracting and fostering talent are therefore decisive factors and key to ensuring Software AG's business success.

Software AG stayed on course during the COVID-19 pandemic. However, other macroeconomic topics and an ever-changing work reality (hybrid work) require additional energy, patience, and a new mindset to overcome these emerging challenges. The Company's internal transformation is taking place at the same time as a global social and economic transformation that is also affecting every individual. Despite the changes of recent years, Software AG was able to steadily improve employee satisfaction.

Furthermore, the demographic trend in some countries and markets could result in a decline in growth potential due to a shortage of qualified young talent. Succession management and well organized knowledge transfer are key success factors in minimizing the impact of this risk.

The age structure in the A&N business line could lead to a loss in expertise. Software AG is taking the following measures to counter this risk:

- Measure, monitor, track, and assess internal and external key indicators such as external rating platforms, attrition rates, employee satisfaction, etc.
- Ongoing evaluation of market-oriented remuneration and target salaries based on global benchmarks
- Foster an education culture through comprehensive learning and growth programs, mentoring, courses, and workshops for employees and leaders
- Support leaders to deepen and strengthen their capabilities and competencies
- Globally optimize employee development reviews and establish options for personal and professional advancement

- Promote physical and mental health
- Improve employee engagement and satisfaction with annual employee surveys and apply improvement where weaknesses are identified
- Specific offerings to foster and educate high school and college students early in their development
- Strengthen Software AG's presence externally in the labor market and social media as well as promote the Software AG image as an attractive employer
- Improve talent acquisition by adapting the hiring process to reflect the changing talent market
- Continue activities for direct recruitment of new employees and training of existing staff

Software AG assumes that these measures provide a sound basis for ensuring its long-term success.

Due to the growing intensity of competition among employers for talent, personnel-related topics were rated with the yellow risk signal at the end of 2022 (2021: green).

Legal risks

Intellectual property

This strategic risk mainly consists of the two subcategories described below.

Infringement proceedings

Especially in the USA, a generous number of software patents are granted. This, along with the peculiarities of US procedural law, facilitates patent disputes. Aside from potential lawsuits from other tech companies, this situation is also exploited by non-practicing entities (sometimes referred to as "patent trolls"), which are often financed by hedge funds to file patent infringement proceedings against software companies in particular. This is also relevant to Software AG. Patent disputes in the USA entail the risk of high legal costs incurred in defending against claims, which are not reimbursed according to American procedural law. The risk associated with non-practicing entities has been mitigated in recent years due to a new legal ruling by US courts and legislation providing protection against non-practicing entities in some states.

Furthermore, a large number of well-known tech companies have joined forces to form the License-on-Transfer (LOT) Network. The LOT Network is a non-profit community established to combat the non-practicing entity business model. To strengthen its own position, Software AG joined the network in 2020. Members of the LOT Network grant each other licenses in the event that patents are transferred to non-practicing entities.

The last patent infringement proceedings brought against Software AG by a non-practicing entity ended in a settlement in the 2019 fiscal year. Since this case, which lasted many years, there have been no further attacks by non-practicing entities in recent years. Nevertheless, there is a risk of being sued by competitor tech companies for patent infringement. Software AG has an Intellectual Property (IP) Rights team to counter patent lawsuits. In addition to tasks associated with IP law protection, the team handles Software AG's own patent portfolio and coordinates its defense against patent infringement lawsuits. Having a patent portfolio is the best protection against claims from other market participants because it offers opportunities for cross-licensing agreements. There was room for improvement regarding Software AG's patenting activities in recent years. IP leadership therefore launched an initiative whereby workshops were held at all relevant R&D locations to examine the option of new patent registrations. In addition, Software AG's recently updated and highly attractive inventor remuneration system provides a heightened incentive for employees to develop patentable innovations and engage in the patenting process.

Software AG owns a significant number of patents, which can be used to protect its business and defend against patent infringement suits. There are however various inherent risks to dealing with inventions. For example, inventions may not be incorporated into products and thus published before having been registered with the patent office because they are otherwise no longer protected. Furthermore, patents can be weakened if the underlying technology is built into open-source software that is subject to a permissive free license.

To defend itself against patent infringement lawsuits, all relevant source code files and other technical as well as marketing documentation were and are stored centrally so that all required documents are available quickly in the event of a lawsuit. This documentation process is employed for newly acquired companies as well. All new products are evaluated for potential patent infringements before publication. R&D and Product Marketing employees receive training on the subject of inventions and patents.

In principle, there is also a risk of trademark infringement. Trademark research is conducted to carefully review new product and brand names against previously existing identical or similar trademarks that could be infringed upon.

Implemented measures and processes reduce this risk considerably for Software AG. It is currently unforeseeable to what extent future patent infringement suits will be fueled by the increasingly protectionist tendencies worldwide.

Protection of Software AG partners' IP rights

Because Software AG licenses third-party products, it is required to defend rights granted to customers such as rights of use for specific resources. Unauthorized undetected use by customers can result in liability risks relating to lost license fees owed to software distributors. To mitigate this risk, audit rights have been included in all customer contracts which entitle Software AG to monitor customers' use of products in accordance with contractual stipulations. All third-party software sales agreements are reviewed for unfavorable terms and modified as needed by a central department. In addition, Software AG continued developing and optimizing its procurement process.

Like last year, the risk associated with the protection of IP rights was rated at a green risk signal as of December 31, 2022.

Risks from cloud contracts

The overall buying behavior of enterprise customers in the software market has changed radically. Customers increasingly request term-based, self-installable software products and hosted cloud products. Unlimited self-installable software products are less and less in demand. The demand for subscription and SaaS offerings is therefore rising continuously. Software AG's Management Board therefore defined a "subscription-first" approach as part of the new strategy, whereby all Software AG products have been offered primarily as subscriptions since 2020. Software AG is also continuously expanding its cloud offering. Nearly all Software AG products are now available as cloud solutions. This satisfies the increasing customer demand for pay per use and subscription options and, regardless of the deployment model, provides access to the advantages of this form of consumption.

The risk associated with information security and data protection is significantly higher in the cloud business than in on-premises business because Software AG acts as a processor. This transfers the risk to Software AG as the cloud provider. This results in an increased legal risk associated with cloud agreements. To minimize this risk, an information security management system (ISMS) in accordance with ISO 27001 was implemented and externally certified.

The assessment of risks associated with cloud contracts is included in the two following risks regarding data protection and information security. A separate assessment therefore did not take place.

Data protection

As a provider of maintenance, cloud, and consulting services, Software AG works with personal customer data and thus acts as a processor. Software AG also processes personal data about its employees, customers, prospective customers, partners, and suppliers in the role of controller. The Company is legally required to treat this data in accordance with the applicable data protection laws and protect it against unauthorized access, alteration, or deletion. Software AG must ensure personal data is treated confidentially, but available at all times for the required application without loss of integrity. Due to the increasing number of cyberattacks, guaranteeing compliance with data protection is becoming more challenging. Software AG's order processing agreements with customers require compliance with data protection laws, particularly with the European Union's general data protection regulation (GDPR). At the same time, growing IT complexity increases the attack surface for cyberattacks. According to the GDPR, penalties of up to 4 percent of Software AG's consolidated annual revenue can be issued in the event of infringement of data protection laws. Furthermore, additional costs for external consultants may be incurred, process productivity may decline, and significant reputational losses detrimental to sales may result. Sizable investments are necessary on an ongoing basis to take these security measures and comply with regulations.

Software AG counteracts these risks by improving its data protection management system (DPMS) on an ongoing basis. This DPMS defines processes that help ensure data protection such as internal data protection policies and standardized processes that are constantly being adapted accordingly.

In addition, the following measures were taken to reduce the risk associated with data protection:

- Software AG's data processing agreements (DPA) with customers minimize the risks it assumes to the legally admissible extent
- Implementation of a data protection policy that is binding for the whole Group as well as binding corporate rules (BCRs) for international data transfer to ensure a uniform level of data protection throughout the Software AG Group (current project)
- The DPMS is monitored and optimized on an ongoing basis
- Mandatory data protection training for all employees to raise awareness for the requirements of data protection
- As a result of the malware attack in October 2020, Software AG acquired a great deal of experience in processing personal (including sensitive) data and drew the necessary security-related conclusions. With the help of investments and measures now concluded, Software AG significantly improved its level of data protection. However, 100 percent security cannot be guaranteed as attacks are getting ever more intelligent.

The Schrems II ruling (Judgment of the European Court of Justice on Transfers of Personal Data to Third-Party Countries) strengthens data protection for EU citizens. The ruling also creates compliance issues that can, however, be mitigated through the use of EU standard contractual clauses (SCCs). The ruling stipulates, among other things, that necessary data transfer to an "unsafe third country" can be legally safeguarded through the use of EU SCCs. Under certain circumstances, using an SCC can help provide the legal security necessary to transfer personal data to a data processor based in an unsafe third country. The main prerequisite for using an SCC is that a data processor can guarantee an equivalent level of data protection as that in the EU. To minimize the risk of unauthorized data processing in an unsafe third country, Software AG concludes SCCs with the relevant data processors. In addition, supplementary and technical security measures were taken, e.g. encryption, to ensure compliance with the rules associated with the Schrems II ruling.

The risks associated with data protection were rated at risk signal green at the end of 2022 (2021: yellow).

Information security

All data and IT service functions for internal purposes and customer services globally are subject to an upward threat potential curve because of the fact that malware attacks are getting increasingly smarter. Furthermore, government regulations on data protection and IT security are getting ever stricter. The growing complexity of IT increases the vulnerable attack surface of Software AG's sensitive data and IT systems to hackers and poses a constant threat to its tangible and intangible assets. This risk, however, is not specific to Software AG. It affects nearly every company worldwide.

To mitigate these risks, Software AG introduced and implemented the following measures:

- The SecureBiz program was introduced at the beginning of 2021. This program primarily comprises improvement of the following points:
  - Continuous tracking of the IT landscape for weak points as well as security monitoring
  - Information protection and management
  - Network redesign including network segmentation, real-time data flow, and irregularity monitoring
  - Hardened active directory and Azure active directory
  - Admin rights only issued upon request
  - End-device management
- An ISO 27001-certified information security management system (ISMS) is in place for cloud business customers
- Employee training on information security was introduced and will be expanded continuously
- To increase transparency of IT security, internal control mechanisms are monitored and optimized to reach a state-of-the-art level
- Management and monitoring of overall information security was separated from IT security operations
- Software AG's IT security strategy and the corresponding management program are aligned with the global corporate and IT strategies
- The IT Security department ensures the ongoing development of processes, workflows, and tools and monitors the extent to which they are correctly installed and employed so as to prevent potential malware attacks
- Risk evaluations are optimized and rolled out uniformly on all security-relevant IT systems

All these measures, however, cannot and will not provide a 100 percent guarantee of IT security. The systems have become too complex, and potential attackers too well trained and equipped, sometimes by foreign governments with extensive resources. Software AG therefore can and must do everything in its power to achieve the maximum level of security.

The risk associated with information security was given a yellow risk signal at the end of 2022 (2021: red).

Other legal risks

Regulatory, compliance, and litigation risks

Regulatory and political changes, such as embargoes, can influence Software AG's business operations in different national markets. That could have a negative impact on the Group's future business and financial performance. Uncertainties regarding regional legal systems could hinder or prevent the assertion of Software AG's rights (e.g. commercial property rights).

A multinational software company like the Software AG Group is subject to global risks associated with legal disputes and government and official processes. Software AG cannot rule out that litigation and proceedings will have negative effects on the earnings of the Company; as a rule, the Group's financial position can even be negatively affected when lawsuits are won, given the high cost of defense attorneys and other defense services needed to thwart accusations, for example in the United States. Despite detailed risk assessment and forward-looking risk provisions, there is a risk that the actual cost of litigation is higher than the assumed risk value.

For further information on specific legal disputes, please refer to Note [32] in the Notes to the Consolidated Financial Statements and Other Provisions in the Separate Annual Financial Statements of Software AG (Parent Company).

Financial operating risks

Exchange rate risks

Software AG is exposed to exchange rate risks through its global business activities. Software AG's sales organizations operate in the currency of the countries in which the sales are transacted. This can result in currency risks and opportunities for Group revenue. Further information on currency impact on revenue is provided in the Financial Performance of the Group section of the Economic Report.

Exchange Rate Fluctuation Impact on Group Revenue in 2022:

Currency fluctuation in 2022	Change in exchange rates volume-weighted 2022 vs. 2021	Impact on revenue in 2022 in € millions
US dollar 31.5% of revenue	12.0%	32.4
Pound sterling 6.4% of revenue	0.3%	0.2
Israeli shekel 6.3% of revenue	5.6%	3.2
Australian dollar 3.4% of revenue	3.9%	1.2
Brazilian real 3.1% of revenue	18.0%	4.5
Canadian dollar 2.8% of revenue	7.8%	1.9
South African rand 2.2% of revenue	1.8%	0.4
Other currencies 16.5% of revenue	6.6%	9.8
Currency effects on total revenue	**5.9%**	**53.6**

The sales-related expenses are in the same currency as the sales themselves, however. This natural hedging relationship is strengthened in the USA due to the fact that components of Software AG's R&D and global Marketing are based there. Software AG further utilizes derivative financial instruments for hedging. This mitigates the effects of exchange rate fluctuations on Group results. Furthermore, portions of the Company's liquid assets are held in the USA. Its hedging instruments are used to cover existing foreign currency receivables and payables and anticipated cash flows. All exchange rate risks are monitored centrally.

Risks from financial instruments

Liquidity and cash-flow risks concerning derivative financial instruments are eliminated by the fact that Software AG secures only existing balance sheet items or highly likely cash flows. Based on the financial instruments open on the balance sheet date, an increase in the market interest rate level by 100 basis points would have increased Group net income in 2022 by €1.0 million (2021: €2.9 million). Provided conditions such as revenue structure and balance sheet relationships remained constant and no further hedging transactions took place, this approximate correlation could be applied to future fiscal years as well. Under these conditions, a 10-percent decrease in the euro's value against the US dollar as of December 31, 2022, would have caused Group net income in 2022 to increase by €1.1 million (2021: €1.7 million). Constant monitoring of the relevant banks' creditworthiness helps Software AG minimize the risk of losing business partners with whom derivative financial instruments are concluded.

Other financial risks

Other financial risks include predominantly the risk of bad debt losses. No cluster risks exist due to Software AG's diversified markets and customer structure. Default risks in the long-term average are quite marginal as a result of the generally high level of creditworthiness on the part of its customers. To reduce the impact of these risks, Software AG uses an automated approval process for customer contracts, known as the Global Deal Desk, based on its own technology. To protect cash holdings, Software AG constantly monitors partner banks' creditworthiness and adjusts investment decisions accordingly.

GENERAL STATEMENT ON THE GROUP'S RISK SITUATION

While the assessment of individual risks has changed compared to the previous year, the Software AG Group's overall consolidated risk situation shows an essentially constant risk situation year-on-year.

The Management Board assumes that the risks are limited and manageable. No individual or consolidated risks can be identified that, due to the extent of their impact or their likelihood of occurring, are likely to jeopardize the going concern of the Company now or in the future.

SOFTWARE AG'S RATING

The necessity for an external rating did not arise because of Software AG's solid financial structure and employed financing instruments. There is currently no external rating of Software AG. Nevertheless, there are some facts that shed light on Software AG's external rating.

Based on the financial statements from December 31, 2021, as in previous years, Software AG was given central bank eligibility by the German Central Bank (Deutsche Bundesbank). This means that lending banks can use credit claims with Software AG as collateral for refinancing with the Deutsche Bundesbank.

Software AG's own banks were unified in their classification of its creditworthiness as investment-grade at the end of 2022.

Risk Summary

	Impact on EBIT in the next 3 years	Probability	Risk signal
Corporate strategy risks and opportunities			
Product innovation and portfolio	medium	likely	yellow
Growth in API Management, Integration, and Web Services	medium	unlikely	green
Development of Business Transformation	low	likely	green
Ongoing development of IoT & Analytics	medium	likely	yellow
Market risks and opportunities in the Adabas & Natural business	medium	likely	yellow
Acquisitions: pre-acquisition phase (selection)	medium	unlikely	green
Acquisitions: post-acquisition phase (integration)	low	likely	green
ESG	medium	likely	yellow
Product distribution risks and opportunities			
Sales efficiency and sales risks and opportunities	low	likely	green
Partnership risks and opportunities	medium	likely	yellow
Personnel risks and opportunities			
Employer appeal	low	highly likely	yellow
Legal risks			
Intellectual property (IP) right protection	low	unlikely	green
Data protection	low	likely	green
Information security	medium	likely	yellow

Takeover-Related Disclosures

Pursuant to sections 289a and 315a of the German Commercial Code (HGB) and explanatory report

COMPOSITION OF SUBSCRIBED CAPITAL AND LIMITATIONS AFFECTING VOTING RIGHTS OR THE TRANSFER OF SHARES

As of December 31, 2022, Software AG's share capital totaled €74,000 thousand and was divided into 74,000,000 registered shares. Each no-par value share arithmetically represents €1.00 of the Company's share capital. In accordance with the provisions of the German Stock Corporation Act (section 67, AktG), only those entered as such in the share register are deemed to be shareholders in relation to the Company. Shareholders can exercise their rights at the Annual Shareholders' Meeting when they exercise their voting rights in accordance with legal stipulations and the Company's Articles of Association. Each share entitles its holder to one vote. The exception to this are the treasury shares held by the Company, which do not confer any rights to the Company. The voting rights associated with the shares concerned are nullified by law in those cases to which section 136 of AktG applies.

CAPITAL INTEREST EXCEEDING 10 PERCENT OF VOTING RIGHTS

The Software AG Foundation, Darmstadt, Germany, holds approximately 31 percent of Software AG's outstanding shares. The foundation is a separate non-profit legal entity and is devoted worldwide to the fields of therapeutic pedagogy, social therapy, education, services to youth and senior citizens, the environment, and research. There are no other shareholders with an interest in Software AG's share capital exceeding 10 percent of voting rights.

PROVISIONS ON THE APPOINTMENT/ DISMISSAL OF MANAGEMENT BOARD MEMBERS AND AMENDMENTS TO THE ARTICLES OF ASSOCIATION

Management Board members are appointed and dismissed in accordance with section 84 et seqq. of AktG. The Management Board consists of multiple members in accordance with section 7(1) of the Articles of Association; the number of Management Board members is determined by the Supervisory Board. All amendments to the Articles of Association are to be adopted at the Annual Shareholders' Meeting by at least a three-fourths majority of the share capital represented at the time of the resolution in accordance with section 179 of AktG unless the Articles of Association stipulate otherwise. Section 19(1) of the Articles of Association stipulates that resolutions of the Annual Shareholders' Meeting can generally be adopted through a simple majority of votes cast; if aside from the majority of votes, a capital majority is required by law, resolutions can be adopted through a simple majority of votes cast and a simple majority of the share capital represented at the time of the resolution. Section 12(2) of the Articles of Association confers the power to make amendments relating to the wording only of the Articles of Association to the Supervisory Board. Furthermore, the Supervisory Board is authorized by way of Annual Shareholders' Meeting resolutions, to amend section 5 of the Articles of Association based on the respective utilization of authorized and conditional capital and after expiration of the respective authorization or utilization period.

THE MANAGEMENT BOARD'S POWERS TO ISSUE OR REPURCHASE SHARES

Pursuant to the resolution of the Annual Shareholders' Meeting on May 12, 2021, the Management Board is authorized, subject to the consent of the Supervisory Board, to issue bearer and/or registered warrant and/or convertible bonds or combinations of these instruments (bonds) up to a total value of €750,000,000 with or without a specified maturity date and to grant bond owners or holders the right to convert the bonds to new no-par value registered shares in the Company representing up to a proportional amount of the share capital of €14,800,000, which are secured by the corresponding conditional capital in section 5(3) of the Articles of Association. This authorization may be exercised until May 11, 2026.

Pursuant to a resolution from December 13, 2021, and with the consent of the Supervisory Board on the same date, the Management Board utilized its authorization to issue convertible bonds, excluding subscription rights, to the Silver Lake Group with a nominal value of €344.3 million. These bonds entitle the holders to convert them to a maximum of 7.4 million Software AG shares. The corresponding subscription agreement was signed on February 3, 2022, and the closing of the transaction was on February 15, 2022.

Pursuant to section 5(2) of the Articles of Association, the Management Board is authorized, subject to the consent of the Supervisory Board, to increase the Company's share capital on one or more occasions on or before May 11, 2026, up to a total of €14,800,000, by issuing new no-par value registered shares against cash contributions or contributions in kind (authorized capital). In doing so, the number of shares must increase in proportion to the share capital.

For more information on the authorized capital and conditional capital described above, please refer to section 5 of Software AG's Articles of Association.

Furthermore, in accordance with the resolution passed at the Annual Shareholders' Meeting on May 12, 2021, the Management Board is authorized to purchase treasury shares on or before May 11, 2026, representing a proportional amount of the share capital of up to 10 percent of the existing share capital at the time of the resolution. The treasury shares are to be purchased on the stock market or through a public purchase offer addressed to all shareholders of the Company or a public invitation to submit an offer to sell. The shares purchased, together with other treasury shares that the Company has already purchased and still holds or that are attributable to it in accordance with sections 71d and 71e of AktG, may not account for more than 10 percent of the respective share capital at any time.

The complete version of the described authorizations and of the Management Board's explanation can be found in the agenda for the Annual Shareholders' Meeting on May 12, 2021, at Annual Shareholders' Meeting on the corporate website, and Software AG's Articles of Association at Statutes.

For more information on conditional capital, authorized capital, and the purchase of treasury shares, please also refer to Note [27] in the Notes to the Consolidated Financial Statements and to the Notes to the Balance Sheet under Shareholders' Equity in the Notes to the Annual Financial Statements.

SIGNIFICANT AGREEMENTS CONTINGENT UPON A CHANGE OF CONTROL RESULTING FROM A TAKEOVER BID AND COMPENSATION AGREEMENTS WITH MEMBERS OF THE MANAGEMENT BOARD OR EMPLOYEES IN THE EVENT OF A TAKEOVER BID

The lenders of the syndicated credit line in the maximum amount of €300 million are entitled—provided they are not replaced—to decline any new withdrawals if one or more persons acting in concert (except Software AG Foundation, its members or companies controlled by them) obtain more than 50 percent of voting or dividend rights or the right to appoint more than half the members of the Supervisory Board. The relevant lenders are entitled to call any amounts already borrowed (plus interest accrued and any other amounts due) and terminate the credit facility.

With respect to loan agreements with the European Investment Bank in the original amount of €430 million, of which €326.7 million had been drawn as of December 31, 2022, the bank is entitled to terminate the unused portion of the loan if one or more persons acting in concert obtain more than 50 percent of voting or dividend rights, the right to appoint more than half the members of the Supervisory Board, or any other comparable controlling influence. Any amounts already borrowed (plus interest accrued and any other amounts due) can also be called prematurely and the credit facility terminated.

One Management Board contract stipulates that, if terminated without good cause within 12 months of a change of control, the Management Board member will receive a severance payment equal to 1.5 annual salaries based on the most recently agreed annual target remuneration, capped at the amount of target remuneration for the remaining term of the contract. In case of resignation by a member of the Management Board, the above mentioned policy is not applicable if the position of the Management Board member has only been altered marginally with the change of control.

In the event of a change of control, any stock appreciation rights granted by the Company under Management Incentive Plan 2019, must be paid out at fair value to the relevant plan participants within the term of the rights.

In the event of a change of control, the holders of the convertible bonds issued in February 2022 on the basis of the Management Board's resolution on December 13, 2021, and the approval of the Supervisory Board on the same date, are entitled to convert their bonds to Software AG shares or, alternatively, demand reimbursement plus interest (that which has accrued and is due by maturity).

Other takeover-related disclosures not mentioned in this section do not apply to Software AG in accordance with sections 289a, 315a of HGB.

Corporate Governance Statement

Software AG submitted its Corporate Governance Statement/Consolidated Corporate Governance Statement on February 23, 2023 and published it on its website.

This statement includes the Declaration of Compliance with the German Corporate Governance Code pursuant to section 161 of AktG, which was submitted separately and published on the corporate website on January 30, 2023.

Consolidated Financial Statements

Consolidated Income Statement

For fiscal years 2022 and 2021

in € thousands	Note	2022	2021
Licenses		314,497	240,504
Maintenance		405,264	399,363
SaaS		75,844	44,138
Product revenue		795,605	684,005
Services		162,568	149,834
Other		7	3
Total revenue	**[5]**	**958,180**	**833,842**
Cost of sales		-239,894	-188,827
Gross profit		**718,286**	**645,015**
Research and development expenses		-181,387	-151,180
Sales, marketing, and distribution expenses		-341,976	-280,208
General and administrative expenses		-94,343	-82,807
Other income	[6]	58,877	16,477
Other expenses	[7]	-81,333	-25,224
Other taxes	[10]	-2,483	-5,297
Operating income		**75,641**	**116,776**
Financing income	[8]	14,868	7,181
Financing expenses	[8]	-25,402	-6,164
Net financial income/expenses		**-10,534**	**1,017**
Earnings before income taxes		**65,107**	**117,793**
Income taxes	[9]	-45,860	-33,449
Net income		**19,247**	**84,344**
thereof attributable to shareholders of Software AG		18,984	83,862
thereof attributable to non-controlling interests		263	482
Earnings per share in € (basic)	[12]	0.26	1.13
Earnings per share in € (diluted)	[12]	0.26	1.13
Weighted average number of shares outstanding (basic)		73,979,889	73,979,889
Weighted average number of shares outstanding (diluted)		73,979,889	73,979,889

Statement of Comprehensive Income

For fiscal years 2022 and 2021

in € thousands	Note	2022	2021
Net income		**19,247**	**84,344**
Currency translation differences from foreign operations		30,750	83,647
Net gain/(loss) from cash flow hedges	[27]	26	912
Currency translation gain/loss from net investments in foreign operations		6,295	0
Items to be reclassified to the income statement if certain conditions are met		**37,071**	**84,559**
Net gain/(loss) from equity instruments designated to measurement at fair value through other comprehensive income	[29]	-679	-470
Net actuarial gain/loss from remeasurement of post-employment benefit obligations	[26]	41,444	13,885
Items not to be reclassified to the income statement		**40,765**	**13,415**
Gain/loss recognized in equity	**[27]**	**77,836**	**97,974**
Total comprehensive income		**97,083**	**182,318**
thereof attributable to shareholders of Software AG		96,820	181,836
thereof attributable to non-controlling interests		263	482

Consolidated Balance Sheet

ASSETS

in € thousands	Note	Dec. 31, 2022	Dec. 31, 2021
Current assets			
Cash and cash equivalents		427,105	585,844
Other financial assets	[13]	2,551	24,092
Trade receivables, contract assets, and other receivables	[14]	251,799	198,466
Other non-financial assets	[15]	51,987	39,487
Income tax receivables	[16]	36,505	27,029
		769,947	**874,918**
Non-current assets			
Intangible assets	[17]	221,702	87,466
Goodwill	[17]	1,381,828	986,136
Property, plant, and equipment	[18]	76,005	76,877
Investment property	[19]	5,635	6,241
Other financial assets	[13]	9,823	21,115
Trade receivables, contract assets, and other receivables	[14]	135,848	128,732
Other non-financial assets	[15]	52,812	9,113
Income tax receivables	[16]	15,748	14,225
Deferred tax receivables	[20]	9,057	16,567
		1,908,458	**1,346,472**
Total assets		**2,678,405**	**2,221,390**

EQUITY AND LIABILITIES

in € thousands	Note	Dec. 31, 2022	Dec. 31, 2021
Current liabilities			
Financial liabilities	[21]	31,888	84,866
Trade and other payables	[22]	57,350	53,548
Other non-financial liabilities	[23]	138,037	137,888
Other provisions	[24]	59,529	43,924
Income tax liabilities	[25]	30,673	34,980
Contract liabilities	[5]	137,168	135,675
		454,645	**490,881**
Non-current liabilities			
Financial liabilities	[21]	635,217	223,767
Trade and other payables	[22]	130	212
Other non-financial liabilities	[23]	866	1,564
Other provisions	[24]	5,504	12,124
Provisions for pensions and similar obligations	[26]	11,750	35,042
Income tax liabilities	[25]	911	1,629
Deferred tax liabilities	[20]	42,671	6,397
Contract liabilities	[5]	15,559	11,560
		712,608	**292,295**
Equity	**[27]**		
Subscribed capital		74,000	74,000
Capital reserves		55,737	22,580
Retained earnings		1,332,134	1,369,375
Other reserves		50,038	-27,798
Treasury shares		-757	-757
Attributable to shareholders of Software AG		**1,511,152**	**1,437,400**
Non-controlling interests		**–**	**814**
		1,511,152	**1,438,214**
Total equity and liabilities		**2,678,405**	**2,221,390**

Consolidated Statement of Cash Flows

For fiscal years 2022 and 2021

in € thousands	2022	2021
Net income	19,247	84,344
Income taxes	45,860	33,449
Net financial income/expenses	10,534	-1,017
Amortization/depreciation of non-current assets	83,222	40,165
Other noncash income/expenses	-12,094	544
Changes in receivables and other assets	-117,735	-29,064
Changes in payables and other liabilities	33,757	23,590
Income taxes paid	-39,604	-35,765
Interest paid	-19,695	-7,221
Interest received	14,907	7,210
Net cash flow from operating activities	**18,399**	**116,235**
Proceeds from the sale of property, plant, and equipment/intangible assets	3,055	2,127
Purchase of property, plant, and equipment/intangible assets	-13,465	-11,158
Proceeds from the sale of non-current financial assets	4,902	1,063
Purchase of non-current financial assets	-2,011	-3,904
Proceeds from the sale of current financial assets	23,268	8,698
Purchase of current financial assets	-2,381	-27,666
Proceeds from the sale of an affiliated entity	10,776	0
Proceeds/payments from disposals of assets held for sale	0	2,132
Payments for acquisitions, net	-537,317	0
Net cash flow from investing activities	**-513,173**	**-28,708**
Dividends paid	-56,699	-56,629
Proceeds/payments for current financial liabilities	-583	-7,496
Repayment of lease liabilities	-11,968	-12,974
New non-current financial liabilities	464,300	60,000
Repayment of non-current financial liabilities	-78,333	-3
Net cash flow from financing activities	**316,717**	**-17,102**
Change in cash and cash equivalents	-178,057	70,425
Change in cash and cash equivalents from currency translation	19,318	35,437
Net change in cash and cash equivalents	**-158,739**	**105,862**
Cash and cash equivalents at beginning of period	585,844	479,982
Cash and cash equivalents at end of period	**427,105**	**585,844**

Consolidated Statement of Changes in Equity

For fiscal years 2022 and 2021

in € thousands	Subscribed capital		Capital reserves	Retained earnings
	Common shares outstanding (no.)			
Equity as of Jan. 1, 2021	**73,979,889**	**74,000**	**22,580**	**1,341,738**
Total comprehensive income[1]				**83,862**
Transactions with shareholders				
Dividend payment				-56,225
Transactions between shareholders				
Equity as of Dec. 31, 2021	**73,979,889**	**74,000**	**22,580**	**1,369,375**
Equity as of Jan. 1, 2022	**73,979,889**	**74,000**	**22,580**	**1,369,375**
Total comprehensive income				**18,984**
Transactions with shareholders				
Dividend payment				-56,225
Issue of convertible bonds			33,157	
Change in scope of consolidated entities				
Transactions between shareholders				
Equity as of Dec. 31, 2022	**73,979,889**	**74,000**	**55,737**	**1,332,134**

[1] Total comprehensive income includes net income of €19,247 thousand (2021: €84,344 thousand) which was allocated in full to retained earnings.

Other reserves				Treasury shares	Attributable to shareholders of Software AG	Non-controlling interests	Total
Currency translation differences from foreign operations	Net gain/loss on remeasuring financial assets	Gain/loss from remeasurement of post-employment benefit obligations	Currency translation gain/loss from net investments in foreign operations				
-73,395	-8,340	-50,961	6,924	-757	1,311,789	736	1,312,525
83,647	442	13,885			181,836	482	182,318
					-56,225	-404	-56,629
10,252	-7,898	-37,076	6,924	-757	1,437,400	814	1,438,214
10,252	-7,898	-37,076	6,924	-757	1,437,400	814	1,438,214
30,750	-653	41,444	6,295		96,820	263	97,083
					-56,225	-474	-56,699
					33,157		33,157
						-603	-603
41,002	-8,551	4,368	13,219	-757	1,511,152	0	1,511,152

Notes to the Consolidated Financial Statements

General

[1] BASIS OF PRESENTATION

Software AG's Consolidated Financial Statements are prepared in accordance with the International Accounting Standards Board (IASB), International Financial Reporting Standards (IFRS) as applicable in the European Union (EU), and in accordance with the additional provisions required under German commercial law as set forth in section 315e(1) of the German Commercial Code (HGB). The IFRS and interpretations applicable as of December 31, 2022, were observed.

Software AG is a registered stock corporation under German law with registered offices in Darmstadt (Uhlandstraße 12, 64297 Darmstadt, Germany). It is listed in the commercial register of the Darmstadt District Court under number HRB 1562. It is the principal parent company of a Group that is globally active in the fields of software development, licensing and maintenance, as well as IT services.

Software AG's Management Board prepared the Consolidated Financial Statements on March 8, 2023. The Audit Committee of Software AG intends to discuss the Consolidated Financial Statements in its meeting scheduled for March 22, 2023; they should be approved by the Supervisory Board on the same date.

Unless otherwise stated, the Consolidated Financial Statements are expressed in thousands of euros; the functional currency of Software AG is the euro. The figures presented in the report were rounded according to customary business practice. In some cases, rounding could mean that values in this report do not add up to the exact sum given or percentages do not equal the values presented.

The separate financial statements of the companies of the consolidated Group were prepared on the date of the Consolidated Financial Statements.

The mandatory statements on the German Corporate Governance Code pursuant to section 161 of the German Stock Corporation Act (AktG) have been submitted and made available to shareholders on the corporate website.

[2] ACCOUNTING POLICIES

USE OF ESTIMATES

In the preparation of the Consolidated Financial Statements, estimates and assumptions are made for certain items that have an impact on the recognition and measurement of recognized assets, liabilities, income, expenses, and contingent liabilities. These estimates and assumptions are based on historical data and are reviewed on an ongoing basis. Actual amounts may differ from the estimates made. The primary areas of application for estimates and assumptions are revenue recognition, accounting of business combinations, subsequent measurement of goodwill and other intangible assets, accounting of share-based remuneration, assessment of legal risks, valuation of pension obligations, valuation of trade receivables, and accounting of income and deferred tax.

Society, politics, and business are currently facing complex macroeconomic challenges such as the rise in energy prices, the shortage of energy in general, the ongoing high rate of inflation, interest rate hikes, depreciation of the euro, geopolitical tensions, and the war in Ukraine. This is causing widespread uncertainty with regard to global economic development. Software AG is continuously addressing these challenges and accounted for them in the Consolidated Financial Statements, e.g., in determining the recoverability of goodwill and measuring provisions and financial instruments.

No significant adjustments to the carrying amounts of recognized assets and liabilities were made in 2022 in connection with the war in Ukraine. Risks associated with the geopolitical situation were given particular consideration through an asset and liability analysis as well as the recognition of impairments. Software AG does not have research locations in Ukraine or in Russia. Possible further sanctions as well as the exchange rates of the respective local currencies may negatively impact sales and service activities. The associated risks are monitored continuously.

PRINCIPLES OF CONSOLIDATION

The separate financial statements of the entities included in the Consolidated Financial Statements were prepared in accordance with uniform accounting policies pursuant to IFRS as of the date of the Consolidated Financial Statements (December 31, 2022). The initial consolidation method applied to business combinations was based on the relevant founding date in the case of companies founded by Software AG and the date of acquisition in the case of acquired companies.

Revenue, income and expenses, and receivables and payables arising between consolidated entities have been eliminated. Intra-Group earnings are eliminated where they have not arisen from services to third parties. Group equity and net income attributable to minority interests are reported separately from equity and net income attributable to the shareholders of the parent company.

BUSINESS COMBINATIONS

All business combinations are recognized according to the purchase method. For every transaction, Software AG decides whether it recognizes the non-controlling interest in the acquired company at fair value or based on the corresponding share of identifiable net assets.

CURRENCY TRANSLATION

Financial statements of foreign subsidiaries are translated in accordance with the functional currency concept using the modified closing rate as per IAS 21. Since the subsidiaries operate independently from an organizational, financial, and business standpoint, the respective local currency is usually identical with the functional currency.

Income and expenses are translated at the relevant monthly average rate, assets and liabilities are translated at the closing rate on the balance sheet date, and the respective equity of the subsidiaries is translated at historical rates into euros.

Currency translation differences arising from equity consolidation are offset against equity and reported in a separate column in the Consolidated Statement of Changes in Equity.

In the schedule of changes in property, plant, and equipment, the balances at the beginning and the end of the fiscal year are translated at the applicable closing rates, and other items are translated at average rates. Any differences arising from exchange rate fluctuations are reported as currency translation differences as a separate line item under cost and accumulated depreciation.

In the separate financial statements of the consolidated entities, foreign currency receivables and payables are translated at the closing rate. Exchange rate gains and losses not yet realized as of the balance sheet date are included in profit or loss for the period, except for translation differences arising from non-current, intra-Group monetary items that are part of a net investment in a foreign company. These differences are recognized directly in equity under other reserves.

Software AG considers Venezuela, Argentina, and Turkey as hyperinflationary economies as defined by IAS 29. This had no material impact on the Consolidated Financial Statements.

The exchange rates used for the translation of the most important currencies changed as follows compared to the previous year:

Closing Rate

€1	Dec. 31, 2022	Dec. 31, 2021	Change as %
US dollar	1.0666	1.1326	5.8
Brazilian real	5.6386	6.3101	10.6
Pound sterling	0.8869	0.8403	-5.5
Australian dollar	1.5693	1.5615	-0.5
Israeli shekel	3.7554	3.5159	-6.8
South African rand	18.0986	18.0625	-0.2
Canadian dollar	1.4440	1.4393	-0.3

Average Rate

€1	Dec. 31, 2022	Dec. 31, 2021	Change as %
US dollar	1.0539	1.1835	11.0
Brazilian real	5.4433	6.3812	14.7
Pound sterling	0.8526	0.8600	0.9
Australian dollar	1.5174	1.5747	3.6
Israeli shekel	3.5360	3.8242	7.5
South African rand	17.2094	17.4800	1.5
Canadian dollar	1.3703	1.4835	7.6

TOTAL REVENUE

The following accounting policies for recognition of revenue (in accordance with IFRS 15) apply:

CATEGORIES OF SALES REVENUE

Software AG sales revenue consists primarily of revenue from granting term or perpetual software licenses, revenue from Software as a Service (SaaS) offerings, maintenance revenue, and revenue from services. These categories of sales revenue also reflect the impact of economic factors on type, amount, date, and uncertainty of revenue and cash flows.

Conversion from perpetual to term software licenses (subscription resets) is possible under certain conditions. These conditions include the irrevocable surrender of perpetual software licenses, the acquisition of new software licenses, and complete transparency of the software license agreement's price structure. Consequently, upon effectiveness of this agreement, the perpetual rights of use are terminated and the associated maintenance agreement ends; a contract granting term-based rights of use together with the associated maintenance services (subscription) begins. The license and maintenance shares are separated in accordance with the approach described in Division of Transaction Price; and the license and maintenance revenues are recognized as described in Recognition of Sales Revenue.

IDENTIFICATION OF THE CONTRACT

A contract is an agreement between two or more parties that establishes enforceable rights and obligations and determines that enforceability is a question of law. Software AG enters written agreements only. Agreements must be signed by both parties within a reporting period to be able to recognize revenue in that period. Revenue resulting from an agreement signed at a later point in time is recognized in the period in which the agreement was signed.

Revenue from an agreement which grants the customer the right to terminate with no resulting materially disadvantageous payments, is only recognized in the period that is not subject to the termination right.

With respect to business with resellers, a contract exists only if the existence of an agreement between the reseller and an end user (end-user agreement) can be verified and all other criteria for revenue recognition are met.

IDENTIFICATION OF PERFORMANCE OBLIGATIONS

Software AG's contracts with customers often include various products and services. The products and services described in the last section, Categories of Sales Revenue, are usually to be treated as separate contractual performance obligations. The relevant portion of the contractual price is recognized separately. The determination as to whether a product or a service is treated as a separate contractual performance obligation nevertheless requires judgment to be exercised.

When customers purchase products or services, Software AG sometimes offers them options for buying additional products or services. Software AG exercises its own judgment when determining whether such options give the customer a substantive right that it would not have without signing this agreement. In making this determination, the Company considers whether the options entitle the customer to a discount that is greater than the discount provided with the relevant products or services sold with the option.

DETERMINATION OF TRANSACTION PRICE

Software AG also exercises judgment when determining the consideration it expects to receive in exchange for the transfer of products or services to a customer. This includes estimations as to whether and to what extent the customer is entitled to subsequent concessions or payments and whether the customer will pay the contractually agreed consideration as expected. In this exercise of judgment, primarily previous experiences with a specific or a comparable customer are considered. These estimates are reviewed every balance sheet date. Software AG's contracts generally do not contain variable considerations. There may, however, be individual cases when retrospective adjustments are made to the transaction price, which must be recognized as revenue corrections on the date they were made.

Software AG recognizes financing elements when the period of time between the transfer of purchased products or services to the customer and payment of these products or services by the customer is at least one year.

DIVISION OF TRANSACTION PRICE

The transaction price is generally divided between the individual contractual performance obligations based on the individual sales prices.

Reliable individual sales prices result when comparable services were sold to other customers at comparable prices, in particular when it comes to maintenance services.

Perpetual software licenses are often sold in combination with maintenance and service contracts. In this case, when an agreement involves multiple elements, revenue recognition is based on the individually identifiable performance obligations of the transaction. Because it is impossible to calculate reliable individual sale prices for software licenses, revenue is divided between the different revenue types using the residual method. Under the residual method, all determinable individual sale prices are deducted from the total transaction value, and the residual amount is distributed among the software licenses using list prices.

Term software licenses are often sold in combination with maintenance services (subscriptions). The Company exercises its own judgment in dividing the transaction price between performance obligations. Valuation of the maintenance portion is based on the valuation of maintenance services sold together with perpetual software licenses. The average term of these subscription agreements is currently three years. If term software licenses are sold in combination with services, the transaction price to be allocated to the term software licenses is determined according to the residual method, i.e. the price of the individual services is deducted from the total contract value.

RECOGNITION OF SALES REVENUE

Software AG accounts for revenue from SaaS based on time elapsed during the period in which the relevant services are rendered.

Software AG recognizes revenue for these on-premises licenses as of the date on which the customer receives access to and thus control over the software. When deciding whether software offerings grant customers the right to use Software AG's intellectual property and not the right to access its intellectual property, the usefulness of its software for customers—without subsequent updates—is considered.

Maintenance revenue is recognized proportionately over the term of the maintenance contract period.

Revenue resulting from services invoiced on the basis of hours performed is recognized according to services rendered by a Software AG entity. Revenues and expenses from fixed-price service contracts are recognized in accordance with the percentage-of-completion (PoC) method if Software AG's service generates an asset that does not provide Software AG with any alternative options for use and Software AG is legally entitled to payment for services already rendered. Should Software AG's service from a fixed-price contract generate or improve an asset and should the customer have control over the asset, the PoC method is also used for revenue recognition. The percentage of completion of a contract is calculated on the basis of the percentage of total estimated contract costs incurred for work performed as of the balance sheet date. Some of the costs for making this calculation are estimated using the expected number of consulting hours/consulting days.

Software AG's contracts generally do not contain withdrawal, reimbursement, or other similar obligations.

INCREMENTAL COSTS WHEN ACQUIRING NEW ORDERS

The assets that Software AG capitalizes as costs associated with acquiring a new customer order consist primarily of sales commissions. The assets are amortized over the expected contract term using the straight-line method. The amortization period is three years. The amortization of capitalized costs for the acquisition of new orders is included in sales, marketing, and distribution expenses.

Software AG recognizes incremental costs for acquiring new orders as expenses as of the date on which they are incurred when the amortization period is not assumed to be longer than one year.

COST OF SALES

The cost of sales comprises primarily personnel expenses, amortization of acquired intangible assets, and costs for services from third-party hosting providers.

RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses are recognized in the income statement as incurred.

New products are not technologically realizable until shortly prior to being ready for market launch. In the phase leading up to technological feasibility, research and development processes are closely linked. Therefore, the capitalization criteria for internally generated intangible assets are not considered to be met and expenses are recognized as research and development expenses when incurred.

SALES, MARKETING, AND DISTRIBUTION EXPENSES

Sales, marketing, and distribution expenses include costs for personnel, materials, write-downs allocated to the sales cost center, and marketing and advertising costs.

GENERAL AND ADMINISTRATIVE EXPENSES

General and administrative expenses include costs for personnel, materials, and write-downs allocated to the administration cost center.

GOVERNMENT GRANTS

Government grants are not recognized until there is reasonable assurance that the conditions attached to them will be complied with and that the grant will be received by Software AG. This is normally the case upon receipt of payment. Government grants are reported under other income.

If loans from the government are granted at an interest rate below the market rate, the interest-rate advantage is valued as the difference between the original carrying amount of the loan, calculated in accordance with IFRS 9, and the payments received. The interest-rate advantage is reported under other income, as soon as all conditions for receiving government grants have been met.

BORROWING COSTS

Borrowing costs that are directly attributable to the acquisition, construction, or production of a qualifying asset are capitalized as part of the cost of the asset. Other borrowing costs are recognized as an expense for the period in which they were incurred. No borrowing costs were capitalized in fiscal 2022 or 2021.

SHARE-BASED COMPENSATION

In accordance with IFRS 2, share-based payment transactions are generally divided into cash-settled and equity-settled transactions. Both types of payment transactions are measured at their fair value as of the grant date. The value is then recognized over the vesting period as remuneration expenses. Rights granted under cash-settled share-based payment transactions are remeasured at fair value on each reporting date until settlement. Fair values of the respective awards are calculated based on an option price model that factors in model-influencing option price parameters.

NON-DERIVATIVE FINANCIAL ASSETS

Software AG recognizes non-derivative financial assets as of the date it acquires the contractual right to receive cash or other financial assets from another entity. Standard purchases and sales are measured at fair value as of the value date.

Subsequent measurement is carried out based on the following categories of financial assets:

a) amortized cost (AC)
b) fair value through profit or loss (FVPL)
c) fair value through other comprehensive income (FVOCI)

Software AG classified its balance of equity securities at fair value through other comprehensive income. Software AG generally uses the option that allows it to classify each new equity security individually as fair value through other comprehensive income or fair value through profit or loss.

TRADE RECEIVABLES AND CONTRACT ASSETS

A contract asset is to be recognized if revenue has been recognized as a result of the fulfillment of a contractual performance obligation before the customer has made a payment or before the conditions for invoicing and thus for recognizing a receivable are present.

Trade receivables are classified based on the business model (hold-to-collect versus hold-to-sell). Receivables which are not intended for sale are measured at amortized cost. In general, receivables categorized as hold to collect and sell are recognized at fair value through other comprehensive income. However, if the deviations are immaterial, receivables categorized as hold to collect and sell can be also measured at amortized cost.

Software AG applies a simplified impairment model based on an impairment matrix. This impairment matrix is based primarily on historical data on credit losses and current data on receivables overdue.

Furthermore, outstanding receivables are monitored on an ongoing basis at local and central levels to determine if the relevant receivables show any objective indications of jeopardized creditworthiness. If, using this approach, Software AG arrives at the assumption that realization of a receivable is improbable, the receivables above the values in the impairment matrix are written down in part or in whole.

DERIVATIVE FINANCIAL INSTRUMENTS

If the derivative financial instruments are financial assets or financial liabilities in accordance with IAS 32, they are recognized at fair value. Instruments for which hedge accounting is not applied are classified as fair value through profit or loss. Changes in the fair value of the instruments are recognized directly in profit or loss.

If the criteria for hedge accounting in accordance with IFRS 9 are met, the derivative financial instrument is designated as a hedging instrument and accounted for in accordance with the hedge accounting provisions of IFRS 9.

Accordingly, in the case of cash flow hedges, the effective portion of changes in the fair value of derivatives is recognized directly in equity. The ineffective portion is recognized directly in profit or loss. Cumulative amounts previously recognized in equity are reclassified to the income statement for the fiscal years in which the hedged item affects profit or loss.

The Company did not recognize any fair value hedges.

DERECOGNITION OF FINANCIAL ASSETS

A financial asset (including trade receivables) is derecognized if any of the following criteria is met:

- The contractual rights to receive cash flows from the financial asset have expired.
- Software AG has transferred its contractual rights to receive cash flows from the financial asset to a third party or has assumed a contractual obligation to pay the cash flows immediately to a third party in connection with a "pass-through arrangement." Here, essentially all opportunities and risks related to ownership of the financial asset or the power of control over the asset must be transferred.

If Software AG transfers its contractual rights to receiving cash flows from the asset or enters a pass-through arrangement, Software AG evaluates if and to what extent it retains the opportunities and risks related to ownership. As part of the transfer or sale of trade receivables, the assessment of the related opportunities and risks primarily focuses on the credit risk associated with the receivables. If Software AG does not fully transfer or retain the opportunities and risks associated with ownership of this asset, Software AG continues to recognize the transferred asset according to the scope of its continuing involvement. In this case, Software AG also recognizes an associated liability. The transferred asset and the associated liability are recognized in such a way that accounts for the rights and obligations retained by Software AG. There were no agreements that led to Software AG's continuing involvement as of December 31, 2022.

NON-DERIVATIVE FINANCIAL LIABILITIES

In accordance with IFRS 9, Software AG classifies non-derivative financial liabilities at amortized cost or at fair value through profit or loss.

Subsequent measurement of financial liabilities classified at amortized cost is carried out using the effective interest method.

Financial liabilities are derecognized when the contractual obligation has been settled, canceled, or has expired.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash on hand, bank balances, and term deposits with maturities of up to three months as well as short-term, highly liquid securities classified as current assets that are readily convertible to known amounts of cash and are only subject to negligible risk of changes in value.

INTANGIBLE ASSETS

Intangible assets for which a useful life can be established are measured at cost less any accumulated amortization and impairment losses. The amortization period and method of amortization for key intangible assets are as follows:

	Amortization period in years	Method of amortization
Acquired software	5 to 12,5	straight line
Acquired customer base	5 to 17	straight line
Acquired brand name	10	straight line

Intangible assets with an indefinite useful life are measured at cost less any accumulated impairment losses. Intangible assets with an indefinite useful life are tested for impairment at least once per year. Or, as soon as there is any indication that goodwill might be impaired, an impairment test is carried out.

GOODWILL

Goodwill resulting from a business combination is recognized as an asset as of the acquisition date. Goodwill is not amortized. Instead, it is tested for impairment at least once per year (as of December 31) and written down to its recoverable amount in case of impairment. Or, as soon as there is any indication that goodwill might be impaired, an impairment test is carried out. Any impairment losses are reported directly in the income statement and cannot be recovered in the following period.

PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment are carried at cost less any accumulated depreciation. When items of property, plant, and equipment are sold or scrapped, the corresponding cost and any accumulated depreciation are derecognized, and any gains or losses from disposal are recognized in the consolidated income statement.

The cost of items of property, plant, and equipment consists of the purchase price, including any import duties and non-refundable purchase taxes, and any directly attributable costs required to prepare the asset for operation in its intended use. Any subsequent expenditure, such as service or maintenance charges arising once the asset has been put into operation, is recognized as an expense in the period in which it is incurred. Subsequent expenditures relating to an item of property, plant, and equipment are only capitalized if the expenditure improves the condition of the asset beyond its originally assessed standard of performance.

Items of property, plant, and equipment are generally depreciated using the straight-line method in accordance with their useful economic lives.

	in years
Buildings	25 to 50
Improvements to buildings/leasehold	5 to 15
Operating and office equipment	3 to 13
Computer hardware and accessories	1 to 7

Right-of-use assets are written down either over the term of useful economic life or the term of the lease—whichever is shorter. The terms of useful economic life and methods of depreciation are reviewed on a regular basis to ensure that they are in accordance with the expected pattern of economic benefits of the asset in question.

Assets under construction are recognized at cost. Depreciation on these items begins only after they have been put into operation.

IMPAIRMENT OF INTANGIBLE ASSETS AND PROPERTY, PLANT, AND EQUIPMENT

As soon as there is any indication that an intangible asset with a finite useful life or an item of property, plant, and equipment might be impaired, an impairment test is carried out and, if an impairment loss is ascertained, the carrying amount of the asset is written down to its lower recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell or its value in use. The value in use is the present value of estimated future cash flows expected to arise from the continued use of the asset and from its disposal at the end of its useful life. Impairment losses are reversed provided the reasons for a previously scheduled impairment no longer exist. Impairment losses are reported under costs of the relevant functional area or under other expenses.

INVESTMENT PROPERTY

Property is recognized under investment property when it is for the purpose of generating rent income and/or value appreciation. Like property, plant, and equipment, investment property is measured in accordance with the cost model: at cost or cost of sales, less depreciation and, if relevant, the necessary impairments. The owned investment property is generally depreciated—like other property, plant, and equipment—on a straight-line basis over 25 to 50 years.

LEASES

Leases are agreements whereby the lessor transfers the right to use an identified asset to the lessee for a defined period of time and in exchange for payment of a fee.

Software AG as lessee recognizes right-of-use assets for leased objects and liabilities for the assumed payment obligations in the amount of the present value of future lease payments.

As of the beginning of use, Software AG recognizes all leases as right-of-use assets and lease liabilities in the balance sheet in the amount of the present value of the future lease payments.

Lease payments are all fixed payments less future incentive payments by the lessor.

The following additional types of payments are recognized:

- variable payments that are coupled to a rate or index
- expected payments from residual value guarantees
- payments to exercise, secure, buy, or terminate options
- contractual penalty payments for termination of a lease if the assumed lease term provides for the exercise of a termination option

The series of payments is discounted at an incremental borrowing rate appropriate to the lease, since the implicit interest rate of the lease is not usually known.

When determining lease length, consideration is given to any facts and circumstances that offer an economic incentive to exercising existing options. The assumed term thus includes periods covered by extension options if sufficient certainty exists that the option will be exercised. A change to the term is considered if the sufficient certainty of exercise or non-exercise of an existing option changes.

DEFERRED TAXES

Deferred tax assets and liabilities are recognized for temporary differences between the carrying amounts in the tax base and the carrying amounts in the Consolidated Balance Sheet. Deferred tax assets also include claims for tax reductions resulting from the anticipated use of tax loss carryforwards in subsequent years, the realization of which is deemed probable.

Deferred taxes are calculated on the basis of tax rates anticipated to apply in the relevant countries in accordance with the legal situation prevailing at the time of realization (reversal of tax deferrals).

Deferred tax assets and liabilities are not discounted. The carrying amounts of the recognized assets and liabilities are regularly examined and adjusted if necessary.

OTHER PROVISIONS

Other provisions are reported when the Company has a current legal or constructive obligation towards a third party due to a past event that is likely to result in a future outflow of resources and for which the amount of the obligation can be reliably estimated. Estimates are regularly reviewed and adjusted.

If the effect of discounting is significant, the provision is recognized in the amount of the present value of the expected future cash flows.

PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

The present value of pension obligations for defined benefit plans and the associated expenses are determined using actuarial principles in accordance with the projected unit credit method set out in IAS 19 (revised in 2011, IAS 19R). This approach takes into account anticipated future increases in pensions and salaries in addition to the pensions known as of the balance sheet date.

The pension provisions are reported at the full present value of the defined obligation, less the fair value of the reinsurance cover taken out for life insurance policies—provided they are pledged and thus protected from access by other creditors—or less the fair value of the plan assets accumulated to cover pension entitlements. Net assets to be recognized are reported separately as pension assets under non-financial assets. The interest from the interest cost on the claims is reported in net financial income/expenses. The result of the recalculated net obligation is recognized as other comprehensive income in the Statement of Comprehensive Income. It is comprised of actuarial gains and losses, the return on plan assets, and changes in the effects of the asset cap less amounts previously recognized as net interest.

Payments for defined contribution pension plans are recognized as expenses in profit or loss for the period provided the employee has met the stated performance target.

CONTRACT LIABILITIES

Contract liabilities consist of advance payments received and due from customers for services to be rendered in future periods, particularly in connection with maintenance and SaaS agreements. The reversal in profit or loss takes place in the period in which the service is rendered.

TREASURY SHARES

The amount paid for treasury shares, including directly attributable costs, is deducted from shareholders' equity. Treasury shares are reported as a separate item in the equity statement.

COMPOUND FINANCIAL INSTRUMENTS

Compound financial instruments relate to convertible bonds denominated in euros that can be converted to new no-par value registered Software AG shares by the holder at a fixed price. They are divided into a debt component (financial liability) and an equity component (capital reserves).

The debt component is measured when issued at the fair value of an otherwise comparable financial liability without conversion rights. Subsequent measurement is carried out using the effective interest method. The resulting interest expense is recognized in net financial income/expenses. When converted upon maturity, the debt component is reclassified to equity.

The value of the equity component is the difference between the fair value of the total compound financial instrument and the debt component. Subsequent measurement is not necessary.

Directly attributable transaction costs are divided proportionately between the two components. If they are attributable to the debt component, they are factored into the effective interest method. The portion attributable to the equity component is deducted from equity.

NEW ACCOUNTING RULES TO BE APPLIED STARTING IN THE FISCAL YEAR

Software AG applied the amendments to IFRS 3, IAS 16, and IAS 37 as well as the amendments from the IASB's Annual Improvement Project 2018—2022 for the first time as of January 1, 2022. None of these changes led to a significant impact on the Consolidated Financial Statements.

PUBLISHED BUT NOT YET APPLICABLE ACCOUNTING RULES

The IASB has published various standards, interpretations, and amendments to standards that are not yet required to be applied and with regard to which Software AG has not opted for early application to the Consolidated Financial Statements for the year ended December 31, 2022. However, Software AG does not expect these future changes to have a significant impact on its Consolidated Financial Statements.

[3] SCOPE OF CONSOLIDATION AND INVESTMENTS

CHANGES IN THE SCOPE OF CONSOLIDATION

The scope of consolidation changed in fiscal years 2022 and 2021 as follows:

	Germany	Foreign	Total
Dec. 31, 2020	**10**	**65**	**75**
Additions	0	0	0
Disposals (including mergers)	-1	-1	-2
Dec. 31, 2021	**9**	**64**	**73**
Additions	0	4	4
Disposals (including mergers)	-1	-4	-5
Dec. 31, 2022	**8**	**64**	**72**

The disposals in 2022 resulted from the merger of a company in the USA, the closure of three companies, and the sale of a shareholding in FACT Informationssysteme und Consulting AG, Neuss, Germany (FACT). The additions resulted from the purchase of three StreamSets companies (refer to Business Combinations) and one newly established company in Egypt.

The Consolidated Financial Statements include Software AG and all of the entities it controls. Control exists when Software AG can exercise power of control over the entity, is impacted by fluctuating returns on its share in the entity, and can influence the amount of the returns.

The following affiliated entities were part of the Group of Software AG (parent company) during the fiscal year:

a) Domestic entities	Ownership interest as %	Equity[1] Dec. 31, 2022 in € thousands	Earnings[1] 2022 in € thousands
SAG Deutschland GmbH, Darmstadt, Germany[2]	100	65,923	-2,034
Cumulocity GmbH, Düsseldorf, Germany[2]	100	9,940	92
FACT Unternehmensberatung GmbH, Darmstadt, Germany	100	3,752	12,968
SAG Consulting Services GmbH, Darmstadt, Germany[2]	100	1,846	499
SAG Cloud GmbH, Darmstadt, Germany	100	1,039	537
itCampus Software- und Systemhaus GmbH, Leipzig, Germany	100	971	143
SAG LVG mbh, Darmstadt, Germany[2]	100	959	0
FACT Informationssysteme und Consulting AG, Neuss, Germany (sold as of September 14, 2022)	55	0	0

[1] The figures specified are based on unconsolidated IFRS figures. Equity is translated into euros at the closing rate and earnings at the average exchange rate for the year.
[2] A profit transfer agreement exists for these companies; the earnings shown related to IFRS earnings after profit transfer.

b) Foreign entities	Ownership interest as %	Equity[1] Dec. 31, 2022 in € thousands	Earnings[1] 2022 in € thousands
Software AG USA, Inc., Reston, VA, USA	100	727,165	76,824
Software AG, Inc., Reston, VA, USA	100	426,640	107,589
Software AG (UK) Limited, Derby, United Kingdom	100	72,833	20,462
Software AG ESPAÑA, S.A. Unipersonal, Tres Cantos, Madrid, Spain	100	69,187	5,488
S.P.L. Software Ltd, OR-Yehuda, Israel	100	66,692	10,885
Software AG Australia Pty. Ltd., North Sydney, Australia	100	58,466	3,788
Software AG Government Solutions, Inc., Herndon, VA, USA	100	35,800	7,259
Software A.G. (Israel) Ltd., OR-Yehuda, Israel	100	30,016	4,383
Software AG France S.A.S., Paris La Défense Cedex, France	100	29,056	1,961
Software AG Bangalore Technologies Private Ltd., Devarabisanahalli Bangalore, India	100	25,567	6,591
Software AG (Canada) Inc., Kitchener, Ontario, Canada	100	22,945	10,074
Software AG South Africa (Pty) Ltd, Magaliessig Sandton, South Africa	100	18,010	4,020
Software AG Nederland B.V., Den Haag, Netherlands	100	14,641	54
Software AG Brasil Informática e Serviços Ltda, São Paulo, SP, Brazil	100	13,657	2,833
Software GmbH Österreich, Vienna, Austria	100	10,912	3,662
Software AG (Singapore) Pte LTD, Singapore	100	9,866	1,056
Software AG Distribution LLC, Reston, VA, USA	100	8,629	51,282
Software A.G. Argentina S.R.L., Buenos Aires, Argentina	100	8,411	884
Software AG Belgium S.A., Watermael-Boitsfort, Belgium	100	8,394	882
SAG Software Systems AG, Zurich, Switzerland	100	8,200	3,328
Software AG Denmark A/S, Hvidovre, Denmark	100	6,632	137
Software AG Polska Sp. z o.o., Warsaw, Poland	100	4,505	1,301
PT Software AG Indonesia Operations, Jakarta, Indonesia	100	3,910	1,401
Software AG (India) Sales Private Limited, Bangalore, Karnataka, India	100	3,682	-202
Software AG, S.A. de C.V. (Mexico), Distrito Federal, Mexico	100	3,658	1,123
Software AG Development Center Bulgaria EOOD, Sofia, Bulgaria	100	3,607	1,518
Software AG Chennai Development Center India Pvt. Ltd, Chennai, India	100	3,451	589
Software AG (Gulf) W.L.L., Manama, Bahrain	100	2,818	-1,740
Software AG Operations Malaysia Sdn Bhd., Selangor, Malaysia	100	2,617	100
Software AG International FZ-LLC, Dubai, United Arab Emirates	100	2,201	-2,591
SGML Technologies Limited, Derby, United Kingdom	100 inactive	1,984	0
Software AG for Information Technology LLC, Riad, Saudi Arabia (formerly: Alfabet Saudi Arabia LLC)	100	1,982	1,715
Software AG Finland Oy, Helsinki, Finland	100	1,969	177
Software AG Sweden AB, Kista, Sweden	100	1,863	403

[1] The figures specified are based on unconsolidated IFRS figures. Equity is translated into euros at the closing rate and earnings at the average exchange rate for the year.

b) Foreign entities	Ownership interest as %	Equity[1] Dec. 31, 2022 in € thousands	Earnings[1] 2022 in € thousands
Software AG Bilgi Sistemleri Ticaret A.S., Istanbul, Turkey	100	1,764	-233
Software A.G. (Portugal) Alta Tecnologia Informática, Ltd., Lisbon, Portugal	100	1,723	302
StreamSets Technologies Iberica, S.L.U., Barcelona, Spain (acquired on April 18, 2022)	100	1,721	727
Limited Liability Company Software AG (RUS), Moscow, Russia	100	1,640	-823
Software AG Korea, Ltd., Seoul, South Korea	100	1,613	130
Software AG De Puerto Rico, Inc., San Juan, Puerto Rico	100	1,578	250
SAG Software AG Luxembourg S.A., Luxembourg, Luxembourg	100	1,191	166
Software AG (Philippines), Inc., Makati City, Philippines	100	992	82
Software AG Development Centre Slovakia s.r.o., Košice, Slovakia	100	697	116
Software AG Italia S.p.A, Milan, Italy	100	565	-892
Operadora JackBe, S. de R.L. de C.V., Mexico City, Mexico	100	510	-2
SAG SALES CENTRE IRELAND LIMITED, Dublin, Ireland	100	504	29
Software AG Ltd. Japan, Minato-ku, Tokyo, Japan	100	445	-1,683
StreamSets UK Limited, Derby, England (acquired on April 18, 2022)	100	388	114
Software AG Kochi Pvt. Ltd., Bangalore, Karnataka, India	100	274	7
Terracotta Software India Pvt. Ltd., Bangalore, Karnataka, India	100 inactive	125	3
IDS Scheer Sistemas de Processamento de Dados, São Paulo, Brazil (in liquidation)	100	37	-2
Software AG (India) Private Limited, Bangalore, India	100	19	6
Software AG Sydney PTY LTD, North Sydney, Australia	100 inactive	0	0
TrendMiner Inc., Houston, Texas, USA (liquidated as of January 21, 2022)	100 inactive	0	0
Software AG Nordic A/S, Oslo, Norway (liquidated as of January 14, 2022)	100 inactive	0	0
PCB Systems Limited, Derby, United Kingdom	100 inactive	0	0
Software AG de Costa Rica, S.A., San José, Costa Rica (liquidated as of September 29, 2022)	100	0	0
A. Zancani & Asociados, C.A., Chacao Caracas, Venezuela	100 inactive	0	0
SAG Egypt for Information Technology, Cairo, Egypt (founded on December 25, 2022)	100	0	0
Software AG CLOUD APJ PTY LTD, North Sydney, Australia (liquidated as of December 18, 2022)	100	0	0
Software AG Cloud Americas Inc., Wilmington (New Castle), USA (merged with Software AG USA Inc. as of June 30, 2022)	100	0	0
Software AG Factoria S.A., Santiago de Chile, Chile	100	-3	0
Software AG Venezuela, C.A., Caracas, Venezuela	100	-3	-4
Software AG De Panamá, S.A., Corregimiento de Pueblo nuevo, Panama	100	-843	-25
Software AG (Hong Kong) Limited, Hong Kong, China	100	-4,973	-728
Software AG China Ltd., Shanghai, China	100	-9,696	-2,229
TrendMiner N.V., Hasselt, Belgium	100	-13,903	-6,366
Software AG Australia (Holdings) Pty. Ltd., North Sydney, Australia	100	-21,343	8,374
StreamSets, Inc., Wilmington, USA (acquired on April 18, 2022)	100	-39,741	-47,444

[1] The figures specified are based on unconsolidated IFRS figures. Equity is translated into euros at the closing rate and earnings at the average exchange rate for the year.

BUSINESS COMBINATIONS

Acquisition of StreamSets

On April 18, 2022, Software AG acquired 100 percent of the shares in StreamSets, Inc. (StreamSets), a provider of business-to-business software solutions for data integration, to expand the existing product portfolio especially in hybrid integration. StreamSets' operating results as well as assets and liabilities are reflected in Software AG's Consolidated Financial Statements beginning on that date.

The following table shows the purchase price allocation in connection with the acquisition of StreamSets as of the acquisition date:

in € thousands	2022
Consideration transferred in cash	**553,532**
Cash and cash equivalents	16,215
Intangible assets	163,675
Deferred tax receivables	24,536
Other identifiable assets[1]	6,959
Total identifiable assets	**211,385**
Contract liabilities	8,046
Deferred tax liabilities	45,936
Other identifiable liabilities	3,431
Total liabilities assumed	**57,413**
Net assets	**153,972**
= Goodwill	**399,560**

[1] Including acquired receivables at an estimated fair value of €3,827 thousand (consistent with gross contractual amounts).

Goodwill arising from the StreamSets acquisition is not deductible for tax purposes and consists largely of the acquired workforce's know-how and technical skills as well as the expected synergies, e.g. from the realization of cross-selling opportunities, the development and commercialization of combined software products, and economies of scale.

Software AG allocated goodwill arising from the acquisition of StreamSets to the Digital Business segment. For further information on Software AG's segments, please refer to Note [4].

Financial impact of the StreamSets acquisition on the Consolidated Financial Statements

The revenue and earnings contribution for StreamSets (including subsequent accounting of purchase price allocation effects and tax-related effects) recognized in the Consolidated Income Statement for the reporting period since the acquisition date are as follows:

in € thousands	2022 as reported	Of which StreamSets
Revenue	958,180	27,378
Net Income	19,247	-54,025

Had StreamSets been consolidated as of January 1, 2022, Software AG's estimated revenue for the reporting period would have been €964,378 thousand and estimated net income would have been €1,895 thousand. These amounts were calculated after applying Software AG's accounting policies and adjusting StreamSets' earnings to reflect significant effects from, for example:

- Additional write-downs that would have been charged assuming the fair value adjustment to intangible assets had been applied from January 1, 2022
- Cumulative effects of fair value adjustments on contract liabilities
- The borrowing costs on the funding levels and debt position of Software AG after the business combination
- Employee benefits
- Transaction costs incurred as part of the acquisition
- Related tax effects

These figures were prepared for comparative purposes only. The figures for revenue and net income are not necessarily indicative of the results of operations that would have actually occurred had the acquisition been in effect at the beginning of the respective period or of future results.

SALE OF AN AFFILIATED COMPANY

In connection with the sale of its 55 percent shareholding in FACT, an affiliated company, Software AG realized a gain on the disposal of €11,915 thousand in September 2022. The gain on the disposal is reported in the Consolidated Income Statement under other income. The sale led to the complete derecognition of the non-controlling interests previously reported in the balance sheet.

[4] SEGMENT REPORTING

NOTES ON SEGMENT REPORTING

Segmentation is in accordance with the internal control of the Group. Internal control focuses primarily on product revenue at constant currency for the two product segments. Margins and earnings are controlled largely at Group level. Software AG therefore reports on the following three segments:

- Digital Business (integration, business process management, and big data)
- Adabas & Natural (A&N: data management with the Adabas & Natural and CONNX product families)
- Professional Services (implementation of solutions in cooperation with customers and partners)

The segment contribution does not include the amortization expense associated with the purchase of intangible assets through acquisitions. This expense is therefore shown separately under reconciliation. This presentation corresponds with internal control and reporting lines (management approach). The majority of sales, marketing, and distribution expenses are classified based on revenue percentage. A focus on absolute earnings contributions therefore only makes sense in certain scenarios given the interdependency between the two product segments. Research and development expenses are assigned to the segments based on expense components directly attributable to the R&D department as well as the overhead coded to R&D. They have no direct impact on internal control.

The following table shows the segment data for the current and previous fiscal years:

Segment Report for Fiscal Years 2022 and 2021

	Digital Business			Adabas & Natural (A&N)		
in € thousands	2022 IFRS	2022 acc[1]	2021 IFRS	2022 IFRS	2022 acc[1]	2021 IFRS
Licenses from subscriptions	178,868	169,456	132,709	81,131	78,165	49,869
Maintenance from subscriptions	83,415	78,972	52,168	19,470	18,524	11,243
Perpetual maintenance	181,326	170,357	209,871	121,053	113,025	126,081
SaaS	75,844	71,629	44,136	0	0	2
Annual recurring revenue	**519,453**	**490,414**	**438,884**	**221,654**	**209,714**	**187,195**
Perpetual licenses	30,225	29,093	30,642	24,273	22,346	27,284
Product revenue	**549,678**	**519,507**	**469,526**	**245,927**	**232,060**	**214,479**
Services	0	0	0	0	0	0
Other	7	7	0	0	0	0
Revenue	**549,685**	**519,514**	**469,526**	**245,927**	**232,060**	**214,479**
Cost of sales	-77,772	-76,070	-62,500	-8,464	-8,074	-7,732
Gross profit	**471,913**	**443,444**	**407,026**	**237,463**	**223,986**	**206,747**
Sales, marketing, and distribution expenses	-284,259	-267,658	-231,129	-36,381	-34,199	-29,767
Segment contribution	**187,654**	**175,786**	**175,897**	**201,082**	**189,787**	**176,980**
Research and development expenses	-149,470	-143,373	-120,100	-31,917	-31,927	-31,080
Segment earnings	**38,184**	**32,413**	**55,797**	**169,165**	**157,860**	**145,900**
General and administrative expenses						
Other income						
Other expenses						
Other taxes						
Operating income						
Financing income						
Financing expenses						
Net financial income/expenses						
Earnings before income taxes						
Income taxes						
Net income						

[1] Items presented at constant currency are translated using monthly average rates from the previous year. Currency translation effects on balance sheet items related to intra-Group transactions are not taken into account in expenses.

Professional Services			Reconciliation		Total		
2022 IFRS	2022 acc¹	2021 IFRS	2022 IFRS	2021 IFRS	2022 IFRS	2022 acc¹	2021 IFRS
0	0	0	0	0	259,999	247,621	182,578
0	0	0	0	0	102,885	97,496	63,411
0	0	0	0	0	302,379	283,382	335,952
0	0	0	0	0	75,844	71,629	44,138
0	**0**	**0**	**0**	**0**	**741,107**	**700,128**	**626,079**
0	0	0	0	0	54,498	51,439	57,926
0	**0**	**0**	**0**	**0**	**795,605**	**751,567**	**684,005**
162,568	152,960	149,834	0	0	162,568	152,960	149,834
0	0	3	0	0	7	7	3
162,568	**152,960**	**149,837**	**0**	**0**	**958,180**	**904,534**	**833,842**
-127,853	-120,734	-108,612	-25,805	-9,983	-239,894		-188,827
34,715	**32,226**	**41,225**	**-25,805**	**-9,983**	**718,286**		**645,015**
-12,861	-12,106	-13,446	-8,475	-5,866	-341,976		-280,208
21,854	**20,120**	**27,779**	**-34,280**	**-15,849**	**376,310**		**364,807**
0	0	0	0	0	-181,387		-151,180
21,854	**20,120**	**27,779**	**-34,280**	**-15,849**	**194,923**		**213,627**
					-94,343		-82,807
					58,877		16,477
					-81,333		-25,224
					-2,483		-5,297
					75,641		**116,776**
					14,868		7,181
					-25,402		-6,164
					-10,534		**1,017**
					65,107		**117,793**
					-45,860		-33,449
					19,247		**84,344**

INFORMATION ON GEOGRAPHIC REGIONS

Revenue is distributed across geographic regions as follows (based on headquarters of the respective Group entity):

Geographic distribution of revenue

	2022			
in € thousands	**Germany**	**United States**	**Other countries**	**Software AG Group**
Licenses	53,817	92,018	168,662	314,497
Maintenance	48,005	146,352	210,906	405,264
SaaS	10,942	30,929	33,973	75,844
Services	27,912	38,968	95,689	162,568
Other	0	0	7	7
Total	**140,676**	**308,267**	**509,237**	**958,180**

	2021			
in € thousands	**Germany**	**United States**	**Other countries**	**Software AG Group**
Licenses	45,622	76,640	118,242	240,504
Maintenance	54,989	138,956	205,418	399,363
SaaS	8,627	12,817	22,694	44,138
Services	29,744	30,803	89,287	149,834
Other	0	3	0	3
Total	**138,982**	**259,219**	**435,641**	**833,842**

Countries included in "other countries" are presented separately once the revenue generated in the country in question reaches a significant level. Revenue generated in the USA was reported separately as it was greater than 10 percent of Group revenue. This revenue is generated in US dollars, so when comparing consecutive periods, exchange rate fluctuations should be considered.

NON-CURRENT ASSETS

Non-current assets include intangible assets, property, plant, and equipment, as well as financial investment property.

in € thousands	**2022**	**2021**
United States	1,120,094	563,722
Germany	400,537	416,002
Other countries	164,539	176,996
Software AG Group	**1,685,170**	**1,156,720**

Notes to the Consolidated Income Statement

[5] REVENUE

Revenue by segment and region is presented in the segment report in Note [4]. All revenue presented resulted solely from contracts with customers. Revenue in fiscal 2022 included €132,116 thousand (2021: €120,859 thousand) that was recognized as contract liabilities at the beginning of the period. Taking termination options into account, the transaction price allocated to the remaining performance obligations as of December 31, 2022, was €575,746 thousand (2021: €562,832 thousand).

Software AG anticipates recognition of the corresponding revenue over the following periods of time:

in € thousands	2023	2024	2025-2028
Anticipated revenue to be recognized	350,726	131,033	93,987

[6] OTHER INCOME

Other income includes the following items:

in € thousands	2022	2021
Foreign exchange gains	42,596	13,918
Gains on the disposal of the shareholding in FACT	11,915	0
Government grants in the form of low-interest-rate loans	2,300	1,809
Miscellaneous	2,066	750
	58,877	**16,477**

[7] OTHER EXPENSES

Other expenses consist of the following items:

in € thousands	2022	2021
Foreign exchange losses	37,183	13,523
Goodwill impairment losses	25,314	0
Expenses related to a new investor	0	5,832
Expenses arising from malware incident	0	4,418
Restructuring	6,200	0
Litigation	9,199	0
Miscellaneous	3,437	1,451
	81,333	**25,224**

For more information on expenses in connection with the legal risks and corresponding provisions, please refer to Notes [24] and [32]. For more information on goodwill impairment losses, please refer to Note [17]. Provisions for restructuring only include expenses directly attributable to restructuring measures. This relates primarily to expenses for severance payments to employees and compensation payments in connection with early retirement programs.

[8] NET FINANCIAL INCOME/EXPENSES

Financial income includes interest income on financial assets in the amount of €13,180 thousand (2021: €5,726 thousand). Financial expenses include interest expenses on financial liabilities in the amount of €18,684 thousand (2021: €4,319 thousand).

[9] INCOME TAXES

Software AG's income taxes can be broken down by origin as follows:

in € thousands	2022	2021
Current domestic taxes	-3,954	-2,850
Current foreign taxes	-34,655	-36,286
	-38,609	**-39,136**
Deferred domestic taxes	-12,644	8,195
Deferred foreign taxes	5,393	-2,508
	-7,251	**5,687**
	-45,860	**-33,449**

In Germany, a uniform corporate income tax of 15 percent applies. Based on the average municipal trade tax collection rate and a solidarity surcharge of 5.5 percent on corporate tax, the income tax rate for German entities was 31.8 percent (2021: 31.8 percent) for 2022. Tax rates abroad ranged between 10 and 34 percent (2021: between 10 and 37.5 percent).

Expenses from deferred taxes totaled €7,251 thousand and included €5,402 thousand (2021: tax expenses of €2,828 thousand) in tax income relating to temporary differences that arose.

The income tax expense of €45,860 thousand for 2022 (2021: €33,449 thousand) is €25,136 thousand higher than the expected income tax expense of €20,724 thousand (2021: €37,494 thousand) that resulted from applying the applicable domestic tax rate of 31.8 percent (2021: 31.8 percent) at Group level. The Group's effective income tax rate is 70.4 percent (2021: 28.4 percent).

The difference between the expected and actual tax expense can be attributed to the following:

in € thousands	2022	2021
Earnings before income taxes	**65,107**	**117,793**
Expected income tax (31.8 percent; 2021: 31.8 percent)	-20,724	-37,494
Difference vs. foreign tax rates and changes in tax rates	9,830	9,756
Nonperiodic income tax effects	-655	1,733
Tax increases/decreases due to tax-exempt income or nondeductible expenses	-4,678	1,471
Adjustment of tax loss carryforwards and changes in valuation adjustments to deferred tax assets	-24,467	-5,936
Nondeductible or applicable foreign and withholding taxes	-5,166	-2,982
Other adjustments	0	3
Reported income tax expenses	**-45,860**	**-33,449**

Nonperiodic tax effects amounted to -€655 thousand (2021: €1,733 thousand) and included nonperiodic deferred income tax income of €315 thousand (2021: €860 thousand in income tax expenses).

Resulting from the change in income tax rates, a total negative effect of €241 thousand (2021: €1,776 thousand in positive effects) was included in difference vs. foreign tax rates and changes in tax rates in 2022. This is primarily due to Germany and the USA. Further adjustments to this item resulted from the difference between local tax rates applicable to Group entities (see above) and the Group tax rate of 31.8 percent (2021: 31.8 percent).

The item tax increases/decreases due to tax-exempt income or nondeductible expenses mainly includes the effects of the non-tax-deductible impairment of goodwill in the Professional Services segment (see Note [17]) and the tax-exempt income on the disposal of the shareholding in FACT in 2022 (see Note [3]).

A portion of Group deferred tax assets on loss carryforwards was not recognized in 2022 because the conditions for capitalization were no longer considered to be met. These effects are reported in adjustment of tax loss carryforwards and changes in valuation adjustments to deferred tax assets.

Expenses from deferred taxes decreased by €4,299 thousand (2021: €608 thousand) and the current tax expense by €0 thousand (2021: €461 thousand) in 2022 as a result of the reversal of loss carryforwards.

[10] OTHER TAXES

Other taxes of €2,483 thousand (2021: €5,297 thousand) decreased year-on-year by €2,814 thousand and include property taxes, vehicle taxes, and other indirect taxes.

[11] PERSONNEL EXPENSES

Personnel expenses in the fiscal years 2022 and 2021 were as follows:

in € thousands	2022	2021
Wages and salaries	514,540	447,917
Social benefits	67,611	59,951
Pension expenses	20,662	13,337
	602,813	**521,205**

In fiscal 2022, the average number of employees (part-time employees are taken into account on a pro rata basis only) by operational area was as follows:

	2022	2021
Support and Services	1,501	1,499
R&D	1,531	1,475
Sales and Marketing	1,117	1,043
Administration	759	701
	4,908	**4,718**

In absolute terms (part-time employees are counted in full), the Group employed 5,172 (2021: 5,001) people as of December 31, 2022.

[12] EARNINGS PER SHARE

Earnings per share are calculated based on the net income attributable to shareholders and a weighted average of the number of shares outstanding. The average weighted number of shares outstanding in 2022 remained unchanged from the previous year at 73,979,889.

The convertible bonds issued in the fiscal year (see Note [27]) had no dilutive effect in 2022. They are therefore not to be taken into account in calculating basic earnings per share. No other potential shares exist.

in € thousands	31.12.2022	31.12.2021
Net income	19,247	84,344
Less earnings attributable to non-controlling interests	-263	-482
Net income attributable to shareholders of Software AG	18,984	83,862
Weighted average number of shares outstanding (basic)	73,979,889	73,979,889
Weighted average number of shares outstanding (diluted)	73,979,889	73,979,889
Earnings per share in € (basic)	0.26	1.13
Earnings per share in € (diluted)	0.26	1.13

Notes to the Consolidated Balance Sheet

[13] OTHER FINANCIAL ASSETS

Other financial assets as of December 31 were as follows:

	Dec. 31, 2022			Dec. 31, 2021		
in € thousands	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Debt securities	0	0	0	17,645	0	17,645
Equity securities	0	370	370	0	4,724	4,724
Securities	2,234	911	3,145	2,477	1,092	3,569
Loans and other financial receivables	271	7,893	8,164	3,308	11,328	14,636
Derivatives	46	650	695	661	3,972	4,633
Total	**2,551**	**9,823**	**12,374**	**24,092**	**21,115**	**45,208**

For more information on the valuation of financial assets, please refer to Note [29].

[14] TRADE RECEIVABLES, CONTRACT ASSETS, AND OTHER RECEIVABLES

Trade receivables, contract assets, and other receivables as of December 31 were as follows:

	Dec. 31, 2022			Dec. 31, 2021		
in € thousands	**Current**	**Non-current**	**Total**	**Current**	**Non-current**	**Total**
Trade receivables	160,780	10,273	171,053	132,205	7,842	140,047
Not yet settled or invoiced services (contract assets)	90,357	125,038	215,395	65,818	120,241	186,059
Other receivables	662	537	1,199	443	649	1,092
Total	**251,799**	**135,848**	**387,647**	**198,466**	**128,732**	**327,198**

Contract assets represent payments due from customers for underlying services that have been rendered by Software AG but, due to contractual provisions, will be invoiced later. They are reclassified to trade receivables when the invoice is issued.

Gross receivables and allowances for expected credit losses were as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Trade receivables, contract assets before allowances	389,196	327,736
Allowances for expected credit losses	2,748	1,630
Carrying amount	**386,448**	**326,106**

Write-downs of trade receivables and contract assets totaled €578 thousand in fiscal 2022.

The following trade receivables were not yet due or past due as of the balance sheet date:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Carrying amount	171,054	140,047
of which neither impaired nor past due as of the balance sheet date	129,337	117,791
of which past due in the following time periods as of the balance sheet date		
1 to 3 months	33,237	16,466
4 to 6 months	4,433	3,680
7 to 12 months	4,047	2,110
> 12 months	0	0

[15] OTHER NON-FINANCIAL ASSETS

Other non-financial assets can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2022
Asset surplus from defined benefit plans	33,225	0
Capitalized advance payments in connection with support, license, and rental contracts	29,145	19,787
Capitalized costs from acquisition of new customer orders (sales commission)	28,243	16,995
Capitalized advance payment in connection with the issue of convertible bonds	0	6,800
Receivables from finance authorities	10,906	2,134
Other	3,280	2,884
	104,799	**48,600**

[16] INCOME TAX RECEIVABLES

Tax receivables in the amount of €52.253 thousand (2021: €41,254 thousand) consist primarily of receivables due to refundable withholding taxes and advance payments made in relation to income taxes.

[17] INTANGIBLE ASSETS AND GOODWILL

Changes in intangible assets and goodwill as of December 31, 2022

in € thousands	Goodwill	Intangible assets	Total
Cost			
Balance as of Jan. 1, 2022	**988,036**	**536,620**	**1,524,656**
Currency translation differences	20,563	17,070	37,633
Additions from acquisitions	399,560	163,675	563,235
Additions	0	1,912	1,912
Disposals	0	-1,604	-1,604
Balance as of Dec. 31, 2022	**1,408,159**	**717,673**	**2,125,832**
Accumulated amortization			
Balance as of Jan. 1, 2022	**-1,900**	**-449,154**	**-451,054**
Currency translation differences	883	-12,560	-11,677
Additions	-25,314	-35,495	-60,809
Disposals	0	1,238	1,238
Balance as of Dec. 31, 2022	**-26,331**	**-495,971**	**-522,302**
Residual carrying amount as of Jan. 1, 2022	986,136	87,466	1,073,602
Residual carrying amount as of Dec. 31, 2022	1,381,828	221,702	1,603,530

Changes in intangible assets and goodwill as of December 31, 2021

in € thousands	Goodwill	Intangible assets	Total
Cost			
Balance as of Jan. 1, 2021	**949,270**	**507,859**	**1,457,129**
Currency translation differences	38,766	26,543	65,309
Additions	0	2,286	2,286
Disposals	0	-68	-68
Balance as of Dec. 31, 2021	**988,036**	**536,620**	**1,524,656**
Accumulated amortization			
Balance as of Jan. 1, 2021	**-1,900**	**-408,577**	**-410,477**
Currency translation differences	0	-23,148	-23,148
Additions	0	-17,495	-17,495
Disposals	0	66	66
Balance as of Dec. 31, 2021	**-1,900**	**-449,154**	**-451,054**
Residual carrying amount as of Jan. 1, 2021	947,370	99,282	1,046,652
Residual carrying amount as of Dec. 31, 2021	986,136	87,466	1,073,602

Intangible assets mainly include software, customer bases, and brand names obtained in connection with acquisitions.

The following significant intangible assets with indefinite useful lives existed as of December 31, 2022:

in € thousands	Carrying amount as of Dec. 31, 2022	Carrying amount as of Dec. 31, 2021	Reason for assuming indefinite useful life
Brand names (ARIS) obtained through IDS Scheer AG acquisition	17,900	17,900	Use and future expansion of the brand names is planned for an indefinite period of time.
Brand name (webMethods) obtained through webMethods acquisition	23,440	22,074	Use and future expansion of the brand name is planned for an indefinite period of time.

Brand names are not subject to amortization. They were allocated in full to the Digital Business segment as of December 31, 2022. Any changes in the carrying amounts result from currency translation effects.

The carrying amounts of goodwill were allocated to the segments as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Adabas & Natural (A&N)	332,795	337,360
Digital Business	1,049,033	624,515
Professional Services	0	24,261
Goodwill	**1,381,828**	**986,136**

Software AG's strategic partnership with Persistent Systems, a middleware implementation partner in North America, was expanded in the third quarter of 2022. As part of this expansion, Software AG Professional Services specialists were transferred to Persistent Systems with the goal of establishing a center of excellence. The new go-to-market strategy provides for close collaboration between the two partners in the North American market with Persistent Systems servicing a portion of the Professional Services business in the role of subcontractor through the center of excellence. This partnership will enable Software AG to focus on especially complex consulting projects as well as the core business. Due to the expected impact on future earnings in the Professional Services segment, Software AG tested the goodwill allocated to the Professional Services segment for impairment as of September 30, 2022, and determined a fair value of €27,656 thousand. This resulted in an impairment loss of €25,314 thousand in the fiscal year. The impairment loss is attributable in full to the goodwill of the Professional Services business line. This impairment test was conducted using a weighted average cost of capital (WACC) after taxes of 8.0 percent (2021: 8.8 percent) and a sustainable growth rate of 1 percent (2021: 1 percent). Largely constant revenue (2021: 1.5 percent average annual revenue growth) and a target EBITA margin (last year of the detailed planning period) of 2.5 percent (2021: 4.25 percent) were assumed in the detailed planning period.

The increase in goodwill in the Digital Business segment resulted primarily from the corporate acquisition of StreamSets (see Note [3]).

The segments represent the smallest cash-generating units in the Group. They represent the smallest identifiable group of cash inflow-generating assets which are largely independent of inflows from other assets.

Goodwill as well as intangible assets with an indefinite useful life are tested for impairment at least once per year.

The test consists of a comparison of the carrying amount of the cash-generating unit to which the goodwill or the intangible asset is allocated with the recoverable amount. Testing for impairment involves regularly checking the recoverable amount with regard to fair value less costs to sell.

Fair value less costs to sell is calculated using discounted cash flows which are calculated based on the medium-term budget approved by management. The budget covers a period of five years (2021: five). Budget planning for 2023 was largely carried out as in previous years. Revenue by segment and costs directly attributable to the segments are based on the segment budget planning. The non directly attributable costs are coded to the segments.

Planning incorporates past experience, insights on current operating results, and management estimates of future developments which are aligned with the assumptions market stakeholders would apply. Revenue trends at country level, for instance, is one element of management estimates of future developments that is particularly prone to uncertainty. This approach is rated as level 3 of the valuation hierarchy in accordance with IFRS 13.

The forecasts take into account historical values and estimates of future developments. Costs to sell are assumed to amount to 2 percent (2021: 2 percent) of the relevant fair value.

The expected cash flow for the A&N segment was calculated as described above and discounted using a post-tax WACC of 8.5 percent (2021: 6.8 percent). The sustainable growth rate was assumed to be -5 percent (2021: 0 percent). A nearly constant revenue level is assumed for the period of detailed planning. A perpetual annuity of -5 percent (2021: 0 percent, but a 20 percent discount on the last detailed planning year) was used to determine sustainable cash flow. But even using an additional discount of 90 percent on the sustainable cash flow, the fair value less costs to sell would slightly exceed the carrying amount.

A WACC after taxes of 9.3 percent (2021: 8.5 percent) and a sustainable growth rate of 1 percent (2021: 1 percent) were used for the Digital Business segment. An average annual revenue growth rate of approximately 12 percent (2021: 20 percent) was assumed in the period of detailed planning. Furthermore, an EBITA margin of -7 percent was assumed in the 2023 budget and an increase in EBITA margin of about 28 percent by 2027. But even given a target EBITA margin of 20 percent in 2027 or, alternatively, a reduction in revenue growth by 50 percent, the fair value less costs to sell would slightly exceed the carrying amount. Nor would an increase in WACC after taxes of 2 percentage points result in the need for impairment.

[18] PROPERTY, PLANT, AND EQUIPMENT

Changes in property, plant, and equipment as of December 31, 2022

in € thousands	Land and buildings	Operating and office equipment	Total
Cost			
Balance as of Jan. 1, 2022	**127,677**	**54,621**	**182,298**
Currency translation differences	1,422	276	1,698
Additions from acquisitions	617	331	948
Additions	7,360	15,054	22,414
Disposals	-11,236	-13,652	-24,888
Balance as of Dec. 31, 2022	**125,840**	**56,630**	**182,470**
Accumulated depreciation			
Balance as of Jan. 1, 2022	**-70,541**	**-34,880**	**-105,421**
Currency translation differences	-1,102	-327	-1,429
Additions	-10,740	-11,066	-21,806
Disposals	10,826	11,365	22,191
Balance as of Dec. 31, 2022	**-71,557**	**-34,908**	**-106,465**
Residual carrying amount as of Jan. 1, 2022	57,136	19,741	76,877
Residual carrying amount as of Dec. 31, 2022	54,283	21,722	76,005

Changes in property, plant, and equipment as of December 31, 2021

in € thousands	Land and buildings	Operating and office equipment	Total
Cost			
Balance as of Jan. 1, 2021	**134,000**	**50,016**	**184,016**
Currency translation differences	2,849	2,189	5,038
Additions	6,610	10,861	17,471
Disposals	-15,782	-8,445	-24,227
Balance as of Dec. 31, 2021	**127,677**	**54,621**	**182,298**
Accumulated depreciation			
Balance as of Jan. 1, 2021	**-71,191**	**-30,476**	**-101,667**
Currency translation differences	-2,162	-1,694	-3,856
Additions	-11,233	10,761	-21,994
Disposals	14,045	8,051	22,096
Balance as of Dec. 31, 2021	**-70,541**	**-34,880**	**-105,421**
Residual carrying amount as of Jan. 1, 2021	62,809	19,540	82,349
Residual carrying amount as of Dec. 31, 2021	57,136	19,741	76,877

Most of the land and buildings are owned by the parent company and the Spanish subsidiary. The properties pertain mainly to the central administrative buildings of these entities.

Operating and office equipment mainly includes office furniture and IT equipment. The capital expenditure of €15,054 thousand (2021: €10,861 thousand) primarily relates to the initial purchase of computer equipment. Property, plant, and equipment totaling €76,005 thousand (2021: €76,877 thousand) includes right-of-use assets arising from leases in the amount of €19,116 thousand (2021: €19,184 thousand).

[19] INVESTMENT PROPERTY

Changes in investment property as of Dec. 31, 2022

in € thousands	Investment property
Cost	
Balance as of Jan. 1, 2022	**10,233**
Currency translation differences	0
Additions	0
Disposals	0
Balance as of Dec. 31, 2022	**10,233**
Accumulated depreciation	
Balance as of Jan. 1, 2022	**-3,992**
Currency translation differences	0
Additions	-606
Disposals	0
Balance as of Dec. 31, 2022	**-4,598**
Residual carrying amount as of Jan. 1, 2022	6,241
Residual carrying amount as of Dec. 31, 2022	5,635

Changes in investment property as of Dec. 31, 2021

in € thousands	Investment property
Cost	
Balance as of Jan. 1, 2021	**10,233**
Currency translation differences	0
Additions	0
Disposals	0
Balance as of Dec. 31, 2021	**10,233**
Accumulated depreciation	
Balance as of Jan. 1, 2021	**-3,316**
Currency translation differences	0
Additions	-676
Disposals	0
Balance as of Dec. 31, 2021	**-3,992**
Residual carrying amount as of Jan. 1, 2021	6,917
Residual carrying amount as of Dec. 31, 2021	6,241

Due to local market developments in the rent price index, an external appraiser was contracted to determine the fair value of a property in Spain. Based on the outcome of the appraisal, an impairment loss in the amount of €364 thousand was recognized for the property in 2022. There was no indication of diminished usability for the remaining properties, for which reason their fair value only depreciated as scheduled.

The total fair value of investment property was €12 million (2021: €14 million) as of the balance sheet date. Rental income of €1,486 thousand (2021: €1,600 thousand) was generated from leasing these properties in 2022. Expenses arose in connection with this income (not including depreciation) in the amount of €554 thousand (2021: €838 thousand).

[20] DEFERRED TAXES

Deferred taxes were composed of the following as of the balance sheet date (before offsetting):

	Deferred tax assets		Deferred tax liabilities	
in € thousands	**Dec. 31, 2022**	**Dec. 31, 2021**	**Dec. 31, 2022**	**Dec. 31, 2021**
Intangible assets	4,629	4,882	59,995	23,696
Property, plant, and equipment	1,487	872	5,699	7,539
Receivables and financial assets	4,929	4,603	25,365	20,130
Other non-financial assets	0	0	16,311	7,283
Other obligations	20,843	17,567	3,859	3,015
Provisions for pensions and similar obligations	4,250	10,497	0	0
Liabilities	2,407	2,975	2,664	985
Tax loss/interest/R&D carryforwards / tax credits	41,734	31,422	0	0
Total	**80,279**	**72,818**	**113,893**	**62,648**
Amount offset	-71,222	-56,251	-71,222	-56,251
Amount recognized in the balance sheet	9,057	16,567	42,671	6,397

Deferred tax assets on tax loss/interest/R&D carryforwards and tax credits rose year-on-year by €10,312 thousand. The change resulted primarily from the initial consolidation relating to the StreamSets acquisition.

As of December 31, 2022, unused tax loss/interest and R&D cost carryforwards existed in the Group in the amount of €135,796 thousand, of which €2,878 thousand in interest carryforwards, of which €7,931 thousand in R&D cost carryforwards (2021: €52,307 thousand, of which €2,878 thousand in interest carryforwards), for which no deferred tax assets were recognized. The increase is mainly due to the fact that capitalization conditions for deferred tax assets on losses carried forward were no longer considered to be met in 2022.

If the loss/interest and R&D cost carryforwards could have been utilized in full, additional deferred tax assets would theoretically have had to be recognized in the amount of €39,421 thousand (2021: €16,402 thousand).

Of the losses carried forward for which no deferred taxes were recognized, €9,652 thousand will expire in the period from 2023 to 2026, €3,399 thousand in the following years, and €111,904 thousand can be utilized indefinitely.

As of year-end, deferred tax assets were recognized in the Consolidated Financial Statements in the amount of €650 thousand (2021: €9,012 thousand), which were attributable to companies that suffered losses in the current or previous period. Recognition of deferred tax assets depends solely on recognition of future taxable earnings that exceed the earnings effects from the reversal of existing taxable temporary differences. It is assumed that a tax advantage will be recognized due to planned future positive taxable earnings.

As of the balance sheet date, taxable temporary differences associated with investments in subsidiaries existed in the amount of €36,451 thousand (2021: €28,211 thousand), for which no deferred tax liabilities had been recognized.

Accumulated deferred taxes were offset against equity and resulted in income of €1,397 thousand (2021: €1,397 thousand). The amounts resulted from recognition of new accounting rules in equity which were applied for the first time.

Accumulated current taxes that were offset against equity resulted in expenses of €2,581 thousand (2021: €2,581 thousand) in 2022. The amounts resulted from recognition of translation currency effects in equity from loans to foreign operations.

[21] FINANCIAL LIABILITIES

Financial liabilities can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Current financial liabilities		
Liabilities to banks	14,558	75,998
Other current financial liabilities	8,641	8,676
Derivatives	8,689	192
	31,888	**84,866**
Non-current financial liabilities		
Convertible bonds	311,248	0
Liabilities to banks	309,827	
Other non-current financial liabilities	13,379	14,661
Derivatives	763	404
	635,217	**223,767**

Financial liabilities changed as follows:

in € thousands		Liabilities to banks	Financial liabilities	Lease liabilities (IFRS 16)	Derivatives	Total
	Balance as of Dec. 31, 2021	**284,700**	**561**	**22,776**	**596**	**308,633**
	Proceeds					
	New non-current financial liabilities, net	120,000	310,475			430,475
Changes in cash and cash equivalents	**Payments**					
	Repayment of current and non-current financial liabilities, net	-78,480				-78,480
	MIP hedge premium	-1,355				-1,355
	Repayment of lease liabilities			-11,968		-11,968
Changes in noncash items	**Changes from subsequent measurement**					
	Additions lease liabilities			9,632		9,632
	MIP hedge premium				8,336	8,336
	Accrued interest on leases			716		716
	Accrued interest on convertible bonds		773			773
	Other changes from measurement	-480	-437	740	520[1]	343
	Balance as of Dec. 31, 2022	**324,385**	**311,372**	**21,896**	**9,452**	**667,105**
	Total change +/–	**-39,685**	**-310,811**	**880**	**-8,856**	**-358,472**
		Thereof current financial liabilities				31,888
		Thereof non-current financial liabilities				635,217

[1] Changes in cash and cash equivalents are factored into the measurement.

For further information on convertible bonds issued in the fiscal year, please refer to Note [27].

in € thousands		Liabilities to banks	Financial liabilities	Lease liabilities (IFRS 16)	Derivatives	Total
	Balance as of Dec. 31, 2020	**230,621**	**1,153**	**27,152**	**1,008**	**259,934**
Changes in cash and cash equivalents	**Proceeds**					
	New non-current financial liabilities, net	60,000				60,000
	Payments					
	Repayment of current and non-current financial liabilities, net	-7,499				-7,499
	MIP hedge premium	-1,104				-1,104
	Capital increase ADAMOS		-936			-936
	Guarantees in connection with Sunshine		-90			-90
	Lease liabilities			-12,974		-12,974
Changes in noncash items	**Financial purchase of assets**					
	Capital increase ADAMOS		436			436
	Additions lease liabilities			7,274		7,274
	Financial purchase of derivatives					
	MIP hedge premium	2,097				2,097
	Measurement					
	Interest adjustment for government loans	539				539
	Accrued interest on leases			885		885
	Other adjustments	46	-2	439	-412[1]	71
	Balance as of Dec. 31, 2021	**284,700**	**561**	**22,776**	**596**	**308,633**
	Total change +/–	**-54,079**	**592**	**4,376**	**412**	**-48,699**
		Thereof current financial liabilities				84,866
		Thereof non-current financial liabilities				223,767

[1] Changes in cash and cash equivalents are factored into the measurement.

Liabilities to banks and other financial liabilities had the following maturities as of the reporting date:

in € thousands	Up to 1 year	>1 year
Loans with variable interest rates	0	100,000
Loans with fixed interest rates	14,558	521,075

The fair values of the liabilities to banks with variable interest rates are equal to their carrying amounts. The fair values of the liabilities with fixed interest rates amounted to €519,355 thousand (2021: €109,502 thousand). The fair values were calculated by discounting the future cash flows using current market rates.

[22] TRADE PAYABLES AND OTHER LIABILITIES

Trade payables and other liabilities can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Payables to suppliers	46,955	42,151
Advance payments received on orders	9,354	11,356
Other liabilities	1,171	253
	57,480	**53,760**

[23] OTHER NON-FINANCIAL LIABILITIES

Other non-financial liabilities can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Liabilities due to employees	106,775	105,238
Tax liabilities	20,148	21,394
Liabilities for social security	6,086	6,158
Remaining other current liabilities	5,894	6,662
	138,903	**139,452**

[24] OTHER PROVISIONS

Other provisions changed as follows:

in € thousands	Other personnel-related provisions	Miscellaneous other provisions	Total other provisions
Balance as of Jan. 1, 2022	**37,060**	**18,988**	**56,048**
Currency translation differences	33	-196	-163
Additions	11,040	11,839	22,879
Utilization	-12,689	-762	-13,451
Reversal	-71	-209	-280
Balance as of Dec. 31, 2022	**35,373**	**29,660**	**65,033**
of which with a remaining term of more than 1 year			0
Balance as of Jan. 1, 2021	**33,150**	**16,752**	**49,902**
Currency translation differences	70	42	112
Additions	12,334	3,159	15,493
Utilization	-8,423	-726	-9,149
Reversal	-71	-238	-309
Balance as of Dec. 31, 2021	**37,060**	**18,988**	**56,048**
of which with a remaining term of more than 1 year	12,096	28	12,124

MISCELLANEOUS OTHER PROVISIONS

Miscellaneous other provisions can be broken down as follows:

in € thousands	Dec. 31, 2022	Dec. 31, 2021
Litigation	22,105	13,189
Provisions arising from the malware attack	3,150	3,150
Anticipated losses related to Professional Services projects	3,029	1,158
Other provisions	1,376	1,491
	29,660	**18,988**

For further information on litigation, please refer to Note [32].

[25] INCOME TAX LIABILITIES

in € thousands	2022	2021
Balance as of Jan. 1	**36,609**	**35,428**
Currency translation differences	-646	1,085
Additions	9,756	14,038
Utilization	-12,639	-7,132
Reversal	-1,496	-6,810
Balance as of Dec. 31	**31,584**	**36,609**
of which with a remaining term of more than 1 year	911	1,629

[26] PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

Defined benefit plans

	Defined benefit obligation (DBO)		Fair value of plan assets		Effect of asset caps		Net defined benefit balance	
in € thousands	2022	2021	2022	2021	2022	2021	2022	2021
Germany	34,626	50,960	27,060	25,439	0	0	7,566	25,522
United Kingdom	55,335	103,614	88,561	99,687	0	0	-33,226	3,927
Switzerland	8,115	8,785	6,800	5,967	0	0	1,315	2,818
Other insignificant pension plans and similar plans							2,869	2,775
Defined benefit plans with net debt							**11,750**	**35,042**
Defined benefit plans with asset surplus							**-33,226**	**0**

Pension benefits in Germany consist of fixed commitments to a select group of people. They are partially covered by life reinsurance policies. There are no minimum funding requirements or laws in Germany.

Pension benefits in the United Kingdom relate to commitments made by Software AG (UK) Limited. They comprise post-employment benefits for employees as well as benefits payable to their surviving dependents on the employees' death during their active service period. Due to the changed interest environment, an interest rate of 5.00 percent (2021: 1.75 percent) was used in the valuation of benefits. Due to the significant rise in interest rates, plan assets exceed the present value of the performance obligations resulting in an asset surplus, which is reported under non-financial assets (see Note [13]).

The commitments in Switzerland result from legal requirements of a Swiss federal law on occupational retirement, survivor, and disability pension plans. The law stipulates that every employer must grant entitled employees benefits after termination of their employment.

The defined benefit commitments result in risks to the Company due to possible fluctuations in obligations from defined benefit plans and fluctuations in plan assets. Fluctuations in defined benefit obligations result primarily from changes to financial assumptions such as discount interest rates and changed demographic assumptions (changing life expectancies). Due to the changed interest environment, pension obligations decreased significantly in the fiscal year; and an actuarial gain from changes in financial assumptions was recognized in comprehensive income in the amount of €65,817 thousand.

Possible changes in expected long-term wage and salary increases have no significant impact on the obligations due to the structure of the commitments. The fair value of plan assets and the fluctuation thereof depends mainly on the situation of the capital markets. Software AG seeks to account for this by controlling its asset investments.

	Defined benefit obligation (DBO)		Fair value of plan assets		Net defined benefit balance	
in € thousands	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Balance as of Jan. 1	**163,360**	**169,795**	**-131,093**	**-117,447**	**32,267**	**52,348**
Current service cost	3,818	4,032			3,818	4,032
Net interest income/expenses	2,480	2,010	-2,128	-1,536	352	475
	6,298	**6,042**	**-2,128**	**-1,536**	**4,171**	**4,506**
Income/expenses resulting from adjustments						
Return on plan assets less income recognized as net interest	0	0	9,636	-8,241	9,636	-8,241
Expectation adjustment	3,648	-1,748	0	0	3,648	-1,748
Net actuarial gains/losses from changes to demographic assumptions	-258	-712	0	0	-258	-712
Net actuarial gains/losses from changes to financial assumptions	-65,817	-6,487	0	0	-65,817	-6,487
	-62,427	**-8,948**	**9,636**	**-8,241**	**-52,791**	**-17,189**
Employer contributions	4,263	974	-6,491	-6,907	-2,228	-5,932
Employee contributions	189	230	-189	-428	0	-198
Plan-related payments	-3,069	-1,719	3,069	1,719	0	0
Settlement payments	0	-7,959	0	7,959	0	0
	1,383	**-8,474**	**-3,611**	**2,344**	**-2,228**	**-6,130**
Currency-related changes	-10,540	4,945	4,777	-6,213	-5,763	-1,269
Balance as of Dec. 31	**98,074**	**163,360**	**-122,419**	**-131,093**	**-24,344**	**32,267**

The net defined benefit balance includes defined benefit plans with an asset surplus. Non-financial assets were therefore reported in the amount of €33,226 thousand as of December 31, 2022. The significant assumptions used for calculating the present value of the defined benefit obligations (DBO) are as follows:

as %	2022	2021
Discount rate		
Germany	4.25	1.25
United Kingdom	5.00	1.75
Switzerland	2.25	0.25
Salary trend		
Germany	2.00	2.00
United Kingdom	4.50	4.75
Switzerland	1.50	1.50
Pension trend		
Germany	2.25	1.75
United Kingdom	2.50	3.00
Switzerland	0.00	0.00

A change in the above assumptions by a half of a percentage point would have the following impact on the respective DBOs:

	Change in DBO		
in € thousands	Germany	United Kingdom	Switzerland
Discount rate (-0.5%)	2,492	2,405	692
Discount rate (+0.5%)	-2,233	-2,263	-610
Salary trend (-0.5%)	87	203	77
Salary trend (+0.5%)	-83	-200	-73
Pension trend (-0,5%)	-2,037	-1,330	n/a[1]
Pension trend (+0.5%)	2,239	1,271	397

[1] Pension trend was assumed at 0 percent for Switzerland (see above).

Sensitivities were calculated by varying the respective parameter with otherwise constant assumptions.

The plan assets can be broken down as follows:

	Fair value	
in € thousands	2022	2021
Equities	46,576	69,090
Life insurance policies	33,859	31,406
Cash and cash equivalents	10,019	17,330
Fixed-interest securities	31,965	13,267
	122,420	**131,093**

There was a market price quote in an active market for every component of the plan assets except for the life insurance policies.

Contributions from the Software AG Group to defined benefit plans for fiscal year 2023 are expected to amount to €7,694 thousand (2021: €8,277 thousand).

Expected benefit payments during the next ten years are expected to be as follows:

in € thousands	Expected benefit payments
2023	5,230
2024	4,463
2025	4,129
2026	4,183
2027	4,205
2028-2032	20,320

DEFINED CONTRIBUTION PLANS

There is a minor volume of defined contribution pension commitments. Defined contributions are paid to external insurance companies or funds. Furthermore, Software AG makes contributions to the state and/or public pension fund primarily in Germany. Defined contribution pension commitments accounted for expenses of €25,932 thousand (2021: €18,029 thousand) in 2022.

[27] EQUITY

SUBSCRIBED CAPITAL

As of December 31, 2022, Software AG's subscribed capital totaled €74,000 thousand (2021: €74,000 thousand). Software AG’s share capital is divided into 74,000,000 (2021: 74,000,000) no-par value registered shares, each worth €1. Each share entitles its holder to one vote.

CONDITIONAL CAPITAL

Pursuant to the resolution of the Annual Shareholders’ Meeting on May 12, 2021, the Management Board is authorized, subject to the consent of the Supervisory Board, to issue bearer and/or registered warrant and/or convertible bonds or combinations of these instruments (bonds) up to a total value of €750,000,000 with or without a specified maturity date and to grant bond owners or holders the right to convert the bonds to new no-par value registered shares in the Company representing up to a proportional amount of the share capital of €14,800,000, which are secured by the corresponding conditional capital in section 5(3) of the Articles of Association. This authorization may be exercised until May 11, 2026.

Pursuant to a resolution from December 13, 2021, and with the consent of the Supervisory Board on the same date, the Management Board utilized its authorization to issue convertible bonds, excluding subscription rights, to Silver Lake with a nominal value of €344.3 million. These bonds entitle the holders to convert them to a maximum of 7.4 million Software AG shares. (For further information, please refer to the following description of the accounting effects of the convertible bonds in the current fiscal year.)

AUTHORIZED CAPITAL

As of December 31, 2022, the Management Board was authorized, subject to the consent of the Supervisory Board, to increase the Company's share capital on one or more occasions on or before May 11, 2026, by up to a total of €14,800 thousand by issuing new no-par value registered shares in return for cash contributions and/or contributions in kind (authorized capital). In doing so, the number of shares must increase in proportion to the share capital.

The Management Board did not make use of this authorization in fiscal year 2022.

ACQUISITION OF TREASURY SHARES

At the beginning of the reporting period, Software AG held 20,111 treasury shares representing €20,111 or 0.03 percent of the share capital.

The balance of treasury shares remained unchanged year-on-year as of December 31, 2022. There were no transactions in fiscal 2021 or 2020.

Pursuant to the Annual Shareholders' Meeting resolution from May 12, 2021, Software AG is authorized until May 11, 2026, to purchase Software AG shares totaling a maximum of 10 percent of the share capital at the time of the resolution. The shares purchased, together with other treasury shares that the Company has already purchased and still holds or that are attributable to it in accordance with sections 71d and 71e of AktG, may not account for more than 10 percent of the respective share capital at any time.

CONVERTIBLE BONDS

Software AG issued subordinated unsecured convertible bonds with a total nominal value of €344,300 thousand on February 15, 2022. The convertible bonds have a coupon rate of 2 percent p.a., an initial conversion price of €46.54, and a five-year term to maturity (February 2027). The initial conversion price would change if Software AG were to approve and disburse dividends above the reference dividend price of €0.76 before the convertible bonds reached maturity.

In accordance with the policies on compound financial instruments, the convertible bonds were measured at fair value and, less proportional transaction costs, divided into a debt component (non-current financial liability) and an equity component (capital reserves).

The following table shows the division of proceeds arising from the issue of the convertible bonds between the debt and equity components:

in € thousands		Debt	Equity
Gross proceeds	344,300	310,475	33,825
Transaction costs	6,800	6,132	668
Net proceeds	337,500	304,343	33,157

Subsequent measurement of the debt component was carried out using the effective interest method and the carrying amount equaled €311,248 thousand as of December 31, 2022.

EQUITY MANAGEMENT

The Software AG Group has an obligation to achieve long-term profitable growth. Since software companies typically have a low level of capital expenditure for property, plant, and equipment, equity is not a focus of corporate management.

DIVIDEND

Pursuant to the proposal of the Management Board and the Supervisory Board, the Annual Shareholders' Meeting resolved on May 17, 2022, to appropriate €56,225 thousand (2021: €56,225 thousand) for a dividend payout from the net retained profits of €65,452 thousand (2021: €113,764 thousand) reported by Software AG, the controlling Group company, in the 2021 fiscal year. This corresponded to a dividend of €0.76 (2021: €0.76) per share. A total amount of €9,227 thousand (2021: €57,539 thousand) was carried forward.

Based on the number of shares outstanding as of March 8, 2023, the Management Board will propose to the Annual Shareholders' Meeting to distribute the net retained profits of €48,760 thousand reported by Software AG in fiscal 2022, as follows: to appropriate €3,699 thousand for dividends and to carry forward €45,061 thousand. This corresponds to a dividend of €0.05 per share.

OTHER RESERVES

Other reserves changed as follows, taking into account tax effects:

	2022			2021		
in € thousands	**Pre-tax amount**	**Tax effects**	**Net amount**	**Pre-tax amount**	**Tax effects**	**Net amount**
Currency translation differences from foreign operations	30,750	0	30,750	83,647	0	83,647
Net actuarial gain/loss on pension obligations	55,884	-14,439	41,445	15,381	-1,496	13,885
Net gain/loss on remeasuring financial assets	-719	66	-653	355	87	442
Currency translation gain/loss from net investments in foreign operations	6,295	0	6,295	0	0	0
Gain/loss recognized in equity	**92,210**	**-14,373**	**77,837**	**99,383**	**-1,409**	**97,974**

Cash flow hedges had the following effects on the income statement and other comprehensive income:

in € thousands	Total gain/(loss) recognized in other comprehensive income from the hedges	Ineffective portion recognized in earnings	Items from the income statement	Costs recognized in other comprehensive income from hedges	Amount reclassified from other comprehensive income to the income statement	Items from the income statement
Fiscal year ending Dec. 31, 2022: expected payments relating to awards to members of the Management Board, managers and employees	894	0	n/a	0	-932	Functional costs
Fiscal year ending Dec. 31, 2021: expected payments relating to awards to members of the Management Board, managers and employees	-1,293	0	n/a	0	-1,338	Functional costs

Other Disclosures

[28] NOTES TO THE STATEMENT OF CASH FLOWS

Cash and cash equivalents include €0 thousand (2021: €4 thousand), which are held by the sales subsidiary in Venezuela. Due to current legal limitations relating to foreign currency transactions in Venezuela, Software AG has only limited access to these funds.

Cash and cash equivalents in the amount of €12,748 thousand were recognized in connection with the sale of the FACT shareholding described under Note [3]. After deducting FACT's cash and cash equivalents as of the sale date in the amount of €1,972 thousand, cash flow from the sale of an affiliated company as presented in the statement of cash flows amounted to €10,776 thousand.

Net payments for acquisitions in 2022 amounted to €537,317 thousand (2021: €0 thousand) and consisted of €553,532 thousand (2021: €0 thousand) in consideration paid and €16,215 thousand (2021: €0 thousand) in cash and cash equivalents received.

Dividends paid reported in the statement of cash flows include dividend payments of €474 thousand (2021: €404 thousand) to minority shareholders of subsidiaries.

The change in cash flow from financing activities mainly results from inflows from the issue of convertible bonds (see Note [27]).

Software AG has firmly committed credit lines of approximately €702,000 thousand of which approximately €374,000 thousand was unused as of December 31, 2022. It also has non-binding credit lines in the amount of approximately €120,00 thousand, which were unused as of the balance sheet date. With cash and cash equivalents, Software AG thus had freely disposable liquidity of around €922,000 thousand as of December 31, 2022.

[29] ADDITIONAL INFORMATION ON FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The following table shows the carrying amounts of financial assets and liabilities as well as fair values in accordance with the levels of the fair-value hierarchy. The three levels are defined as follows:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Valuation techniques whereby the lowest level input that is significant to fair value measurement as a whole is directly or indirectly observable in the market.

Level 3: Inputs for the asset or liability that are not based on observable market data.

December 31, 2022

in € thousands	Category	Carrying amount by measurement category		Fair value by level			
		At amortized cost	At fair value	Level 1	Level 2	Level 3	Total
Assets							
Cash and cash equivalents	AC	427,105					
Trade receivables, contract assets, and other receivables	AC	387,647					
Other financial assets							
Financial assets available for sale							
Debt securities	FVTPL		0		0		0
Shareholders' equity	FVOCI		370			370	370
Securities	FVOCI		3,145	3,145			3,145
Loans and other financial receivables	AC	8,164					
Derivative financial instruments							
Designated as hedging instrument							
Stock options	–		389		389		389
Forward equity contracts	–		0		0		0
Not designated as hedging instrument							
Forward currency contracts	FVTPL		33		33		33
Forward equity contracts	FVTPL		0		0		0
Stock options	FVTPL		273		273		273
Liabilities							
Trade and other payables	AC	57,480					
Financial liabilities							
Non-derivative financial liabilities							
Loans[1]	AC	635,633			584,021		584,021
Other non-derivative financial liabilities	AC	22,020			22,020		22,020
Derivative financial liabilities							
Designated as hedging instrument							
Forward equity contracts	–		3,752		3,752		3,752
Not designated as hedging instrument							
Forward currency contracts	FVTPL		40		40		40
Forward equity contracts	FVTPL		5,660		5,660		5,660

[1] Includes convertible bonds.

December 31, 2021

in € thousands	Category	Carrying amount by measurement category		Fair value by level			
		At amortized cost	At fair value	Level 1	Level 2	Level 3	Total
Assets							
Cash and cash equivalents	AC	585,844					
Trade receivables, contract assets, and other receivables	AC	327,198					
Other financial assets							
Financial assets available for sale							
Debt securities	FVTPL		17,645		17,645		17,645
Shareholders' equity	FVOCI		4,724			4,724	4,724
Securities	FVOCI		3,569	3,569			3,569
Loans and other financial receivables	AC	14,636					
Derivative financial instruments							
Designated as hedging instrument							
Stock options	–		2,437		2,437		2,437
Forward equity contracts	–		740		740		740
Not designated as hedging instrument							
Forward currency contracts	FVTPL		71		71		71
Forward equity contracts	FVTPL		437		437		437
Stock options	FVTPL		947		947		947
Liabilities							
Trade and other payables	AC	53,760					
Financial liabilities							
Non-derivative financial liabilities							
Loans	AC	284,700			284,202		284,202
Other non-derivative financial liabilities	AC	23,337			23,337		23,337
Derivative financial liabilities							
Designated as hedging instrument							
Forward equity contracts	–		590		590		590
Not designated as hedging instrument							
Forward currency contracts	FVTPL		6		6		6

No financial assets or liabilities were reclassified to different levels of the fair-value hierarchy during fiscal 2021 or 2022. All equity instruments were measured at fair value through other comprehensive income (FVOCI), to reflect a more long-term investment intension in earnings.

The following table illustrates how the fair values of financial assets and liabilities are determined:

Financial assets/ financial liabilities	Hierarchy level	Valuation technique and key inputs	Significant unobservable inputs	Correlation between unobservable inputs at fair value
Interest rate swaps	2	Discounted cash flow approach; future cash flows are estimated based on forward interest rates (observable interest rate curves as of balance sheet date) and fixed interest rates, discounted at an interest rate that accounts for the credit risk associated with the counter parties	n/a	n/a
Forward currency contracts	2	Discounted cash flow approach; future cash flows are estimated based on forward exchange rates (observable exchange rates as of balance sheet date) and fixed forward exchange rates, discounted at an interest rate that accounts for the credit risk associated with the counter parties	n/a	n/a
Stock options	2	Option pricing model, which accounts for influential option pricing factors (share price, exercise price of the option, share price volatility, dividends as dividend yield, interest rates, option's remaining term)	n/a	n/a
Forward equity contracts	2	The fair values are measured based on the intrinsic values of the forward equity contracts, which are calculated using the share prices from an active market	n/a	n/a
Securities	1	Prices quoted on active market	n/a	n/a
Shareholders' equity (currently non-listed securities only)	3	Comprehensive valuation approach based on multiple quantitative and qualitative factors such as current/ planned earnings, liquidity, recently undertaken/planned transactions	n/a	n/a

The fair values of cash and cash equivalents, time deposits, current receivables, trade payables, and other current financial liabilities correspond approximately with their carrying amounts, primarily due to the short terms of these instruments.

The Company uses various parameters to measure non-current receivables, mainly interest rates and the customers' individual credit ratings. Software AG calculates bad debt allowances to reflect expected defaults based on the measurement results. Accordingly, the carrying amounts of these receivables corresponded approximately with their fair values as of December 31, 2022, and December 31, 2021.

Software AG calculates the fair values of liabilities to banks and other financial liabilities as well as other non-current financial liabilities by discounting the estimated future cash flows using the interest rates applicable to similar financial liabilities with comparable maturities.

The net gain/loss from loans and receivables is only affected significantly by currency translation and interest effects. The net loss from derivatives without qualifying hedging relationships amounted to €4,656 thousand (2021: €311 thousand) in fiscal 2022. The net loss from derivatives designated as cash flow hedges was included in the income statement and amounted to €6,163 thousand (2021: gain of €2,046 thousand) in fiscal 2022.

Equity instruments were written down in the amount of €513 thousand (2021: €517 thousand), which was recognized in other comprehensive income in fiscal 2022.

OBJECTIVES AND METHODS OF RISK MANAGEMENT FOR FINANCIAL INSTRUMENTS

As a result of its international operating activities as well as its investing and financing activities, Software AG is exposed to various financial risks. Management continuously monitors these risks. Derivative financial instruments are used in accordance with internal guidelines in order to reduce risks arising from changes in interest rates, exchange rates, cash flows, or the value of cash investments. Derivatives are generally entered into to hedge existing balance sheet exposures and highly probable forecast transactions.

a) Interest rate risk

The Company is subject to interest rate fluctuations that affect both assets and equity and liabilities on the balance sheet.

On the assets side, income from investing available cash and cash equivalents and future interest income resulting from discounting non-current receivables and contract assets are particularly subject to interest rate risk. On the equity and liabilities side, interest expenses for current and non-current financial liabilities as well as pension provisions and other items related to long-term borrowings are especially exposed to interest rate risk.

The sensitivity analysis required by IFRS 7 relates to interest rate risk arising from monetary financial instruments bearing variable interest rates.

Based on the current structure of the interest-bearing financial instruments, a hypothetical increase in the market interest level of 100 basis points would improve financial income/expenses by €967 thousand (2021: €2,942 thousand).

b) Exchange rate risk

In order to hedge the risk of future fluctuations in exchange rates, the Company enters into currency forward contracts. Foreign currency receivables and liabilities are offset if possible, and only the remaining net exposure is hedged selectively. Estimated cash flows can also be hedged in accordance with internal guidelines.

Hedging transactions are measured at their fair value. The amounts are reported in the balance sheet under other financial assets or financial liabilities. Since hedging transactions are not normally designated as hedge accounting, changes in fair value are immediately recognized through profit or loss in the Consolidated Income Statement.

The sensitivity analysis required by IFRS 7 relates to exchange rate risk arising from monetary financial instruments that are denominated in a currency other than the functional currency in which they are measured. Exchange differences arising from the translation of financial statements into the Group currency (translation risk) and non-monetary items are not taken into account. Most significant monetary financial instruments are denominated in the functional currency. For Software AG, significant effects on earnings (earnings before income taxes) result only from the relationship of the euro to the US dollar. Hedging transactions are based on existing hedges or estimated cash flows and thus reduce any potential effects on earnings. In the case of designated cash flow hedges, exchange rate changes affect other reserves included in equity.

Based on the monetary financial instruments available as of the balance sheet date, a devaluation of the euro by 10 percent against the US dollar would have increased earnings by €1,061 thousand (2021: €1,695 thousand) and other reserves by €0 thousand (2021: €0 thousand). This amount only represents a theoretical risk for Software AG as these instruments are hedges of balance sheet transactions, rather than open trading positions.

c) Market risk

In line with Group policy, assets are controlled in terms of maturity, interest type, and rating such that the Company does not expect any significant fluctuations in value.

d) Credit risk

Software AG is exposed to default risk in its operating business and in connection with certain financial transactions if contracting parties fail to meet their obligations. Major cash investments as well as derivative financial instruments are entered into with banks with credit ratings of at least investment grade and whose credit default swap (CDS) rates are monitored continuously. The theoretical maximum default risk exposure is indicated by the carrying amounts. The guidelines defined by management ensure that the credit risk from financial instruments is spread across various banks.

Receivables are monitored as part of operations on an ongoing basis. The need for impairment is evaluated on every balance sheet date using an impairment matrix for determining expected credit loss. As of December 31, 2022, there was no indication of the existence of any risk beyond that taken into account through bad debt allowances. There is no concentration of credit risks with respect to single customers as a result of the size of the customer base or due to the distribution of the revenues across various sectors and countries. The theoretical maximum exposure to credit risk is reflected in the carrying amounts of the receivables, without taking any collateral into account.

e) Liquidity risk

A liquidity risk arises from the possibility that Group entities may not be able to satisfy their existing financial liabilities, for example, arising from loan agreements, lease agreements or trade accounts payable.

The risk is limited by active working capital management and Group-wide liquidity control and is, if necessary, balanced by available cash and bilateral lines of credit.

Under credit agreements having a total volume of €326.7 million (2021: €110.0 million), Software AG is required to limit net debt within the Group to a maximum of 3.5-times EBITDA and not fall below an interest coverage ratio of 4.0. Further unused credit lines are also available to Software AG with a volume of €300.0 million (2021: €320.0 million); if Software AG draws on them, it is required to meet financial KPIs. As of year-end 2022, the Company's net debt in relation to EBITDA was significantly lower than this limit and the interest coverage ratio was significantly higher.

The table below shows the contractually fixed payments arising from financial liabilities. Liabilities in foreign currency are calculated at the exchange rate as of December 31, 2022.

2022

in € thousands	Up to 1 year	> 1 to 5 years	> 5 years	Total
Trade payables and other financial liabilities (this item)	48,085	40	0	48,125
Financial non-derivative liabilities	14,587	521,361	99,810	635,758
Lease liabilities	8,613	12,723	559	21,895
Derivative financial liabilities	8,689	763	0	9,452

2021

in € thousands	Up to 1 year	> 1 to 5 years	> 5 years	Total
Trade payables and other financial liabilities (this item)	42,318	87	0	42,405
Financial non-derivative liabilities	76,463	160,798	48,000	285,261
Lease liabilities	8,212	13,657	907	22,776
Derivative financial liabilities	192	404	0	596

USE AND MEASUREMENT OF DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments are used only to hedge existing or estimated currency risk, interest rate risk, or other market risk.

The fair values of forward currency contracts are determined on the basis of forward foreign exchange rate which are included in a discounted cash flow model.

The fair values of stock options and equity forward contracts used to hedge the performance phantom share (PPS) plan as well as the Management Incentive Plans (MIP) are based on market prices, which reflect the current market situation and are equivalent to the replacement costs as of the balance sheet date.

The derivative financial instruments serve to hedge cash flow risks arising from share-based remuneration plans.

Forward currency contracts and currency option transactions are entered into for the purpose of hedging foreign exchange risks related to future cash flows.

In order to hedge the risks arising from changes in value of the PPS plan and the MIPs, the Company has entered into hedging instruments on Software AG stock with banks.

The financial instruments for hedging currency and interest rate risk have maximum terms to maturity of 0.4 years. Hedging transactions on the PPS plan and MIPs have remaining maximum terms of 2.4 years.

CASH INVESTMENT POLICY

Software AG takes a conservative approach with regard to its cash investments. The Company invests primarily in short-term time deposits and short-term fixed-income securities with a credit rating of at least "investment grade." Software AG has introduced a process in order to monitor the creditworthiness of the banks with which it maintains relationships whereby performance of the relevant credit default swaps (CDS) and external ratings are monitored continuously and investment decisions are adapted accordingly.

[30] DISCLOSURES ON LEASES AS LESSEE

Software AG rents and leases office buildings and, to a minor extent, vehicles and hardware. Software AG also rents IT equipment with contract terms that are typically between one and three years. These lease agreements are either short-term or for an underlying object of low value. Software AG opted for the simplified option granted by IFRS 16 and does not recognize right-of-use assets or lease liabilities for these agreements.

Right-of-use assets associated with rented office buildings, vehicles, and hardware are presented under property, plant, and equipment (see Note [18]) and changed as follows:

2022

in € thousands	Land and buildings	Operating and office equipment	Total
Balance as of Jan. 1, 2022	**14,942**	**4,242**	**19,184**
Depreciation in the fiscal year	-7,027	-2,553	-9,580
Additions	5,864	2,307	8,171
Disposals	-375	-52	-427
Currency translation differences	1,573	195	1,768
Balance as of Dec. 31, 2022	**14,977**	**4,139**	**19,116**

2021

in € thousands	Land and buildings	Operating and office equipment	Total
Balance as of Jan. 1, 2021	**19,624**	**4,397**	**24,021**
Depreciation in the fiscal year	-8,219	-2,674	-10,893
Additions	6,144	2,474	8,618
Disposals	-1,669	-24	-1,693
Currency translation differences	-938	69	-869
Balance as of Dec. 31, 2021	**14,942**	**4,242**	**19,184**

Lease liabilities associated with rented office buildings, vehicles, and hardware are presented as financial liabilities and changed as follows:

2022

in € thousands	Lease liabilities
Balance as of Jan. 1, 2022	**22,776**
Changes in the fiscal year	-880
Balance as of Dec. 31, 2022	**21,896**
thereof current	8,613
thereof non-current	13,283

2021

in € thousands	Lease liabilities
Balance as of Jan. 1, 2021	**27,152**
Changes in the fiscal year	-4,376
Balance as of Dec. 31, 2021	**22,776**
thereof current	8,212
thereof non-current	14,564

The following amounts for leases were recognized in the income statement in accordance with IFRS 16:

in € thousands	2022	2021
Expenses from leases included in operating income		
Depreciation in the fiscal year	9,580	10,893
Expenses for short-term leases and leases for assets of low value	4,304	1,710
Expenses from leases included in net financial income/expenses		
Interest expenses for lease liabilities	716	885

AS LESSOR

Software AG leases out parts of its own office buildings or those rented, but only to a very minor extent.

[31] SEASONAL INFLUENCES

Based on historical data, the revenue and earnings distribution from 2022 is not fully representative. The distribution of revenue and earnings is regularly affected by large individual deals and is thus difficult to predict. Revenue and earnings before income taxes were distributed over fiscal year 2022 as follows:

in € thousands	Q1 2022	Q2 2022	Q3 2022	Q4 2022	2022
License revenue	55,511	67,381	56,361	135,244	314,497
as % of annual license revenue	18	21	18	43	100
Total revenue	206,032	226,906	221,412	303,830	958,180
as % of annual revenue	22	24	23	32	100
Earnings before income taxes	25,513	28,719	-10,505	21,380	65,107
as % of annual earnings	39	44	-16	33	100

[32] LITIGATION AND CONTINGENT LIABILITIES

Appraisal proceedings were filed with the Regional Court of Saarbrücken in connection with the control and profit transfer agreement with IDS Scheer AG; the petitioners seek an increase in their cash settlements and annual compensation payments. Software AG does not consider the objections raised to be valid. The Regional Court of Saarbrücken ruled on June 6, 2018, to reject the petitioners' filings. Multiple petitioners filed complaints against this decision within the appeal period. The Saarland Higher Regional Court obtained an expert opinion. The appraisal by the court-appointed expert arrived at slightly higher amounts than the initial valuation with regard to individual valuation parameters. It is not foreseeable when the proceedings will be concluded.

In connection with the merger of IDS Scheer AG and Software AG, additional appraisal proceedings were filed with the Regional Court of Saarbrücken in which the petitioners seek a legal review of the set exchange ratio and correction through cash compensation. Software AG does not consider the objections raised to be valid. In its decision of March 15, 2013, the Regional Court of Saarbrücken ruled in favor of the exchange ratio in accordance with the stock market value ratio and an additional cash payment in the amount of €7.22 plus interest for each share held by outside shareholders of IDS Scheer AG. This results in a maximum arithmetical risk of subsequent payments of approximately €7.6 million plus interest. Software AG appealed the decision. The Saarland Higher Regional Court appointed an expert. The court-ordered expert presented a main report in the third quarter of 2017 and a supplementary report in the second quarter of 2021. According to the appraisal by the court-appointed expert, the IDS Scheer AG stock exchange price was not meaningful and application of the stock market value ratio thus not appropriate. In the opinion of the expert, when applying the earnings value ratio, the earnings values used in the initial valuation are to be corrected. Consequently, the expert considers a profit margin of 25 percent for the period of detailed planning and 20 percent for the perpetual annuity to be appropriate for the valuation of Software AG. Using these values would result in an additional cash payment of €7.33 per share held by outside shareholders of IDS Scheer AG, in total €7.7 million plus interest. Because Software AG does not consider the court-ordered expert's appraisal of Software AG's profit margin to be accurate, a private appraisal was prepared and submitted in the fourth quarter of 2021. In an order dated December 20, 2022, the Saarland Higher Regional Court announced that it expected to follow the decision of the Regional Court of Saarbrücken to measure the exchange ratio based on the stock market value ratio. The Saarland Higher Regional Court does not find the court-ordered expert's appraisal according to which the IDS Scheer AG share price is not meaningful and thus application of the stock market value ratio is not an option, convincing. The status of the proceedings is thus effectively the same as after the Regional Court's decision of March 15, 2013. Software AG again took a position on the latest notices issued by the Saarland Higher Regional Court. A decision by the Saarland Higher Regional Court is expected soon. Provisions are set up based on the estimated probable actual resource outflow.

The Spanish cartel authority (Comisión Nacional de los Mercados y la Competencia, CNMC) searched the offices of Software AG España, S.A. Unipersonal (Software AG Spain) on October 28 and 29, 2015, on the suspicion of an inadmissible anti-competitive agreement. On April 25, 2016, the CNMC published on its website that it was initiating antitrust proceedings against 11 companies, including Software AG Spain. CNMC extended the case to three additional companies on October 19, 2017. CNMC accuses Software AG Spain of inadmissible price fixing and cover tenders. Following a hearing on June 12, 2018, the CNMC ruled on July 31, 2018, to impose a penalty on 11 companies, including Software AG Spain. The penalty for Software AG Spain was €6 million, which was paid by court order on January 28, 2019. Software AG appealed the agency's decision and submitted its concluding argument on May 23, 2019. A decision is not expected until 2023 due to further COVID-19-related delays.

After a customer of Software AG in the USA, Shelby County, Tennessee, requested exemption from possible claims filed against the county and/or its employees by Software AG in 2017 and 2018, Software AG Cloud Americas, Inc. was added as a defendant in a class-action lawsuit in the US District Court for the Western District of Tennessee ("Tennessee District Court") on January 18, 2019. The backdrop to this are various lawsuits against a customer of Software AG, Shelby County, Tennessee. Although the class-action suit has been pending since 2016, it has not yet been admitted by the courts and is still in the early discovery phase. Mediation between all parties took place in December 2020. The parties subsequently elaborated the terms of a settlement which was finalized as of June 30, 2021. The settlement was confirmed on December 9, 2021, by Judge Mays of the Tennessee District Court. Due to the court approval, the share of the settlement to be paid by Software AG is limited to 5.5 percent and will be covered in full by insurance. The final settlement was still pending as of December 31, 2022.

Sanction-related supply stoppages and shortages in the Russian business had a negative impact on existing customer relationships and led to risks of legal action under local law; all of these could be averted as of December 31, 2022, by way of sanction-compliant settlements. No new customers were signed due to local risks.

The risk evaluation for other litigation and legal risks was updated; and provisions were set up based on a new calculation of the probable actual resource outflow.

Provisions for litigation totaled €22,105 thousand (2021: €13,189 thousand) as of December 31, 2022.

In addition, contingent liabilities in the amount of €45,501 thousand existed (2021: €37,028 thousand). A resource outflow as of the balance sheet date was not probable enough to set up provisions. These relate to individual lawsuits and €35,841 thousand (2021: €28,664 thousand) for tax-related risks.

[33] SHARE-BASED REMUNERATION

Software AG has various share-based remuneration plans for members of the Management Board, managers, and other Group employees. These plans include the option of cash settlement.

Share-based remuneration resulted in total expenses of €11,654 thousand (2021: €9,870 thousand) in fiscal 2022.

LONG-TERM INCENTIVE PLAN 2022 (MANAGEMENT BOARD)

Rights under Long Term Incentive Plan 2022 (LIP 2022) were allocated to members of the Management Board in December 2022 with an effective date as of July 1, 2022.

The rights have a term of four years. LIP 2022 consists of two equally weighted components or virtual stock options: value right 1 (VR 1) and value right 2 (VR2). Shares under the first component are weighted with a performance factor dependent upon their performance relative to the MDAX, i.e. worse performance can result in a reduction to 0, and outperformance of more than 20 percent can result in a factor of 2. The target amount is equal to the share price on the grant date multiplied by the relative outperformance of Software AG shares and the performance factor. The amount of the disbursement for the VR 2 component is coupled to value growth of Software AG's share during the term and to a target achievement factor resulting from the average target achievement of revenue, profit margin, and annual recurring revenue (ARR) targets in 2025; it is also capped at twice the allocation.

	VR (1)	VR (2)
Term (disbursement date)	July 2026	July 2026
Allocation in 2022	**84,159**	**187,984**
expired in 2022	0	0
Outstanding as of Dec. 31, 2022	**84,159**	**187,984**
of which vested	0	0
Fair value as of Dec. 31, 2022 (in €)	3.95	1.81

A total expense of €15 thousand was incurred under this plan in fiscal 2022. Provisions totaled €15 thousand as of December 31, 2022.

LONG-TERM INCENTIVE PLAN 2022 (EMPLOYEES)

Rights under Long Term Incentive Plan 2022 (LTI 2022) were allocated to employees in July 2022.

The plan only consists of retention stock appreciation rights (RSARs) which were issued in three tranches with varying terms. The disbursement amount for RSARs is based solely on the Software AG share price during a reference period at the end of the relevant term and is capped at three-times the allocation with respect to the entire plan.

	RSARs	RSARs	RSARs
Term (disbursement date)	July 2023	July 2024	July 2025
Allocation in 2022	**139,600**	**139,600**	**139,600**
expired in 2022	-3,700	-3,700	-3,700
Outstanding as of Dec. 31, 2022	**135,900**	**135,900**	**135,900**
of which vested	0	0	0
Fair value as of Dec. 31, 2022 (in €)	23.34	23.34	23.34

A total expense of €2,749 thousand was incurred under this plan in fiscal 2022. Provisions totaled €2,749 thousand as of December 31, 2022.

LONG-TERM INCENTIVE PLAN 2021 (MANAGEMENT BOARD)

Rights under Long Term Incentive Plan 2021 (LIP 2021) were allocated to members of the Management Board in May 2021.

The rights have a term of four years. LIP 2021 consists of two equally weighted components or virtual stock options: value right 1 (VR 1) and value right 2 (VR2). Shares under the first component are weighted with a performance factor dependent upon their performance relative to the MDAX, i.e., worse performance can result in a reduction to 0, and outperformance of more than 20 percent can result in a factor of 2. The target amount is equal to the share price on the grant date multiplied by the relative outperformance of Software AG shares and the performance factor. The amount of the VR 2 component is coupled to value growth of Software AG's share during the term and to a target achievement factor resulting from the average target achievement of revenue, profit margin, and ARR targets in 2024; it is also capped at twice the allocation.

	VR (1)	VR (2)
Term (disbursement date)	May 2025	May 2025
Outstanding as of Dec. 31, 2021	**130,890**	**264,085**
expired in 2022	-32,091	-64,747
Outstanding as of Dec. 31, 2022	**98,799**	**199,338**
of which vested	0	0
Fair value at Dec. 31, 2022 (in €)	3.82	1.24

A total expense of €827 thousand was incurred under this plan in fiscal 2022. This figure is the balance of income of €180 thousand in original commitments plus expenses of €1,007 thousand from hedging the commitments. They are recognized as cash flow hedges for VR 1 and as freestanding derivatives for VR 2. Provisions totaled €254 thousand as of December 31, 2022.

MANAGEMENT INCENTIVE PLAN 2021

Rights under Management Incentive Plan 2021 (MIP 2021) were allocated to employees in July 2021.

The plan consists solely of RSARs which were issued in three tranches with varying terms. The disbursement amount for the RSARs is based solely on the Software AG share price during a reference period at the end of the relevant term and is capped at three-times the allocation with respect to the entire plan.

	RSARs	RSARs	RSARs
Term (disbursement date)	July 2022	July 2023	July 2024
Outstanding as of Dec. 31, 2021	**74,395**	**74,395**	**74,395**
expired in 2022	-7,609	-10,256	-10,256
disbursed in 2022	-66,786	0	0
Outstanding as of Dec. 31, 2022	**0**	**64,139**	**64,139**
of which vested	N/A	0	0
Fair value as of Dec. 31, 2022 (in €)	N/A	23.78	23.78

A total expense of €3,228 thousand was incurred under this plan in fiscal 2022. This figure is the balance of expenses of €1,950 thousand in original commitments plus €1,278 thousand in expenses from hedging the commitments as cash flow hedges. Provisions totaled €1,754 thousand as of December 31, 2022.

MANAGEMENT INCENTIVE PLAN 2020

Rights under Management Incentive Plan 2020 (MIP 2020) were allocated to Management Board members and employees in June 2020. The plan differentiates between three types of stock appreciation rights (SARs): two types of performance shares, PSARs (1) and PSARs (2), and RSARs.

The number of PSARs (1) relevant to disbursement is based on the number of rights allocated times a factor which is the result of the performance of Software AG's share price relative to the MDAX price index. The resulting factor is a minimum of 0 in the case of outperformance of less than 0 percent and 1 in the case of outperformance between 0 and 2 percent. It reaches a maximum of 2 in the case of outperformance of at least 20 percent. Between those values, the target achievement factor grows by 0.1 per outperformance increase of 2 percentage points. Dividend payments are not taken into account when calculating the factor. The disbursement amount for PSARs (1) is determined based on reference prices at the beginning and end of the three-year term and is capped at three-times the allocation.

The number of allocated PSARs (2) and RSARs does not change over the course of the term. The disbursement amount for both components depends on the Software AG share price. For PSARs (2), the difference between the reference price at the beginning and end of the three-year term is applied, and disbursement is capped at three-times the allocation. The disbursement for RSARs is based solely on the Software AG reference share price the end of the three-year term and is also capped at three-times the allocation.

A total expense of €2,865 thousand was incurred under this plan in fiscal 2022. This figure is the balance of income of €358 thousand in original commitments plus €3,223 thousand in expenses from hedging the commitments as cash flow hedges. Provisions totaled €3,569 thousand as of December 31, 2022.

	PSARs (1)	PSARs (2)	RSARs
Term (disbursement date)	June 2023	June 2023	June 2023
Outstanding as of Dec. 31, 2021	152,183	190,226	204,746
expired in 2022	-14,893	-18,617	-22,918
Outstanding as of Dec. 31, 2022	137,290	171,609	181,828
of which vested	0	0	0
Fair value as of Dec. 31, 2022 (in €)	0.23	0.14	23.30

MANAGEMENT INCENTIVE PLAN 2019

Rights under the Management Incentive Plan 2019 (MIP 2019) were allocated to members of the Management Board and employees in May and June 2019. The plan differentiates between PSARs and RSARs.

The number of PSARs (1) relevant to disbursement is based on the number of rights allocated times a factor which is the result of the performance of Software AG's share price relative to the the Nasdaq-100 price index. The resulting factor is a minimum of 0 in the case of outperformance of less than 0 percent and 1 in the case of outperformance between 0 and 2 percent. It reaches a maximum of 2 in the case of outperformance of at least 20 percent. Between those values, the target achievement factor grows by 0.1 per outperformance increase of 2 percentage points. Dividend payments are not taken into account when calculating the factor. The disbursement amount for PSARs (1) is determined based on reference prices at the beginning and end of the four-year term and is capped at three-times the allocation.

The number of RSARs allocated to the Management Board in a four-year term and to employees in four tranches with varying terms does not change during the term. The disbursement amount for RSARs is based solely on the Software AG share price during a reference period at the end of the relevant term and is capped at three-times the allocation with respect to the sum of the four RSAR tranches.

Disbursement of the first and second tranches of employee RSARs occurred in previous years. Disbursement of the third tranche of employee RSARs occurred in April 2022 based on a reference price of €31.61.

A total expense of €215 thousand was incurred under this plan in fiscal 2022. This figure is the balance of income of €1,118 thousand in original commitments plus €1,333 thousand in expenses from hedging the commitments as cash flow hedges. Provisions totaled €1,871 thousand as of December 31, 2022.

	PSARs	RSARs	RSARs
Term (disbursement date)	March 2023	March 2022	March 2023
Outstanding as of Dec. 31, 2021	106,099	47,212	85,423
expired in 2022	-10,366	-508	-7,473
disbursed in 2022	0	-46,704	0
Outstanding as of Dec. 31, 2022	95,733	0	77,950
of which vested	95,733	n/a	77,950
Fair value as of Dec. 31, 2022 (in €)	0.01	n/a	23.99

PERFORMANCE PHANTOM SHARE PLAN

A portion of the variable Management Board remuneration is paid out as a medium-term component on the basis of a PPS plan. As in the previous year, the portion accruing for fiscal year 2023 was converted into PPS on the basis of the average Software AG share price less 10 percent as of February 2023. At the end of the four-year term, the resulting number of shares is settled in cash based on the average Software AG share price in February at the end of the term.

Additionally, there are PPS for which the number of shares is divided into three equal tranches with terms of one, two, and three years. These PPS become due at the end of the respective term and are likewise multiplied by the the average Software AG share price in the February at the end of the term. When PPS become due for the first time after the described vesting period, beneficiaries can reinvest them for up to six years and four months after leaving the Company to continue participating in its success. All PPS that have not yet been disbursed as of January 15 of the seventh year after having left the Company become due for disbursement no later than the trading day following the release of the preliminary first-quarter figures. At this point, or if exercised previously, the number of PPS is multiplied by the average Software AG share price on the sixth to tenth trading days. The decision regarding the possibility to exercise each quarter must be disclosed to the Company between the date of publication of the financial results and the following fifth trading day. Beneficiaries receive an amount per PPS equal to the dividends paid to Software AG shareholders prior to the disbursement date for these PPS.

The disbursement amount is capped at twice the allocation for all PPS.

A total expense of €1,755 thousand (2021: €2,362 thousand) was incurred under this plan in fiscal 2022. This figure is the balance of income of €4,565 thousand (2021: expenses of €3,339 thousand) in original commitments plus an expense of €6,320 thousand (2021: income of €977 thousand) from hedging transactions with banks for the commitments.

Provisions for the rights outstanding under the PPS plan amounted to €15,661 thousand (2021: €18,918 thousand) as of December 31, 2022.

The intrinsic value of the exercisable rights under the PPS plan as of December 31, 2022, amounted to €10,821 thousand (2021: €13,614 thousand) as of December 31, 2022.

[34] CORPORATE BODIES

MEMBERS OF THE SUPERVISORY BOARD:

Christian Yannick Lucas MBA, Harvard Business School Shareholder representative Chair since February 3, 2022	Managing Director and Co-Head EMEA, Silver Lake
Other supervisory board and similar seats:	• *Member of the advisory board of Global Blue Group Holding AG, Eysins, Switzerland* • *Member of the advisory board of Claudius France SAS, Lyon, France* • *Chair of the advisory board of Mistral Midco SAS, Paris, France* • *Member of the advisory board of Mirakl SAS, Paris, France* • *Chair of the advisory board of Tangerine Holdco SpA, Luxembourg (since October 7, 2022)*
Karl-Heinz Streibich Graduate in communications engineering Shareholder representative Chair until January 31, 2022	Honorary chair of the board of acatech—German Academy of Science and Engineering, Berlin, Germany
Other supervisory board seats:	• *Member of the supervisory board of Deutsche Telekom AG, Bonn, Germany* • *Member of the supervisory board of Siemens Healthineers AG, Erlangen, Germany* • *Member of the supervisory board of Münchener Rück AG, Munich, Germany*
Oliver Collmann Graduate in business administration Shareholder representative since April 4, 2022	Partner and CEO of AVEGA Fund Services S.a.r.l., Luxembourg
Other supervisory board seats:	*none*
Ralf Dieter Graduate in economics Shareholder representative until January 31, 2022	Entrepreneur
Other supervisory board seats:	• *Member of the supervisory board of Körber AG, Hamburg, Germany*

Madlen Ehrlich Graduate in international business Employee representative Deputy chair	Senior Director, Bid Operations and Sales Programs Software AG, Berlin, Germany
Other supervisory board seats:	*none*
Bettina Schraudolf Graduate in business information systems Employee representative	Chair of the Works Council Software AG, Darmstadt, Germany
Other supervisory board seats:	*none*
Ursula Soritsch-Renier Graduate in philosophy with a minor in computer science Shareholder representative	Group Chief Digital and Information Officer Saint Gobain, La Défense, France
Other supervisory board seats:	*none*
James Moon Whitehurst MBA, Harvard Business School Bachelor's degree in economics and computer science Shareholder representative since January 1, 2023	Consultant for Silver Lake
Other supervisory board and similar seats:	• *Non-executive director of the board of directors of United Airlines, Inc.* • *Non-executive director of the board of directors of Amplitude, Inc.* • *Non-executive director of the board of directors of Tanium Inc.* • *Member of the international advisory board of Banco Santander S.A.*
Markus Ziener Graduate in economics B.A. in business administration Shareholder representative until May 17, 2022	Managing Director, Asset and Financial Management, Software AG Foundation, Darmstadt, Germany
Other supervisory board and similar seats:	• *Member of the supervisory board of GLS Bank eG, Bochum, Germany* • *Member of the advisory board of Aceite de Oliva Valderrama S.L., Madrid, Spain*

MEMBERS OF THE MANAGEMENT BOARD:

Sanjay Brahmawar MBA in finance and marketing and bachelor's degree in civil engineering	Chief Executive Officer
Other supervisory board and similar seats:	• *Member of the foundation board of trustees of the Frankfurt School of Finance & Management, Frankfurt am Main, Germany* • *Member of the advisory board of ADAMOS GmbH, Darmstadt, Germany* • *Member of the supervisory board of HERE Global B.V., Eindhoven, Netherlands (since January 1, 2023)*
Daniela Bünger International business studies Chartered Global Management Accountant (CGMA)	Chief Financial Officer (since January 1, 2023)
Other supervisory board and similar seats:	*none*
Dr. Elke Frank Degree in law	Chief Human Resources Officer (until October 31, 2022)
Other supervisory board and similar seats:	• *Member of the supervisory board, chair of the Remuneration Committee of Scout24 AG, Munich, Germany* • *Member of the board of trustees of Fraunhofer IAO, Stuttgart, Germany*
Dr. Matthias Heiden Graduate in business administration	Chief Financial Officer (until December 31, 2022)
Other supervisory board and similar seats:	• *Member of the executive board and presidency of the German-Swedish Chamber of Commerce (DSHK), Stockholm, Sweden* • *Member of the advisory board of IKB Deutsche Industriebank AG, Düsseldorf, Germany*
Joshua Husk MBA in global management and bachelor's degree in business management	Chief Revenue Officer (since August 1, 2022)
Other supervisory board and similar seats:	*none*
Dr. Benno Quade PhD in law	Chief Operating Officer (since August 1, 2022)
Other supervisory board and similar seats:	*none*
Dr. Stefan Sigg Graduate in mathematics	Chief Product Officer
Other supervisory board and similar seats:	• *Member of the supervisory board of Deutsches Forschungszentrum für Künstliche Intelligenz GmbH (DFKI), Kaiserslautern, Germany* • *Member of the supervisory board of Fischer Information Technology AG, Radolfzell, Germany* • *Member of the board of trustees of Fraunhofer Institute for Secure Information Technology SIT, Darmstadt, Germany*

REMUNERATION OF THE MANAGEMENT BOARD PURSUANT TO SECTION 314(1), NO. 6 OF HGB

Total remuneration for the Management Board, including newly issued stock options, in fiscal 2022 was €11,576 thousand (2021: €12,826 thousand). This includes awards under the LIP 2022 stock option plan (2021: LIP 2021) in the amount of €2,188 thousand (2021: €3,000 thousand). Management Board remuneration further includes consideration for granted PPS totaling €1,128 thousand (2021: €1,935 thousand). Total remuneration under the PPS plan was €1,244 thousand (2021: €2,006 thousand) in fiscal 2022.

Remuneration for former Management Board members amounted to €1,404 thousand (2021: €1,426 thousand). Pension provisions, offset against plan assets for this group of people, totaled €4,212 thousand (2021: €16,375 thousand). Pension obligations for former Management Board members amounted to €23,431 thousand (2021: €35,299 thousand).

Software AG did not grant any advances or loans to Management Board members in fiscal 2022 or in fiscal 2021. Nor did it enter any contingent liabilities for these individuals.

Detailed disclosures on remuneration paid to Management Board members are presented in the Remuneration Report.

REMUNERATION OF THE SUPERVISORY BOARD PURSUANT TO SECTION 314(1), NO. 6 OF HGB

Total remuneration for the Supervisory Board amounted to €360 thousand (2021: €620 thousand) in fiscal 2022.

Software AG did not grant any advances or loans to Supervisory Board members in fiscal 2022 or in fiscal 2021. Nor did it enter any contingent liabilities for these individuals.

Detailed disclosures on remuneration paid to Supervisory Board members are presented in the Remuneration Report.

[35] RELATED PARTY TRANSACTIONS

A related party as defined by IAS 24 Related Party Disclosures is any legal or natural person able to exercise control over Software AG or its subsidiaries or is subject to control or significant influence by Software AG or its subsidiaries. In particular, this includes legal or natural persons holding a share in Software AG through which they have significant influence over Software AG (Software AG Foundation, Darmstadt, Germany; shareholding unchanged in 2022), and the members of Software AG's corporate bodies, whose remuneration is specified in Note [34] as well as in the Remuneration Report.

On December 13, 2021, Software AG entered into a framework agreement for a strategic partnership with certain affiliates of Silver Lake Partners VI Cayman, L.P. and Silver Lake Alpine II, L.P. (Hereinafter, these entities together with their affiliates are referred to as "Silver Lake.") In January 2022, the Darmstadt District Court appointed Christian Yannick Lucas, Managing Director at Silver Lake and co-head of the firm's activities in Europe, as member of the Supervisory Board, which went into effect on February 3, 2022. On May 17, 2022, the Annual Shareholders' Meeting confirmed Lucas as member of the Supervisory Board.

As stipulated in the agreement with Silver Lake, Software AG issued subordinated unsecured convertible bonds to Silver Lake with a total nominal value of €344,300 million in the fiscal year. For further information, please refer to Note [27].

Under the agreement with Silver Lake, Software AG reimbursed Silver Lake for €1.5 million in transaction costs incurred in connection with the issuance of the convertible bonds. Additionally, Silver Lake provides certain management advisory services to Software AG at no cost for Software AG other than the reimbursement of out-of-pocket expenses. Silver Lake invoiced for expenses in the amount of €16 thousand in fiscal 2022.

DISCLOSURES ON REMUNERATION PAID TO RELATED PARTIES PURSUANT TO IAS 24

Parties related to Software AG also include the members of the Management Board and the Supervisory Board.

Remuneration paid to the Management Board can be broken down as follows:

in € thousands	2022	2021
Short-term benefits	5,837	5,762
Termination of service benefits	1,000	0
Post-service benefits	1,308	1,491
Share-based remuneration	-933	2,413
	7,212	**9,395**

Net pension assets with respect to Management Board members amounted to €2,086 thousand (2021: €699 thousand). Gross pension obligations with respect to Management Board members amounted to €2,186 thousand (2021: €3,577 thousand). The decrease in pension obligations resulted mainly from the increase in the discount rate from 0.75 percent in 2021 to 4.20 percent in 2022.

Furthermore, obligations from share-based compensation plans, including bonuses converted to PPS at year-end, for members of the Management Board amounted to €6,770 thousand (2021: €7,559 thousand).

Obligations from short-term variable remuneration components for members of the Management Board amounted to €1,738 thousand (2021: €2,554 thousand).

Remuneration to the members of the Supervisory Board in fiscal year 2022 totaled €360 thousand (2021: €620 thousand). This remuneration included a fixed short-term component and compensation for committee work. Furthermore, former Supervisory Board chair (until January 31, 2022) Karl-Heinz Streibich was compensated in connection with his former role as CEO with €274 thousand (2021: €274 thousand) in share-based remuneration and €378 thousand (2021: €359 thousand) in post-service benefits.

The total remuneration for members of the Management Board and Supervisory Board amounted to €8,224 thousand (2021: €10,648 thousand).

Remuneration of the Management and Supervisory Boards is outlined in detail in the Remuneration Report. The Remuneration Report presents the structure and amount of the individual components. The Remuneration Report is a separate report pursuant to section 162 of AktG.

No other business transactions took place between Software AG and the members of the Management Board or the Supervisory Board in fiscal year 2022.

[36] AUDITOR FEES

On May 17, 2022, the shareholders of Software AG elected Deloitte GmbH Wirtschaftsprüfungsgesellschaft (Deloitte) as auditor of the Consolidated Financial Statements for the 2022 fiscal year. General and administrative expenses include total fees to Deloitte in the amount of €963 thousand. Of this amount, €810 thousand relate to financial statement audit services, €50 thousand to other attestation services, and €103 thousand to miscellaneous services. Other attestation services relate to audits of the Combined Non-Financial Statement and the Remuneration Report, miscellaneous services primarily to services in connection with quarterly financial reporting.

[37] EVENTS AFTER THE BALANCE SHEET DATE

There were no events that occurred between December 31, 2022, and the date of release of these Consolidated Financial Statements that were of significance to the Consolidated Financial Statements.

[38] EXEMPTION FOR DOMESTIC GROUP COMPANIES PURSUANT TO SECTION 264(3) OF HGB

With the approval of the relevant shareholders' meetings, SAG Deutschland GmbH, Darmstadt, Germany, SAG Consulting Services GmbH, Darmstadt, Germany, Cumulocity GmbH, Düsseldorf, Germany, and SAG LVG mbH, Darmstadt, Germany, which are included in the Consolidated Financial Statements of Software AG, have been exempt from the duty to prepare and publish annual financial statements and a management report, and from the duty to have them audited, in compliance with provisions applicable to corporations in accordance with section 264(3) of HGB.

DATE AND AUTHORIZATION OF ISSUE

Software AG's Management Board approved the Consolidated Financial Statements on March 8, 2023.

Darmstadt, March 8, 2023
Software AG

S. Brahmawar D. Bünger

J. Husk Dr. B. Quade

Dr. S. Sigg

Auditor's Reports

Independent Auditor's Report

To Software Aktiengesellschaft, Darmstadt/Germany

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE COMBINED MANAGEMENT REPORT

Audit Opinions

We have audited the consolidated financial statements of Software Aktiengesellschaft, Darmstadt/Germany, and its subsidiaries (the Group) which comprise the consolidated balance sheet as at December 31, 2022, the consolidated income statement, the statement of comprehensive income, the consolidated statement of changes in equity and the statement of cash flows for the financial year from January 1 to December 31, 2022, and the notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the combined management report for the parent and the group of Software Aktiengesellschaft, Darmstadt/Germany, for the financial year from January 1 to December 31, 2022. In accordance with German legal requirements, we have not audited the content of the combined non-financial statement included in the combined management report, nor have we audited the content of the combined corporate governance statement referred to in the section "Statement on Corporate Governance" of the combined management report. In addition, we have not audited the content of the executive directors' assessment on the appropriateness and effectiveness of the entire internal controls and the risk and opportunity management system marked as unaudited and included in section "Opportunity and Risk Report", subsection "Position Taken by the Management Board in Accordance with the 2022 German Corporate Governance Code" included in the combined management report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) German Commercial Code (HGB) and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at December 31, 2022 and of its financial performance for the financial year from January 1 to December 31, 2022, and
- the accompanying combined management report as a whole provides an appropriate view of the Group's position. In all material respects, this combined management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the combined management report does not cover the content of the afore-mentioned combined statements nor does it cover the afore-mentioned statement of the executive directors on the appropriateness and effectiveness of the internal controls and the opportunity and risk management system.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the combined management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the combined management report in accordance with Section 317 HGB and the EU Audit Regulation (No. 537/2014; referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the combined management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2022. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In the following we present the key audit matters we have determined in the course of our audit:

1. Recognition of software license revenues
2. Accounting for the StreamSets, Inc., acquisition
3. Impairment of goodwill recognized for the Digital Business and Professional Services segments

Our presentation of these key audit matters has been structured as follows:

a) description (including reference to corresponding information in the consolidated financial statements)
b) auditor's response

1. Recognition of software license revenues

a) In the financial year 2022, Software Aktiengesellschaft realized revenue of mEUR 958.2 (prior year: mEUR 833.8), of which mEUR 314.5 (prior year: mEUR 240.5) relate to software license revenues. The evaluation of revenue recognition generated from software licenses bears an inherent risk of error due to the complexity of customer agreements, which are frequently drafted as multi-component agreements in combination with maintenance and/or services. Software Aktiengesellschaft determines the revenues using the residual method by deducting all determinable individual sale prices from the total transaction value in a first step, and distributing the residual amount among the software licenses. The residual amount of the agreed transaction price is allocated to the partial performances (software licenses). The individual sale prices used are substantiated by Software Aktiengesellschaft based on the annual extensions of maintenance agreements after an initial term has expired. Since the accounting requires the executive directors to use significant judgment for identifying performance obligations and allocating the transaction price to separate performance obligations on the basis of the individual sale prices, we classified the recognition of software license revenues as a key audit matter. The executive directors' disclosures on the recognition of software license revenues are included in sections [2] and [5] of the notes to the consolidated financial statements.

b) As part of our audit, we firstly obtained an understanding about the design of the internal processes and controls for recognizing revenue from software licenses, including accounting-related controls for identifying performance obligations and determining individual sale prices. We examined the controls relevant to the audit in terms of their design and establishment. Furthermore, we evaluated whether and to what extent revenue recognition is open to influence by subjectivity, complexity or other inherent risk factors, and assessed the methods, assumptions and data applied in the estimations used. We assessed whether the accounting policies used by the executive directors of Software Aktiengesellschaft for recognizing software license revenue complied with the requirements of IFRS 15. In performing substantive procedures, we inspected and assessed all agreements greater than a relevant size and, additionally, further agreements for granting software licenses selected using a statistical procedure, and, based on the knowledge obtained in the process, examined them for compliance with the applicable accounting policies. In our audit, we examined the analysis prepared by the executive directors for validating the centrally determined individual sale prices. In addition, we obtained external confirmations of the material terms and conditions of agreements from selected customers for the purpose of examining performance obligations and potential side agreements.

2. **Accounting for the StreamSets, Inc., acquisition**
   a) On April 18, 2022, Software Aktiengesellschaft acquired 100% of the shares in StreamSets, Inc., San Francisco/US. The consideration transferred amounted to mEUR 553.5. As part of the purchase price allocation to identifiable assets and assumed liabilities, Software Aktiengesellschaft determined revalued net assets of mEUR 154.0 and goodwill of mEUR 399.6. The executive directors of Software Aktiengesellschaft consulted an external expert to assist in determining and measuring the acquired identifiable assets and assumed liabilities. The identification and measurement of the acquired assets, especially of intangible assets, is complex and based on discretionary assumptions of the executive directors. Material assumptions relate to the future cash flows derived from asset-specific revenue and margin expectations and to estimated useful lives and the discount rates applied. Against this background, this matter was of particular relevance for our audit. The executive directors' disclosures on the accounting for the StreamSets, Inc., acquisition are included in sections [2] and [3] of the notes to the consolidated financial statements.

   b) As part of our audit of the accounting for the StreamSets, Inc., acquisition, we firstly obtained an understanding of the purchase price allocation process established by the executive directors, and assessed the underlying documentation. Moreover, we evaluated whether and to what extent the accounting for the StreamSets, Inc., acquisition was influenced by subjectivity, complexity or other inherent risk factors. We compared the total purchase price with the underlying purchase agreement and records of payment. By relying on inquiries of the executive directors and supporting evidence, such as the financial accounts of StreamSets, Inc, and the purchase agreement, we evaluated whether the assets and liabilities were fully identified in the purchase price allocation. We verified the applied valuation models as regards methodical appropriateness and mathematical correctness. In addition, we critically examined the budget calculations and expected future cash flows used in the valuation models as well as the underlying material assumptions and data, and verified them based on macroeconomic and industry-specific market data and checked them against suitable supporting evidence. Finally, we assessed whether the future cash flows estimated for the valuation were derived appropriately from the assumptions and data. We have audited the derivation of the discount rates by calling in our own valuation experts by means of discussing the parameters used for the determination of the applied discount rates. We evaluated the competence and capability of the external expert commissioned by Software Aktiengesellschaft.

3. **Impairment of goodwill recognized for the Digital Business and Professional Services segments**

   a) As at December 31, 2022, goodwill of mEUR 1,381.8 (51.6% of total assets) is recognized under non-current assets in the consolidated financial statements of the Company. Goodwill relating to Digital Business amounts to mEUR 1,049.0 (prior year: mEUR 624.5) as at December 31, 2022 and goodwill relating to Professional Services amounts to mEUR 0 (prior year: mEUR 25.3). At the level of the operating segments as cash-generating units, the executive directors of Software Aktiengesellschaft perform annual impairment tests for goodwill according to IAS 36. Fair value is determined by the executive directors using a discounted cash flow method. Within Professional Services, the executive directors of Software Aktiengesellschaft concluded an agreement for subcontracting Persistent Systems to render professional services in North America in the financial year 2022, as a result of which material margin assumptions for planning changed in comparison to the prior years. As a consequence, Software Aktiengesellschaft determined that the goodwill relating to Professional Services was impaired by mEUR 25.3 as at September 30, 2022. Material assumptions in impairment testing relate to the cash flows derived from the executive directors' expectations for revenue growth and margins, to discount rates and the growth rate for perpetual annuity. The impairment tests to be carried out on this goodwill are complex and require a considerable level of judgment of the executive directors, especially in respect of the two segments Digital Business and Professional Services. Therefore, the impairment testing of goodwill of these two segments was of particular relevance for our audit. The executive directors' disclosures on goodwill are included in sections [2] and [17] of the notes to the consolidated financial statements.

   b) In examining the recoverability of the goodwill relating to the Digital Business and Professional Services segments, we retraced the executive directors' approach for performing their impairment tests. In a first step, we obtained an understanding about the processes established by the executive directors to assess recoverability, and reviewed the underlying documentation. In addition, we examined identified controls relevant to the audit in terms of their design and establishment. Furthermore, we evaluated whether and to what extent the determination of goodwill impairment is open to influence by subjectivity, complexity and other inherent risk factors. We verified the applied valuation models as regards methodical appropriateness and mathematical correctness. We examined whether the planning data used in the valuation models coincides with the budget calculations prepared by the executive directors of the cash-generating units concerned. We verified the executive directors' material assumptions underlying the budget calculations by means of macroeconomic and industry-specific market data, and critically examined the underlying data for estimating future cash flows of cash-generating units, and checked them against suitable supporting evidence. We have audited the derivation of the discount rates by calling in our own valuation experts by means of discussing the parameters used for the determination of the applied discount rates. Furthermore, we conducted own sensitivity analyses for selected relevant assumptions.

Other Information

The executive directors and/or the supervisory board are responsible for the other information. The other information comprises

- the report of the supervisory board,
- the remuneration report pursuant to Section 162 German Stock Corporation Act (AktG),
- the combined non-financial statement pursuant to Sections 289b to 289e and 315b and 315c HGB, which is contained in the section "Combined Non-Financial Statement" of the combined management report,
- the combined corporate governance statement pursuant to Sections 289f and 315d HGB, which is referred to in the section "Statement on Corporate Governance" of the combined management report,
- the executive directors' assessment on the appropriateness and effectiveness of the entire internal

controls and the risk and opportunity management system marked as unaudited and included in section "Opportunity and Risk Report", subsection "Position Taken by the Management Board in Accordance with the 2022 German Corporate Governance Code" included in the combined management report,
- the executive directors' confirmation regarding the consolidated financial statements and the combined management report pursuant to Section 297 (2) sentence 4 and Section 315 (1) sentence 5 HGB, and
- all other parts of the annual report,
- but not the consolidated financial statements, not the audited content of the combined management report and not our auditor's report thereon.

The supervisory board is responsible for the report of the supervisory board. The executive directors and the supervisory board are responsible for the declaration according to Section 161 AktG, which is part of the combined corporate governance statement, and for the remuneration report. Otherwise, the executive directors are responsible for the other information.

Our audit opinions on the consolidated financial statements and on the combined management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information identified above and, in doing so, to consider whether the other information
- is materially inconsistent with the consolidated financial statements, with the audited content of the combined management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the combined management report that as a whole provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the combined management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also

- identify and assess the risks of material misstatement of the consolidated financial statements and of the combined management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.
- obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the combined management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.
- evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRS as adopted by the EU and with the additional requirements of German commercial law pursuant to Section 315e (1) HGB.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the combined management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- perform audit procedures on the prospective information presented by the executive directors in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the actions taken or safeguards applied to eliminate independence threats.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements for the current period and are therefore the key audit matters. We describe these matters in the auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Report on the Audit of the Electronic Reproductions of the Consolidated Financial Statements and of the Combined Management Report Prepared for Publication Pursuant to Section 317 (3a) HGB

Audit Opinion

We have performed an audit in accordance with Section 317 (3a) HGB to obtain reasonable assurance whether the electronic reproductions of the consolidated financial statements and of the combined management report (hereinafter referred to as "ESEF documents") prepared for publication, contained in the file, which has the SHA-256 value 197a15a0ee10d5ae2e9c530c75ade1561977112f6348486406a0e4bda1aed289, meet, in all material respects, the requirements for the electronic reporting format pursuant to Section 328 (1) HGB ("ESEF format"). In accordance with the German legal requirements, this audit only covers the conversion of the information contained in the consolidated financial statements and the combined management report into the ESEF format, and therefore covers neither the information contained in these electronic reproductions nor any other information contained in the file identified above.

In our opinion, the electronic reproductions of the consolidated financial statements and of the combined management report prepared for publication contained in the file identified above meet, in all material respects, the requirements for the electronic reporting format pursuant to Section 328 (1) HGB. Beyond this audit opinion and our audit opinions on the accompanying consolidated financial statements and on the accompanying combined management report for the financial year from January 1 to December 31, 2022 contained in the "Report on the Audit of the Consolidated Financial Statements and of the Combined Management Report" above, we do not express any assurance opinion on the information contained within these electronic reproductions or on any other information contained in the file identified above.

Basis for the Audit Opinion

We conducted our audit of the electronic reproductions of the consolidated financial statements and of the combined management report contained in the file identified above in accordance with Section 317 (3a) HGB and on the basis of the IDW Auditing Standard: Audit of the Electronic Reproductions of Financial Statements and Management Reports Prepared for Publication Purposes Pursuant to Section 317 (3a) HGB (IDW AuS 410 (06.2022)). Our responsibilities in this context are further described in the "Group Auditor's Responsibilities for the Audit of the ESEF Documents" section. Our audit firm has applied the IDW Quality Assurance Standard: Requirements for Quality Management in the Audit Firm (IDW QS 1).

Responsibilities of the Executive Directors and the Supervisory Board for the ESEF Documents

The executive directors of the parent are responsible for the preparation of the ESEF documents based on the electronic files of the consolidated financial statements and of the combined management report according to Section 328 (1) sentence 4 no. 1 HGB and for the tagging of the consolidated financial statements according to Section 328 (1) sentence 4 no. 2 HGB.

In addition, the executive directors of the parent are responsible for such internal controls that they have considered necessary to enable the preparation of ESEF documents that are free from material intentional or unintentional non-compliance with the requirements for the electronic reporting format pursuant to Section 328 (1) HGB.

The supervisory board is responsible for overseeing the process for preparing the ESEF documents as part of the financial reporting process.

Group Auditor's Responsibilities for the Audit of the ESEF Documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB. We exercise professional judgment and maintain professional skepticism throughout the audit. We also

- identify and assess the risks of material intentional or unintentional non-compliance with the requirements of Section 328 (1) HGB, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinion.
- obtain an understanding of internal control relevant to the audit on the ESEF documents in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- evaluate the technical validity of the ESEF documents, i.e. whether the file containing the ESEF documents meets the requirements of the Delegated Regulation (EU) 2019/815, in the version in force at the balance sheet date, on the technical specification for this electronic file.
- evaluate whether the ESEF documents enable a XHTML reproduction with content equivalent to the audited consolidated financial statements and to the audited combined management report.
- evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) in accordance with the requirements of Articles 4 and 6 of the Delegated Regulation (EU) 2019/815, in the version in force at the balance sheet date, enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual shareholders' meeting on May 17, 2022. We were engaged by the supervisory board on October 22, 2022 and thus, we have been the group auditor of Software Aktiengesellschaft, Darmstadt/Germany, since the financial year 2022.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

OTHER MATTER – USE OF THE AUDITOR'S REPORT

Our auditor's report must always be read together with the audited consolidated financial statements and the audited combined management report as well as with the audited ESEF documents. The consolidated financial statements and the combined management report converted into the ESEF format – including the versions to be submitted for inclusion in the Company Register – are merely electronic reproductions of the audited consolidated financial statements and the audited combined management report and do not take their place. In particular, the ESEF report and our audit opinion contained therein are to be used solely together with the audited ESEF documents made available in electronic form.

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Kirsten Gräbner-Vogel.

Frankfurt am Main/Germany, March 8, 2023

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

(Kirsten Gräbner-Vogel)	(Sebastian Zandt)
Wirtschaftsprüferin	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Audit Report on the Combined Non-Financial Statement

Limited Assurance Report of the Independent Practitioner Regarding the Non-financial Reporting

To Software AG, Darmstadt/Germany

Our Engagement

We have performed a limited assurance engagement on the consolidated non-financial statement of Software AG, Darmstadt/Germany, (hereafter referred to as “the Company”), which is combined with the non-financial statement of the Company and included in the group management report, which is combined with the management report, for the period from January 1 to December 31, 2022 (hereafter referred to as “non-financial reporting”).

Our engagement did not cover the external sources of documentation referenced in the Company’s non-financial reporting.

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the non-financial reporting in accordance with Sections 289c to 289e German Commercial Code (HGB), Sections 315c in conjunction with Sections 289c to 289e HGB and Article 8 of Regulation (EU) 2020/852 of the European Parliament and the Council of June 18, 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (hereafter referred to as “EU Taxonomy Regulation”) and the delegated acts adopted thereon, as well as with their own interpretation of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon, as is presented in the section “Disclosure Requirements under the EU Taxonomy Regulation” of the non-financial reporting.

These responsibilities of the executive directors include the selection and application of appropriate methods regarding the non-financial reporting and the use of assumptions and estimates for individual non-financial disclosures of the Group which are reasonable under the given circumstances. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of a non-financial reporting that is free from misstatement, whether due to fraud (fraudulent non-financial reporting) or error.

Some of the wording and terminology contained in the EU Taxonomy Regulation and the delegated acts adopted thereon are still subject to considerable interpretation uncertainty and have not yet been officially clarified. Therefore, the executive directors have laid down their own interpretation of the EU Taxonomy Regulation and of the delegated acts adopted thereon in the section “Disclosure Requirements under the EU Taxonomy Regulation” of the non-financial reporting. They are responsible for the reasonableness of this interpretation. As there is the inherent risk that indefinite legal concepts may allow for various interpretations, the legal conformity of the interpretation is prone to uncertainty.

The preciseness and completeness of the environmental data in the non-financial reporting is subject to inherent restrictions resulting from the manner in which the data was collected and calculated as well as from assumptions made.

Independence and Quality Assurance of the Audit Firm
We have complied with the German professional requirements on independence and other professional rules of conduct.

Our firm applies the national statutory rules and professional announcements–particularly of the "Professional Charter for German Public Auditors and German Sworn Auditors" (BS WP/vBP) and of the IDW Quality Assurance Standard "Quality Assurance Requirements in Audit Practices" (IDW QS 1) promulgated by the Institut der Wirtschaftsprüfer (IDW)–and therefore maintains a comprehensive quality assurance system comprising documented regulations and measures in respect of compliance with professional rules of conduct, professional standards, as well as relevant statutory and other legal requirements.

Responsibilities of the Independent Practitioner
Our responsibility is to express a conclusion on the non-financial reporting based on our work performed within our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board (IAASB). This Standard requires that we plan and per-form the assurance engagement so that we can conclude with limited assurance whether matters have come to our attention to cause us to believe that the non-financial reporting of the Company, with the exception of the external sources of documentation referenced therein, has not been prepared, in all material respects, in accordance with Sections 289c to 289e HGB, Sections 315c in conjunction with Sections 289c to 289e HGB and the EU Taxonomy Regulation and the delegated acts adopted thereon, as well as with the interpretation by the executive directors presented in the section "Disclosure Requirements under the EU Taxonomy Regulation" of the non-financial reporting.

The procedures performed in a limited assurance engagement are less in extent than for a reasonable assurance engagement; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. The choice of assurance work is subject to the practitioner's professional judgment.

Within the scope of our limited assurance engagement, which we performed between November 2022 and March 2023, we performed, among others, the following procedures and other work:

- Gaining an understanding of the structure of the sustainability organization, and of the involvement of stakeholders
- Inquiries of the executive directors and relevant personnel who have been involved in the preparation process, about the preparation process, about the system of internal control relating to this process, as well as about disclosures in the non-financial reporting
- Identification of probable risks of material misstatement in the non-financial reporting
- Analytical evaluation of selected disclosures contained in the non-financial reporting
- Squaring of selected disclosures with the corresponding data in the consolidated financial statements and in the combined management report
- Assessment of the presentation of the non-financial reporting
- Evaluation of the process used to identify taxonomy-eligible and taxonomy-aligned economic activities and of the corresponding disclosures in the non-financial reporting

The determination of the disclosures pursuant to Article 8 of the EU Taxonomy Regulation requires the executive directors to make interpretations of indefinite legal concepts. As there is the inherent risk that indefinite legal concepts may allow for various interpretations, the legal conformity of the interpretation, and hence our related examination, is prone to uncertainty.

Practitioner's Conclusion
Based on the work performed and the evidence obtained, nothing has come to our attention that causes us to believe that the combined non-financial statement of Software AG for the period from January 1 to December 31, 2022, does not comply, in all material respects, with Sections 289c to 289e HGB, Sections 315c in conjunction with Sections 289c to 289e HGB and the EU Taxonomy Regulation and the delegated acts adopted thereon, as well as with the interpretation by the executive directors presented in the section "Disclosure Requirements under the EU Taxonomy Regulation" of the non-financial reporting.

We do not express a conclusion on the external sources of documentation referenced in the non-financial reporting.

Restriction of Use

We issue this report as stipulated in the engagement letter agreed with the Company (including the "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)" as of January 1, 2017, promulgated by the Institut der Wirtschaftsprüfer (IDW)). We draw attention to the fact that the assurance engagement was performed for the purposes of the Company and the report is solely designed for informing the Company about the findings of the assurance engagement. Therefore, it may not be suitable for another than the aforementioned purpose. Hence, this report should not be used by third parties as a basis for any (asset) decision.

We are liable solely to the Company. However, we do not accept or assume liability to third parties. Our conclusion was not modified in this respect.

Frankfurt am Main/Germany, March 8, 2023

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

(Kirsten Gräbner-Vogel)	(Sebastian Dingel)
Partner/German Public Auditor	Partner

Remuneration Report

Remuneration Report

1 Basis of Presentation

The Remuneration Report was prepared in accordance with the provisions of section 162 of the German Stock Corporation Act (AktG). It is also oriented to the current recommendations of the German Corporate Governance Code (GCGC) and to those of the Remuneration Reporting Working Group of the Institute of Public Auditors in Germany (Institut der Wirtschaftsprüfer in Deutschland e. V., IDW).

The 2021 Remuneration Report was approved under agenda item 6 at the Annual Shareholders' Meeting on May 17, 2022, by 65.71 percent of votes cast in accordance with section 120a(4) of AktG. Feedback and suggestions from shareholders on the Remuneration Report received and requested by the Management Board and Supervisory Board were incorporated into this year’s reporting. The Remuneration Report was prepared based on the principles of comprehensibility, structural clarity, and transparency.

2 Management Board Member Remuneration

2.1 REMUNERATION SYSTEM

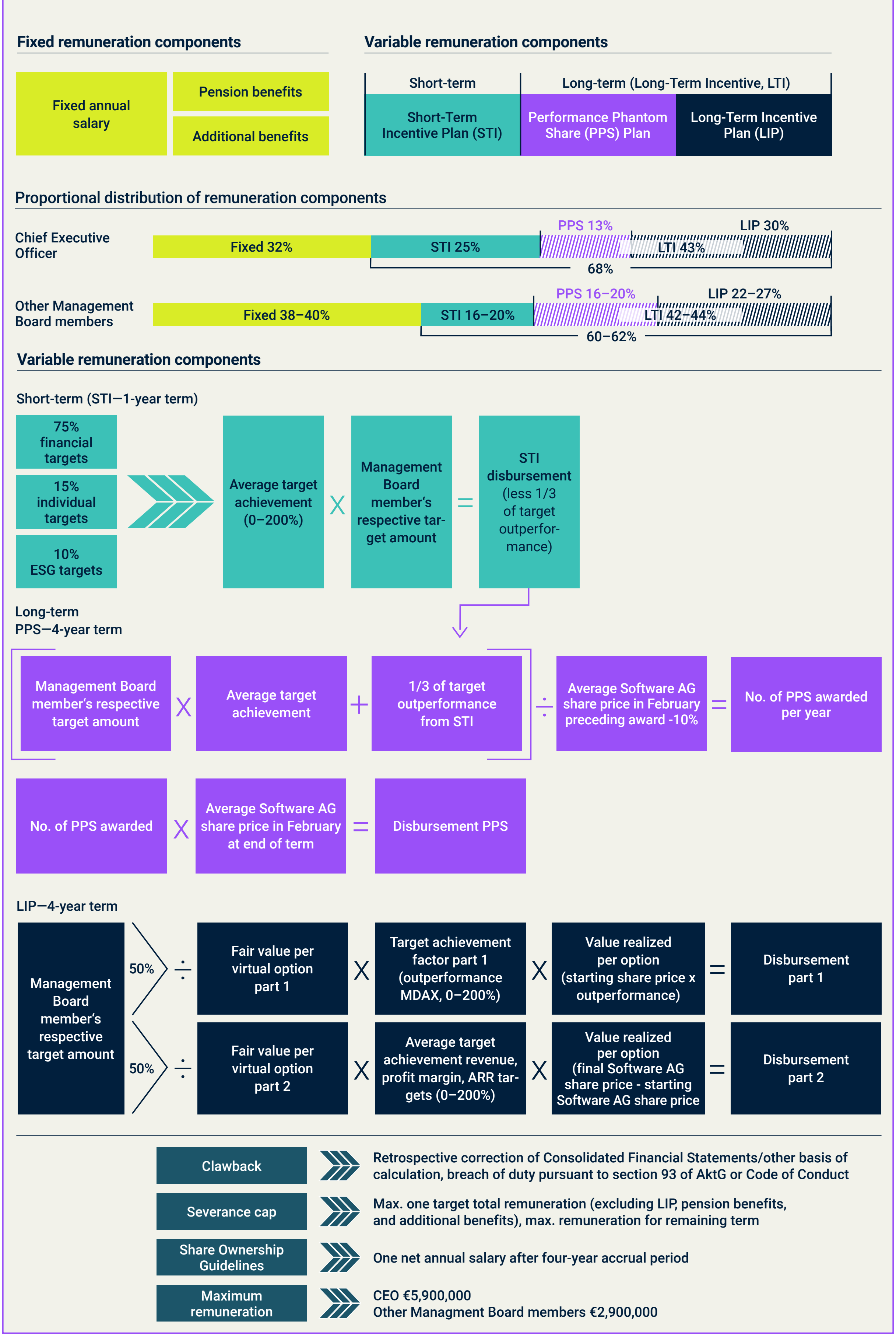
The remuneration system for the members of the Software AG Management Board is designed in a simple, comprehensible, and clear manner and is geared towards promoting sustainable and long-term value creation, implementation of the business strategy, and growth in the business lines. It reflects various objectives geared toward profitability, company growth, enterprise value creation, as well as environmental and social sustainability. These targets prioritize the long-term goals defined by Software AG's Helix strategy. The remuneration system uses financial and non-financial metrics with differing, primarily multi-year terms so as to sustainably support the Company's strategic success. In creating the remuneration system, particular emphasis was given to aligning shareholder interests and expectations with Management Board remuneration.

Excluding the following amendment, the remuneration system has been in effect since the 2021 fiscal year and was approved by a 94.83 percent majority at the Annual Shareholders' Meeting on May 12, 2021, pursuant to section 120a(1) of AktG. Following an in-depth assessment of the remuneration system, Software AG's Personnel Committee and Supervisory Board implemented an amendment effective as of January 1, 2022, regarding the weighting of annual targets within the framework of short-term variable remuneration (short-term incentive). The amendment was approved by an 85.03 percent majority at the Annual Shareholders' Meeting on May 17, 2022, pursuant to section 120a(1) of AktG.

The Management Board remuneration system was reviewed and adopted at the beginning of 2021 by the Supervisory Board in compliance with the legal requirements of sections 87 and 87a of AktG and the recommendations of the GCGC.[1] In this connection, the Supervisory Board engaged an independent external consultant. The Personnel Committee was responsible for preparing the resolution of the Supervisory Board and for regularly providing the Supervisory Board with all information required by the Supervisory Board to carry out a review of the remuneration system. In accordance with legal regulations, the Supervisory Board conducts a review of the remuneration system at its reasonable discretion, but every four years at the latest.

[1] In the 2022 fiscal year, only one resolution for an amendment to the remuneration system, which in essence remained unchanged, was passed.

Remuneration System Overview



2.2 INFORMATION ON DEVIATIONS FROM THE MANAGEMENT BOARD REMUNERATION SYSTEM

The current remuneration system applies to any future contract renewals and new employment contracts signed with Management Board members as of January 1, 2021.[1] Accordingly, Dr. Stefan Sigg's (Chief Product Officer, CPO) contract, which was renewed in 2021, and those contracts signed in the year under review with first-time Management Board appointees, Joshua Husk (Chief Revenue Officer, CRO) and Dr. Benno Quade (Chief Operating Officer, COO), generally correspond with the current remuneration system. Specific deviations were established for Joshua Husk; these will be discussed in further detail below.

[1] The weighting of annual targets within the framework of short-term variable remuneration, which went into force following approval by the Annual Shareholders' Meeting on May 17, 2022, is not part of Management Board members' contracts. As such, this amendment became applicable to all Management Board members serving in the fiscal year regardless of any new contracts or contract renewals.

Sanjay Brahmawar (Chief Executive Officer, CEO) is serving under his existing contract and is thus not yet subject to all amended policies of the current remuneration system. However, the Supervisory Board approved a renewal of his contract on October 27, 2022, whereby the contract will become subject to the current remuneration system, effective as of August 1, 2023.

Dr. Elke Frank (Chief Human Resources Officer, CHRO) left the Management Board as of October 31, 2022, Dr. Matthias Heiden (Chief Financial Officer, CFO) as of December 31, 2022. Because both contracts were signed before January 1, 2021, they were not yet subject to the current remuneration system.

Those aspects of remuneration under the old remuneration system applicable to Sanjay Brahmawar, Dr. Elke Frank, and Dr. Matthias Heiden that deviate from the current remuneration system are described separately in section 2.4 where relevant.

The following table shows temporary deviations from some components of the remuneration system that was approved by the Annual Shareholders' Meeting on May 17, 2022, in connection with the first-time appointment of Joshua Husk to the Management Board in the 2022 fiscal year:

Component	Remuneration system	Deviation for Joshua Husk
Maximum remuneration	Maximum remuneration for the members of the Management Board other than the CEO is €2,900,000 each.	Maximum remuneration for Joshua Husk is €4,000,000. The one-time payment (sign-on bonus) described below may increase the maximum remuneration in the year of disbursement by the amount of the sign-on bonus.
Proportional distribution of remuneration components for Management Board members other than the CEO	Fixed remuneration (fixed annual salary, pension benefits, and additional benefits) is between approximately 38 and 40 percent of target total remuneration. Variable remuneration is between approximately 60 and 62 percent of target total remuneration. Of that, the STI (target amount) accounts for between approximately 16 and 20 percent of target total remuneration and LTI (target amount) for between about 42 and 44 percent of target total remuneration.	Joshua Husk's fixed remuneration accounts for approximately 35 percent of his target total remuneration. Joshua Husk's variable remuneration accounts for approximately 65 percent of his target total remuneration. Of that, the STI (target amount) accounts for about 29 percent of target total remuneration and the LTI (target amount) for about 36 percent of target total remuneration.

Component	Remuneration system	Deviation for Joshua Husk
Sign-on bonus	The remuneration system does not provide for sign-on bonuses.	Joshua Husk shall receive a sign-on bonus in the amount of € 538,097, which under certain conditions is subject to repayment in the event of his departure from the Management Board within 14 months from his start date. The one-time sign-on bonus was not factored into the calculation of proportional distribution. It will not be included in the calculation of maximum remuneration in the year of disbursement.
Pension benefits	Management Board members residing in Germany receive an additional annual cash payment to contribute to their private pension planning. This payment is equal to €150,000 for full members of the Management Board.	Despite residing outside of Germany, Joshua Husk shall also receive the cash payment determined for Management Board members other than the CEO of €150,000 to contribute to his private pension planning.

In accordance with section 87a (2) of AktG, the Supervisory Board is entitled to temporarily deviate from the remuneration system if extraordinary circumstances so require for the long-term wellbeing of the Company. The remuneration system cites a corporate or economic crisis as examples of such circumstances. By legal definition, extraordinary circumstances do not only occur in times of crisis, but are also to be assumed when, with relevant likelihood, the deviation is expected to promote sustainable value creation and profitability for the Company.

Because Joshua Husk could not have been acquired in the absence of these deviations and the Supervisory Board is certain that Joshua Husk's appointment to the Management Board is highly likely to have a lasting positive impact on the success of the Company and is in the interest of the Company, the aforementioned deviations were deemed necessary.

The maximum remuneration as well as the remuneration structure (proportional distribution of the remuneration components and no sign-on bonus) stipulated by the remuneration system are inadequate when compared to the remuneration of US-based CROs of global software companies. The US IT sector in particular is a highly competitive market when it comes to talent and thus remuneration, due among other factors to the dominance of hyperscalers. Because 50 percent of Software AG's total addressable market (TAM) is in the USA and the largest share of revenue is generated there, a strong sales presence is essential in this key market. This is mainly necessary in order to strengthen the role of US representation, eliminate time zone differences, language barriers, and travel restrictions, better leverage existing networks in the USA, and further expand market expertise and experience. A period during which Software AG's CRO was not at Management Board level revealed the importance of representing the key values of customer focus and expertise in the Management Board. Consequently, the installation of a member of the Management Board in the USA responsible for Sales is necessary for the long-term wellbeing of the Company as are the resulting temporary deviations from the remuneration system. This change had to occur in a timely manner in order to continue driving the next stage of transformation and long-term strategy implementation.

An in-depth assessment of prospective candidates was conducted as part of the search process. Overall, the key criterion was that the candidate's qualifications and expertise would drive sustainable value creation and profitability in alignment with the Company's interests. The Supervisory Board is certain that due to his strategic expertise as well as his track record in transformation and infrastructure software this applies to the candidate appointed to the Management Board, Joshua Husk.

2.3 REMUNERATION AMOUNTS AND ADHERENCE TO MAXIMUM REMUNERATION

The Supervisory Board determines target total remuneration for each Management Board member. Target total remuneration comprises the sum of all remuneration components relevant to total remuneration. For the variable remuneration components, the respective target amounts correspond to 100 percent of the budgeted values. The Supervisory Board reviews the variable remuneration component targets each fiscal year. Based on past years' results, the Supervisory Board decides in the context of budget planning for the current year which objectives the Company and the members of the Management Board need to meet.

The total remuneration (sum of all fixed and variable remuneration components as shown in the graphic on page 248) granted to members of the Management Board in a fiscal year is capped (maximum remuneration) at an absolute amount—whether payment is made during the given year or at a later date. Maximum remuneration for the CEO is €5,900,000 and for the other members of the Management Board €2,900,000 each.

If total remuneration calculated for one year exceeds the limit, the long-term incentive (LTI) disbursement amount is reduced as necessary so as to comply with the maximum remuneration policy. If necessary, the Supervisory Board may reduce other remuneration components or demand reimbursement of remuneration components already disbursed, at its reasonable discretion. Irrespective of the determined maximum remuneration, the disbursement amounts of individual variable remuneration components are also capped in terms of percentages. Compliance with the specified thresholds for maximum remuneration cannot be reported on conclusively until all components granted for a given fiscal year have been paid out. This means that for fiscal year 2022, this can only be reported in 2026.

Sanjay Brahmawar shall only become subject to the maximum remuneration policy when the current remuneration system becomes applicable to him upon his contract renewal on August 1, 2023. Dr. Matthias Heiden's and Dr. Elke Frank's contracts were also not subject to the maximum remuneration policy. All three contracts are subject to the old remuneration system whereby there are no caps on variable remuneration components in absolute terms; caps are expressed as percentages, from which an absolute amount can be calculated. There is no explicit cap expressed as an absolute amount on total remuneration. Furthermore, a different maximum remuneration was contractually agreed on an individual basis with Joshua Husk as described in section 2.2.

2.4 REMUNERATION COMPONENTS

The remuneration system comprises fixed and variable remuneration components (for more information, please refer to the graphic on page 248). Fixed remuneration consists of a fixed annual salary, pension benefits, and additional benefits. Variable remuneration consists of a short-term component (STI) and two long-term components (LTI). The long-term components are the PPS plan and the LIP.

2.4.1 Fixed remuneration components

2.4.1.1 Fixed annual salary

The Management Board members receive a fixed annual salary. The fixed annual salary is paid in 12 equal installments. The amount of the fixed annual salary is geared towards the duties and the strategic and operational responsibilities of the individual Management Board member.

2.4.1.2 Pension benefits

For members of the Management Board residing in Germany, the Remuneration system includes an additional annual cash payment to contribute to their private pension planning. This payment equals €250,000 for the CEO and €150,000 for each of the other members of the Management Board. In accordance with the temporary deviation described above, Joshua Husk shall also receive the cash payment in the amount of €150,000.

The CEO, Sanjay Brahmawar, only becomes subject to the updated policy on pension benefits when the current remuneration system becomes applicable to him upon effectiveness of his contract renewal (as of August 1, 2023). Under the old pension benefit system, which also applied to the contracts of Dr. Elke Frank and Dr. Matthias Heiden, he is subject to a policy providing him with pensions for life after completing his 62nd year of age, regardless of when he joined the Company. The pension entitlement is increased annually by the percentage by which the consumer price index for Germany published by the Federal Statistical Office has increased in comparison to the previous year. It also includes a survivor annuity of 60 percent of the Management Board member's pension. In the event that Sanjay Brahmawar leaves the Company prior to the age of 62 and before reaching the 15th year as a member of the Company's Management Board, the benefit entitlement is retained, but is reduced. In the event that he leaves the Company prior to the age of 62, but after reaching the 15th year as a member of the Company's Management Board, the full pension entitlement is retained.

The change in present value of defined benefit obligations (DBO) and the present value of DBO as of December 31, 2022, as reflected in the Consolidated Financial Statements of Software AG for fiscal year 2022 in accordance with International Financial Reporting Standards (IFRS) are as follows:

in €	Change in DBO in 2022	DBO as of Dec. 31, 2022
Sanjay Brahmawar CEO	-614,852	1,401,131
Dr. Elke Frank CHRO	-490,018	446,386
Dr. Matthias Heiden CFO	-303,403	320,747

2.4.1.3 Additional benefits

Additional benefits consist of the provision of a suitable company car for work and personal use (alternatively, a monthly car allowance) and coverage through a group accident insurance policy. Furthermore, members of the Management Board are insured under Software AG's director and officer insurance policy. The deductible is 10 percent of the loss up to a maximum of one-and-a-half times the fixed annual salary of the Management Board member.

2.4.2 Variable remuneration components

2.4.2.1 Short-Term Incentive Plan

The short-term variable remuneration for members of the Management Board is geared towards financial and non-financial results for the respective fiscal year. In the 2022 fiscal year, 75 percent of short-term remuneration depended on financial Company targets, 15 percent on individual financial or non-financial targets, and 10 percent on environmental, social, and governance (ESG) targets, which can be defined individually or jointly for all Management Board members together. The Short-Term Incentive is only paid if certain thresholds are met or exceeded. The disbursement amount for the Short-Term Incentive is capped at 200 percent of the target amount.

The financial targets for the 2022 fiscal year were those targets communicated to the capital market. The individual targets are different quantitative or qualitative objectives established with each of the Management Board members regarding the areas for which they are responsible and aimed at supporting the medium to long-term strategic growth of the Company. The individual targets may, for example, support the achievement of revenue and growth targets, implementation of the business strategy, or a sustainable approach to operations (e.g., in the area of diversity, succession planning, or innovation performance) in the business line for which the Management Board member is responsible. The same individual targets may be defined for multiple members of the Management Board.

ESG targets are objectives related to environment, social issues, and corporate governance. The Supervisory Board determines the ESG performance criteria and methods for measuring performance for the respective fiscal year. Possible performance criteria may consist of, for example, ESG ratings, customer satisfaction, employee satisfaction, and occupational safety (health and safety). Overall achievement of ESG performance is calculated as average target achievement across the individual ESG performance criteria.

Target achievement is determined by the Supervisory Board every year prior to disbursement of the STI. Average target achievement is calculated based on achievement of the financial, individual, and ESG targets and on the defined weighting. If total target achievement equals 100 percent, the disbursement amount is equal to the target amount. If total target achievement equals 0 percent, no payment is made (threshold amount). If total target achievement equals 200 percent or more, the disbursement amount is 200 percent of the target amount (maximum amount). Linear interpolation is carried out between the threshold amount and the target amount and between the target amount and the maximum amount. One-third of any outperformance exceeding 100 percent will not be paid in cash but invested as PPS and paid out at a later point in time based on future share price performance.

If a contract begins or ends during a given fiscal year, the disbursement amount shall be reduced accordingly on a pro-rated basis.

The Supervisory Board is entitled to temporarily adjust the terms and conditions of the STI appropriately and within reasonable limits in the event of extraordinary events or developments, e.g. the acquisition or disposal of part of the Company. Generally unfavorable market conditions do not fulfill the meaning of extraordinary events or developments. This does apply when amendments to accounting rules applicable to the Company have a material impact on key parameters used for calculating the STI or when a fiscal year has fewer than twelve months (short fiscal year).

The financial targets for all members of the Management Board in 2022, their target achievement, and the applicable performance criteria were as follows:

Financial Company Targets[1]

Description of performance criteria	Weighting %	Target achievement 0%	Target achievement 100%	Target achievement 200%	Actual target achievement as %	Actual target achievement weighted at 100% calculated as %
Digital Business Group product bookings	25	2021 +11%	2021 +22,5%	2021 +32%	12.6	3.2
Adabas & Natural Group product bookings	5	2021 -4%	2021 +4%	2021 +10%	200.0	10.0
Group product revenue	25	2021 +6%	2021 +10%	2021 +14%	26.1	6.5
Group EBITA margin (non-IFRS)	20	20%	21%	22%	123.0	24.6
Total	**75**					**44.3**

Achievement of Financial Company Targets by Management Board Member

	Remuneration for target achievement of 0% in €	Remuneration for target achievement of 100% in €	Remuneration for target achievement of 200% in €[2]	Actual remuneration in €
Sanjay Brahmawar	0	1,166,667	2,361,111	688,722
Dr. Elke Frank	0	319,444	648,148	188,579
Dr. Matthias Heiden	0	508,333	1,027,778	300,086
Joshua Husk	0	426,459	862,684	251,753
Dr. Benno Quade	0	91,146	183,738	53,806
Dr. Stefan Sigg	0	554,167	1,118,056	327,143

The ESG targets for all members of the Management Board in 2022, their target achievement, and the applicable performance criteria were as follows:

ESG Targets

Description of performance criteria	Weighting %	Target achievement 0%	Target achievement 100%	Target achievement 200%	Actual target achievement as %	Actual target achievement weighted at 100% as %
Employee Engagement Score	5	<=3.95	4.14	4.24	170	8.5
Net Promoter Score	5	48	52	56	200	10.0
Total	**10**					**18.5**

1 For a definition of the KPIs, please refer to Fundamental Aspects of the Group in Software AG's 2022 Combined Management Report.
2 The compensation amounts shown in this and subsequent tables in this section include a financial benefit that arises because the rights granted under the PPS plan are subject to a 10 percent discount on the average share price in February. For an explanation of the PPS plan, see section 2.4.2.2.

Achievement of ESG Targets by Management Board Member

	Remuneration for target achievement of 0% in €	Remuneration for target achievement of 100% in €	Remuneration for target achievement of 200% in €	Actual remuneration in €
Sanjay Brahmawar	0	155,556	314,815	287,778
Dr. Elke Frank	0	42,593	86,420	78,796
Dr. Matthias Heiden	0	67,778	137,037	125,389
Joshua Husk	0	56,861	115,025	105,193
Dr. Benno Quade	0	12,153	24,498	22,483
Dr. Stefan Sigg	0	73,889	149,074	136,694

The individual targets in 2022, target achievement, and the applicable performance criteria were as follows:

Individual Targets and Achievement by Management Board Member

	Weighting as %	Topic	Target	Actual target achievement by target as %	Actual total target achievement as %
Sanjay Brahmawar	7.5	StreamSets integration	Realization of target ARR growth[1]	0.0	50.0
	7.5	Helix transformation strategy	Adherence to implementation schedule	100.0	
Dr. Elke Frank	7.5	StreamSets integration	Realization of target ARR growth	0.0	25.0
	7.5	People & Culture	Achievement degree of defined KPIs on schedule[2]	50.0	
Dr. Matthias Heiden	7.5	StreamSets integration	Realization of target ARR growth	0.0	25.0
	7.5	Reporting systems	Further development and integration of existing systems for in-depth KPI analysis	50.0	
Joshua Husk	7.5	StreamSets integration	Realization of target ARR growth	0.0	66.5
	7.5	Sales forecast	Increase forecast accuracy and realization of planned Digital Business bookings	133.0	
Dr. Benno Quade	7.5	StreamSets integration	Realization of target ARR growth	0.0	87.5
	7.5	Professional Services & Operations	Strengthen ecosystem and process optimization	175.0	
Dr. Stefan Sigg	7.5	StreamSets integration	Realization of target ARR growth	0.0	62.5
	7.5	Cloud/ SaaS offerings	Support trend toward more SaaS offerings	125.0	

[1] ARR = annual recurring revenue; for a definition, please refer to Fundamental Aspects of the Group in Software AG's 2022 Combined Management Report.
[2] KPIs = key performance indicators.

Achievement of Individual Targets by Management Board Member

	Remuneration for target achievement of 0% in €	Remuneration for target achievement of 100% in €	Remuneration for target achievement of 200% in €	Actual remuneration in €
Sanjay Brahmawar	0	233,333	472,222	116,667
Dr. Elke Frank	0	63,889	129,630	15,972
Dr. Matthias Heiden	0	101,667	205,556	25,417
Joshua Husk	0	85,292	172,537	56,719
Dr. Benno Quade	0	18,229	36,748	15,951
Dr. Stefan Sigg	0	110,833	223,611	69,271

Total Target Achievement and Bonuses for 2022

	Remuneration for target achievement of 0% in €	Remuneration for target achievement of 100% in €	Remuneration for target achievement of 200% in €	Actual total target achievement as %	Bonus remuneration amount in €	Of which STI amount in €[1]
Sanjay Brahmawar	0	1,555,556	3,148,148	70.3	1,093,167	702,750
Dr. Elke Frank	0	425,926	864,198	66.5	283,347	221,750
Dr. Matthias Heiden	0	677,778	1,370,370	66.5	450,892	266,100
Joshua Husk	0	568,612	1,150,246	72.8	413,665	255,778
Dr. Benno Quade	0	121,528	244,985	75.9	92,240	39,531
Dr. Stefan Sigg	0	738,889	1,490,741	72.2	533,108	252,525

[1] The remaining bonus remuneration amount is granted in PPS and thus corresponds to the PPS awards for 2022 in section 2.4.2.2.

2.4.2.2 Performance Phantom Share Plan

Management Board members' long-term variable remuneration within the framework of the PPS plan is geared toward sustainable enterprise growth. This entails share-based remuneration which is granted annually to Software AG Management in the form of PPS. Each tranche has a term of four years.

The amount granted under the PPS plan equals the contractual annual individual target amount for the respective Management Board member multiplied by the target achievement of STI targets. On the PPS plan grant date, the amount granted under the PPS plan plus the amount transferred to each Management Board member under the STI is converted into virtual Company shares (PPS) on the basis of Software AG's reference share price and allocated to the respective Management Board member as a computational amount. The reference share price equals the average share price of Software AG's share in the February preceding the award, less 10 percent.

Upon expiration of the four-year term, a cash amount is disbursed based on the average price of Software AG's share in the February at the end of the term. The disbursement amount under the PPS plan is limited to 200 percent of the target amount.

The CEO, Sanjay Brahmawar, only becomes subject to the PPS plan as described when the current remuneration system becomes applicable to him upon his contract renewal (as of August 1, 2023). The previous PPS plan applies to him as well as to Management Board members Dr. Elke Frank and Dr. Matthias Heiden, who left in 2022, with the following deviations:

- The PPS are awarded in three identical tranches with minimum holding periods of one, two, and three years each reaching maturity in March.
- When the minimum holding period has elapsed, plan beneficiaries are entitled to request disbursement (exercise) of matured PPS once per quarter (between the publication date of the financial results and the following fifth trading day).
- If shares are exercised as of the end of the minimum holding period, a cash amount is disbursed based on the average price of Software AG's share in the February prior to the disbursement; if they are exercised at a later point in time, a cash amount is disbursed based on the average price of Software AG's share between the sixth and tenth trading days following the decision to exercise.
- During the entire holding period, plan beneficiaries will receive an amount per PPS equal to the dividend paid to Software AG shareholders per share.
- The disbursement is limited to twice the reference price applicable when the respective PPS tranches are issued; this cap is calculated annually for the bal-

ance of PPS awarded to members of the Management Board based on the weighted average of the reference share price.
- All PPS that have not yet been disbursed as of January 15 of the seventh year after a Management Board member has left the Company become due for payment no later than the trading day following the release of the preliminary first-quarter figures.

The number of PPS awarded in the past two fiscal years as well as the number held as of December 31, 2022, is shown in the following table:

PPS Awarded in the Fiscal and Previous Year / Total Balance

	Awarded in 2022 no.	Value awarded in 2022 in €	Awarded in 2021 no.	Value awarded in 2021 in €	Total balance as of Dec. 31, 2022 no.	Total balance as of Dec. 31, 2022 in €
Sanjay Brahmawar	19,852	390,417	24,563	816,852	99,518	2,319,927
Dr. Elke Frank	3,132	61,597	5,541	184,274	15,026	349,670
Dr. Matthias Heiden	9,396	184,792	11,967	397,974	26,728	604,573
Joshua Husk	8,028	157,887	0	0	8,028	157,887
Dr. Benno Quade	2,680	52,708	0	0	2,680	52,708
Dr. Stefan Sigg	14,267	280,583	16,094	535,215	57,497	1,327,614
Total	57,355	1,127,985	58,165	1,934,315	209,477	4,812,380

2.4.2.3 Long-Term Incentive Plan

Long-Term Incentive Plan 2021 and 2022

Management Board members' long-term variable remuneration within the framework of the LIP is geared toward sustainable enterprise growth. Starting with the 2021 fiscal year, remuneration under the LIP is granted to Management Board members annually in the form of virtual stock options. Each tranche has a term of four years.

The LIP consists of two equally weighted parts. When the LIP is granted, 50 percent of the annual individual LIP target amount for each Management Board member is converted into virtual stock options for part 1 and part 2 of the LIP and allocated to the respective Management Board members as a computational amount. On the basis of a fair-value calculation, virtual stock options for part 1 and part 2 are issued, with expected values that correspond to 50 percent, respectively, of the individual target amounts for the respective Management Board members.

Disbursement at the end of the four-year term is determined by the number awarded and target achievement factors.

For part 1 of the LIP, the target achievement factor is based on the outperformance of Software AG's share in comparison to the MDAX. The outperformance is calculated as the difference between the appreciation of the Software AG share and the appreciation of the MDAX price index over the four-year term of the LIP tranche, respectively. The target achievement factor is a minimum of 0 in the case of outperformance of less than 0 percent and 1 in the case of outperformance between 0 and 2 percent. It reaches a maximum of 2 in the case of outperformance of at least 20 percent. Between those values, the target achievement factor grows by 0.1 per outperformance increase of 2 percentage points. The value per option for part 1 is calculated as the product of outperformance and the starting price of the Software AG share and is multiplied by the target achievement factor to determine the disbursement amount. The disbursement for part 1 of the LIP is limited to 200 percent of the target amount.

Under part 2 of the LIP, the target achievement factor is calculated as the average fulfillment of the targets for earnings, profit margin, and annual recurring revenue (ARR). Every year, the Supervisory Board sets a minimum target achievement (threshold amount), a target amount, and maximum target achievement (maximum amount) for each target for the next four fiscal years. Below the threshold amount, target achievement equals 0 percent. At the target amount, target achievement equals 100 percent. Above the maximum amount, target achievement equals 200 percent. Linear interpolation is carried out between the threshold amount and the target amount and between the target amount and the maximum amount. Target achievement is thus limited to 0 to 200 percent per target and in total. In determining average target achievement, the three targets for the fiscal year are weighted (equally) at one-third each. The value per option for part 2 is calculated as the appreciation of the Software AG share from the beginning to the end of the term of the LIP tranche and is multiplied by the average target achievement to determine the disbursement amount. The disbursement for part 2 of the LIP is limited to 200 percent of the target amount.

Existing rights under Management Incentive Plan 2020

Rights under Management Incentive Plan 2020 (MIP 2020) were allocated to Management Board members in June 2020. Because selected Management Board members currently hold rights under MIP 2020, this plan is presented in the Remuneration Report.

The plan differentiates between three types of value rights (VRs): two types of performance shares (components 1 and 2) and retention shares (component 3). Rights granted under MIP 2020 have a term of three years.

Component 1

The number of VRs granted under component 1 at the end of the three-year term is determined by the target achievement factor. For performance stock appreciation rights (PSARs), the target achievement factor is based on the outperformance of Software AG's share in comparison to the MDAX index. The outperformance is calculated as the difference between the appreciation of the Software AG share and the appreciation of the MDAX price index over the three-year term of the MIP tranche. The target achievement factor is a minimum of 0 in the case of outperformance of less than 0 percent and 1 in the case of outperformance between 0 and 2 percent. It reaches a maximum of 2 in the case of outperformance of at least 20 percent. Between those values, the target achievement factor grows by 0.1 per outperformance increase of 2 percentage points.

The disbursement amount of the VRs under component 1 is calculated as the product of the target achievement factor and the difference between the starting and final price of the Software AG share. The starting price is defined as the average Software AG share price during the 20 trading days before (and including) June 8, 2020, i.e., €33.96. The final price is calculated as the average Software AG share price during the 20 trading days before (and including) June 8, 2023.

The disbursement for component 1 is limited to 300 percent of the target amount established by the Supervisory Board, multiplied by 0.3 percent.

Components 2 and 3

The number of allocated VRs under components 2 and 3 does not change over the course of the term. The disbursement amount for both components depends on the Software AG share price. Component 2 is defined as the difference between the starting price and the final price of Software AG's share. This is calculated as the average share price of the Software AG share during the 20 trading days before (and including) June 8, 2020. The final price is calculated as the average Software AG share price during the 20 trading days before (and including) June 8, 2023. Component 2 is only disbursed if the average price of the Software AG share is equal to or higher than €32.72 for at least 10 consecutive trading days between May 10, 2022, and May 10, 2023. The disbursement amount for component 2 is limited to 300 percent of the target amount multiplied by 0.3 percent.

The disbursement for component 3 is based exclusively on this final price. It is limited to 300 percent of the target amount multiplied by 0.4 percent.

Existing rights under Management Incentive Plan 2019

Management Incentive Plan 2019 (MIP 2019) was launched in March 2019. The rights under MIP 2019 were allocated to members of the Management Board in June 2019. Because selected Management Board members currently hold rights under MIP 2019, this plan is presented in the Remuneration Report.

MIP 2019 consists of two differently weighted parts. When MIP 2019 was granted, the target amount for the MIP, as determined by the Supervisory Board individually for each member, was converted into stock appreciation rights (SARs) on the basis of a weighted initial value. These rights were then subdivided into performance SARs (PSARs) at 60 percent, and retention

SARs (RSARs) at 40 percent, and allocated to the Management Board members as computational amounts. Each tranche has a term of four years, i.e., to 2023.

Performance stock appreciation rights

The number of granted PSARs at the end of the four-year term is determined by the target achievement factor. For the PSARs, the target achievement factor is based on the outperformance of the Software AG share in comparison to the Nasdaq 100 stock index. The outperformance is calculated as the difference between the appreciation of the Software AG share and the appreciation of the Nasdaq over the four-year term of the MIP tranche. The target achievement factor is a minimum of 0 in the case of outperformance of less than 0 percent and 1 in the case of outperformance between 0 and 2 percent. It reaches a maximum of 2 in the case of outperformance of at least 20 percent. Between those values, the target achievement factor grows by 0.1 per outperformance increase of 2 percentage points.

The disbursement amount per PSAR is calculated as the product of the target achievement factor and the average share price of the Software AG share during the 20 trading days before (and including) March 24, 2023. The disbursement for PSARs is limited to 300 percent of the target amount multiplied by 0.6 percent.

Retention stock appreciation rights

The number of allocated RSARs does not change over the course of the term. The disbursement amount depends on the average share price of the Software AG share during the 20 trading days before (and including) March 24, 2023. Disbursement for RSARs is limited to 300 percent of the target amount multiplied by 0.4 percent.

Total balance of rights held under LIP and MIP

The following table shows the number of virtual stock options granted in the fiscal year as well as virtual stock options held by Management Board members under the presented plans as of December 31, 2022 (measured in accordance with IFRS 2), as reflected in the Consolidated Financial Statements of Software AG for fiscal year 2022:

Virtual Stock Options Granted, Expired, or Held in the Fiscal Year

	Plan	Performance period in years	Grant date	Number of options granted	Committed value in €	Number of options expired	Number of options as of Dec. 31, 2022	Value of options as of Dec. 31, 2022 in €
Sanjay Brahmawar	LIP 2022	3.67	Dec. 1, 2022[1]	149,247	1,200,000	0	149,247	368,907
	LIP 2021	4.00	May 17, 2021	157,990	1,200,000	0	157,990	330,986
	MIP 2020	3.00	June 10, 2020	109,541	879,464	0	109,541	346,495
	MIP 2019	3.79	June 7, 2019	48,779	1,216,745	0	48,779	468,386
Dr. Elke Frank	LIP 2021	4.00	May 17, 2021	78,995	600,000	50,231	28,764	60,260
	MIP 2020	3.00	June 10, 2020	54,771	439,734	11,104	43,667	138,118
	MIP 2019	3.76	June 7, 2019	10,162	253,482	0	10,162	97,580
Dr. Matthias Heiden	LIP 2022	3.67	Dec. 1, 2022	9,701	78,000	0	9,701	23,979
	LIP 2021	4.00	May 17, 2021	78,995	600,000	46,607	32,388	67,852
	MIP 2020	2.94	July 1, 2020	27,386	219,883	4,108	23,278	73,643
Joshua Husk	LIP 2022	3.67	Dec. 1, 2022	30,281	243,475	0	30,281	74,848
Dr. Benno Quade	LIP 2022	3.67	Dec. 1, 2022	8,291	66,667	0	8,291	20,494
Dr. Stefan Sigg	LIP 2022	3.67	Dec. 1, 2022	74,624	600,000	0	74,624	184,452
	LIP 2021	4.00	May 17, 2021	78,995	600,000	0	78,995	165,493
	MIP 2020	3.00	June 10, 2020	54,771	439,734	0	54,771	173,248
	MIP 2019	3.79	June 7, 2019	24,390	608,384	0	24,390	234,193

[1] The rights granted under LIP 2022 were allocated retroactively effective July 1, 2022, based on valuation parameters as of July 5, 2022.

2.5 OTHER POLICIES

2.5.1 Clawback

The Company is entitled, at its reasonable discretion, to adjust and reclaim the amounts disbursed as variable remuneration if the audited Consolidated Financial Statements and/or the basis for establishing the targets on which the variable remuneration was calculated must subsequently be corrected because they prove to be objectively incorrect, and such error has led to false calculation of the variable remuneration. The amount of the repayment claim is equal to the difference between the amounts actually disbursed by the Company and the amounts that should have been disbursed under the policies on variable remuneration, based on the corrected basis of calculation.

In the event of a breach of duty by a Management Board member pursuant to section 93 of AktG, or a material breach of the Code of Conduct of the Company, the Supervisory Board can reduce or reclaim the variable remuneration components in part or in full.

If the corrected basis of calculation for variable remuneration or the specified breaches affect several of the variable remuneration components that have been disbursed, then all amounts disbursed for the variable remuneration components can be reduced or reclaimed. This repayment claim remains valid until four years have elapsed after disbursement of the variable remuneration components in question.

In fiscal 2022, no variable remuneration components from previous years were reclaimed.

The CEO, Sanjay Brahmawar, only becomes subject to the clawback policy as described when the current remuneration system becomes applicable to him upon his contract renewal (as of August 1, 2023). The contracts of those Management Board members who left in 2022, Dr. Elke Frank and Dr. Matthias Heiden, are not subject to the clawback policy.

2.5.2 Share Ownership Guidelines

As per the Share Ownership Guidelines, after the end of a four-year accrual period, members of the Management Board are contractually required to hold the equivalent of one fixed net annual salary in Software AG shares for the duration of their Management Board term. Compliance with this requirement must be verified at the conclusion of the four-year accrual period and once per year thereafter. If the value of the accrued balance of Software AG shares drops below the required amount, the Management Board member must purchase additional shares to meet the requirement.

The CEO, Sanjay Brahmawar, only becomes subject to the Share Ownership Guidelines when the current remuneration system becomes applicable to him upon his contract renewal (as of August 1, 2023). The Share Ownership Guidelines are not applicable to the contracts of those Management Board members who left in 2022, Dr. Elke Frank and Dr. Matthias Heiden.

2.5.3 Calculation of remuneration for additional activities

If Management Board members are also members of intra-Group Supervisory Boards, the remuneration is offset. If a Management Board member assumes a Supervisory Board seat at a non-Group entity, the Supervisory Board decides based on its best judgment whether and to what extent that remuneration shall be offset. No remuneration for additional activities was offset in the 2022 fiscal year.

2.5.4 Obligations in connection with termination of service

2.5.4.1 Termination through regular expiration of the appointment

No severance or special payments will be provided.

If a Management Board member's contract is terminated by the Management Board member or is terminated with good cause for which the member him/herself is responsible, a severance payment shall not be paid.

2.5.4.2 Obligations when a Management Board member leaves

If a Management Board contract is terminated prematurely without good cause, a possible severance payment to the Management Board member is limited to the value of one maximum target total remuneration (excluding LIP, pension benefits, and additional benefits) and may not exceed the contractually stipulated remuneration for the remaining term (severance cap).

Dr. Elke Frank left the Management Board as of October 31, 2022. She received a severance payment in the amount of €1,000,000 in the 2022 fiscal year for the premature termination of her contract. This corresponds to her target total remuneration (excluding LIP, contributions to Company pension plans, and additional benefits). In addition, it was agreed with her that her short-term variable remuneration for 2022 would be disbursed as a cash payment only and not converted to PPS, even in the event of target achievement of more than 100 percent.

Furthermore, Dr. Matthias Heiden, who left the Management Board as of December 31, 2022, shall receive a one-time payment in the amount of €33,333.33 for handover activities carried out in January 2023. This corresponds to one-twelfth of his short-term variable target remuneration. There were no severance payments. For the duration of the agreed post-contractual six-month non-compete period, the Company shall pay non-compete compensation totaling €300,000 (in monthly installments of €50,000), less other earnings. Furthermore, it was agreed with Dr. Matthias Heiden that his short-term variable remuneration for 2022 would be disbursed as a cash payment only and not converted to PPS, even in the event of target achievement of more than 100 percent.

2.5.4.3 Post-contractual non-compete clauses

In the case of agreement on a post-contractual non-compete clause, a severance payment will be offset against the non-compete compensation. Aside from the non-compete clause described in section 2.5.4.2, which was agreed as part of the termination of one Management Board member's contract, four Management Board member contracts currently contain post-contractual non-compete clauses for a period of either 12 months (two contracts: Sanjay Brahmawar and Dr. Stefan Sigg) or 18 months (two contracts: Dr. Benno Quade and Joshua Husk) after termination of the employment contract. The following conditions apply for the duration of the post-contractual non-compete clause:

- Sanjay Brahmawar shall receive monthly non-compete compensation in the amount of one-twelfth of his target total remuneration (excluding LIP, pension benefits, and additional benefits). Thus, the total severance payment by Software AG as described above—consisting of one target total remuneration (excluding LIP, pension benefits, and additional benefits) and non-compete compensation—does not exceed the severance cap of two years' annual remuneration as recommended by the GCGC.
- Dr. Stefan Sigg shall receive monthly non-compete compensation in the amount of one-twelfth of half of the agreed target total remuneration (excluding LIP, pension benefits, and additional benefits) applicable as of the date of termination of the Management Board employment contract. Thus, the total severance payment by Software AG as described above—consisting of one target total remuneration (excluding LIP, pension benefits, and additional benefits) and non-compete compensation—does not exceed the severance cap of two years' annual remuneration as recommended by the GCGC.
- Joshua Husk shall receive monthly non-compete compensation in the amount of one-twelfth of half of the agreed target total remuneration (excluding additional benefits) applicable as of the date of termination of the Management Board employment contract. Any other severance payments shall be offset.
- Dr. Benno Quade shall receive monthly non-compete compensation in the amount of one-twelfth of half of the agreed cash remuneration (fixed annual salary and short-term variable remuneration) applicable as of the date of termination of the Management Board employment contract. Any other severance payments shall be offset.

2.5.4.4 Obligations in connection with a change in control

If an employment contract ends due to a change of control, no additional severance will be paid.

The CEO, Sanjay Brahmawar, only becomes subject to this policy when the current remuneration system becomes applicable to him upon his contract renewal (as of August 1, 2023). Until then, he shall be subject to the old policy which stipulates that, if terminated without good cause within 12 months of a change of control, the Management Board member will receive a severance payment equal to 1.5 annual salaries based on the most recently agreed annual target remuneration, capped at the amount of target remuneration for the remaining term of the contract. In the case of resignation by a member of the Management Board, the above-mentioned policy is not applicable if the position of the Management Board member has only been altered marginally through the change of control.

2.5.5 Remuneration in the event of illness

In the event of illness, the members of the Management Board shall receive full pay based on their annual target remuneration for a period of six months (12 months in one Management Board member's contract). Thereafter, the variable salary will be reduced by one-twelfth for every month that follows. Salary payments will cease at the end of the term of the contract in any event. Any health insurance benefits received must be credited against such payments.

2.5.6 Remuneration in the event of permanent disability

In the event of permanent disability, the employment contract of the Management Board member concerned will terminate at the end of the third month in which the permanent disability was determined. When in doubt, permanent disability is determined by an expert assessment and is deemed to be present when the Board member has been unable to work for 12 consecutive months (excluding Dr. Elke Frank's contract).

From the date of departure due to permanent disability until completion of the 62nd year of age, CEO Sanjay Brahmawar shall receive a monthly disability pension of €20.1 thousand (2021: €20.1 thousand). The disability pension is linked to his pension entitlement and is increased annually by the percentage by which the consumer price index for Germany published by the Federal Statistical Office has increased in comparison to the previous year.

2.5.7 No additional other obligations

No commitments beyond those described above have been made regarding severance pay in the event the employment contract is not renewed or a shareholder change occurs nor regarding continuation of salary payments in the event of early termination of employment or severance annuities.

2.6 GRANTED AND OWED REMUNERATION PURSUANT TO SECTION 162 OF AKTG

According to section 162 of AktG, all fixed and variable remuneration components that were "granted and owed" to individual members of the Management Board in 2021 and 2022 are to be disclosed. Because according to AktG, it is open to interpretation as to when some individual remuneration components are granted and owed, Software AG developed presentation methods for the first-time application of section 162 of AktG in the 2021 Remuneration Report in accordance with IDW guidelines, and continued to apply them in this 2022 Remuneration Report. In Software AG's view, the following remuneration components in particular are open to interpretation:

- Pension benefits: Pension benefits are presented in the year of payment to beneficiaries as granted and owed remuneration. This applies to payments of pensions under defined benefit obligations as well as cash payments that serve as contributions to board members' private pension planning or to settle acquired pension entitlements.
- STI: Short-term variable remuneration under the Short-Term Incentive Plan is fully earned upon conclusion of the fiscal year for which remuneration is contractually granted. Just the Supervisory Board's determination of target achievement and subsequent disbursement occur in the following year. Short-term variable remuneration under the Short-Term Incentive Plan is therefore shown as granted and owed remuneration in the fiscal year for which it is contractually granted.
- PPS plan and LIP: Remuneration from stock options is shown for all plans as granted and owed in the year of disbursement.

The comparability of the relative proportions of all fixed and variable components shown in the following tables with the information on the relative proportions of target total remuneration in the graphic on page 248 is limited. As described in section 2.3, target total remuneration is remuneration granted in relation to the respective financial year irrespective of when it is disbursed, whereas individual remuneration components are shown in the Remuneration Report as granted and owed directly upon disbursement pursuant to AktG.

Granted and Owed Remuneration for Current Management Board Members

Sanjay Brahmawar
CEO
Joined Aug. 1, 2018

in €			2021	2021 (as %)	2022	2022 (as %)
Fixed remuneration components	Fixed annual salary		1,000,000	44.7	1,000,000	56.5
	Additional benefits		6,732	0.3	6,732	0.4
	Pension benefits		0	0.0	0	0.0
	Total, fixed		**1,006,732**	**45.0**	**1,006,732**	**56.9**
Variable remuneration components	Short-term (STI)		1,188,133	53.1	702,750	39.7
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	41,878	1.9	60,546	3.4
		Long-Term Incentive Plan (LIP, MIP)	0	0.0	0	0.0
	Total, variable		**1,230,012**	**55.0**	**763,296**	**43.1**
Other			0	0.0	300	0.0
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	0.0	0	0.0
Total remuneration			**2,236,743**	**100.0**	**1,770,328**	**100.0**

Dr. Elke Frank
CHRO
Joined Aug. 1, 2019 / Left Oct. 31, 2022

in €			2021	2021 (as %)	2022	2022 (as %)
Fixed remuneration components	Fixed annual salary		500,000	49.9	416,667	25.0
	Additional benefits		21,458	2.1	17,882	1.1
	Pension benefits		0	0.0	0	0.0
	Total, fixed		**521,458**	**52.1**	**434,549**	**26.1**
Variable remuneration components	Short-term (STI)		475,253	47.5	221,750	13.3
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	4,828	0.5	9,039	0.5
		Long-Term Incentive Plan (LIP, MIP)	0	0.0	0	0.0
	Total, variable		**480,082**	**47.9**	**230,789**	**13.9**
Other			0	0.0	1,000,300[1]	60.1
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	0.0	0	0.0
Total remuneration			**1,001,540**	**100.0**	**1,665,638**	**100.0**

[1] Includes severance payment in connection with departure from the Management Board in the amount of €1,000,000 (see section 2.5.4.2).

Dr. Matthias Heiden
CFO
Joined July 1, 2020 / Left Dec. 31, 2022

in €			2021	2021 (as %)	2022	2022 (as %)
Fixed remuneration components	Fixed annual salary		600,000	54.4	600,000	64.0
	Additional benefits		23,364	2.1	23,364	2.5
	Pension benefits		0	0.0	0	0.0
	Total, fixed		**623,364**	**56.5**	**623,364**	**66.5**
Variable remuneration components	Short-term (STI)		475,253	43.1	266,100	28.4
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	4,077	0.4	13,172	1.4
		Long-Term Incentive Plan (LIP, MIP)	0	0.0	0	0.0
	Total, variable		**479,331**	**43.5**	**279,272**	**29.8**
Other			0	0.0	34,982[1]	3.7
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	0.0	0	0.0
Total remuneration			**1,102,695**	**100.0**	**937,619**	**100.0**

1 Includes compensation for lost paid vacation entitlement in connection with departure from the Management Board in the amount of €34,682.10.

Joshua Husk
CRO
Joined Aug. 1, 2022

in €			2021	2021 (as %)	2022[2]	2022 (as %)
Fixed remuneration components	Fixed annual salary		0	–	360,170	29.1
	Additional benefits		0	–	15,059	1.2
	Pension benefits		0	–	67,288	5.4
	Total, fixed		**0**	**–**	**442,517**	**35.8**
Variable remuneration components	Short-term (STI)		0	–	255,778	20.7
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	0	–	0	0.0
		Long-Term Incentive Plan (LIP, MIP)	0	–	0	0.0
	Total, variable		**0**	**–**	**255,778**	**20.7**
Other			0	–	538,097	43.5
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	–	0	0.0
Total remuneration			**0**	**–**	**1,236,392**	**100.0**

2 With the exception of the STI, amounts paid locally in US dollars were translated into euros on the basis of average monthly exchange rates. The STI is translated on the basis of the year-end exchange rate.

Dr. Benno Quade
COO
Joined Aug. 1, 2022

in €			2021	2021 (as %)	2022	2022 (as %)
Fixed remuneration components	Fixed annual salary		0	–	52,083	31.7
	Additional benefits		0	–	9,981	6.1
	Pension benefits		0	–	62,500	38.0
	Total, fixed		**0**	**–**	**124,564**	**75.8**
Variable remuneration components	Short-term (STI)		0	–	39,531	24.0
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	0	–	0	0.0
		Long-Term Incentive Plan (LIP, MIP)	0	–	0	0.0
	Total, variable		**0**	**–**	**39,531**	**24.0**
Other			0	–	300	0.2
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	–	0	0.0
Total remuneration			**0**	**–**	**164,395**	**100.0**

in €			2021	2021 (as %)	2022	2022 (as %)
						Dr. Stefan Sigg CPO Joined April 1, 2017
Fixed remuneration components	Fixed annual salary		700,000	19.0	700,000	59.4
	Additional benefits		42,082	1.1	42,283	3.6
	Pension benefits		2,063,097	56.1	150,000	12.7
	Total, fixed		**2,805,179**	**76.3**	**892,283**	**75.7**
Variable remuneration components	Short-term (STI)		415,847	11.3	252,525	21.4
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	456,144	12.4	32,855	2.8
		Long-Term Incentive Plan (LIP, MIP)	0	0.0	0	0.0
	Total, variable		**871,990**	**23.7**	**285,380**	**24.2**
Other			0	0.0	300	0.0
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	0.0	0	0.0
Total remuneration			**3,677,169**	**100.0**	**1,177,963**	**100.0**

Granted and Owed Remuneration for Former Management Board Members

in €			2021	2021 (as %)	2022	2022 (as %)
						John Schweitzer former CRO Joined Nov. 1, 2018 / Left Feb. 28, 2021
Fixed remuneration components	Fixed annual salary		96,148	13.6	0	–
	Additional benefits		72,941	10.3	0	–
	Pension benefits		2,066	0.3	0	–
	Total, fixed		**171,155**	**24.2**	**0**	**–**
Variable remuneration components	Short-term (STI)		137,765	19.5	0	–
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	398,065	56.3	0	–
		Long-Term Incentive Plan (LIP, MIP)	0	0.0	0	–
	Total, variable		**535,830**	**75.8**	**0**	**–**
Other			0	0.0	0	–
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	0.0	0	–
Total remuneration			**706,984**	**100.0**	**0**	**–**

Karl-Heinz Streibich
former CEO
Joined Oct. 1, 2003 / Left July 31, 2018

in €			2021	2021 (as %)	2022	2022 (as %)
Fixed remuneration components	Fixed annual salary		0	0.0	0	0.0
	Additional benefits		0	0.0	0	0.0
	Pension benefits		358,927	56.7	377,986	57.9
	Total, fixed		**358,927**	**56.7**	**377,986**	**57.9**
Variable remuneration components	Short-term (STI)		0	0.0	0	0.0
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	274,387	43.3	274,387	42.1
		Long-Term Incentive Plan (LIP, MIP)	0	0.0	0	0.0
	Total, variable		**274,387**	**43.3**	**274,387**	**42.1**
Other			0	0.0	0	0.0
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	0.0	0	0.0
Total remuneration			**633,313**	**100.0**	**652,372**	**100.0**

Arnd Zinnhardt
former CFO
Joined May 1, 2002 / Resigned March 31, 2020 / Left Sept. 30, 2020

in €			2021	2021 (as %)	2022	2022 (as %)
Fixed remuneration components	Fixed annual salary		0	0.0	0	0.0
	Additional benefits		0	0.0	0	0.0
	Pension benefits		0	0.0	141,787	86.7
	Total, fixed		**0**	**0.0**	**141,787**	**86.7**
Variable remuneration components	Short-term (STI)		0	0.0	0	0.0
	Long-term (LTI) share-based incentive	Performance Phantom Shares (PPS)	1,216,404	84.4	21,801	13.3
		Long-Term Incentive Plan (LIP, MIP)	0	0.0	0	0.0
	Total, variable		**1,216,404**	**84.4**	**21,801**	**13.3**
Other			225,000	15.6	0	0.0
Repayment claims pursuant to section 162(1), s. 2, no. 4 AktG			0	0.0	0	0.0
Total remuneration			**1,441,404**	**100.0**	**163,589**	**100.0**

2.7 VERTICAL REMUNERATION COMPARISON

In accordance with the recommendations of the GCGC, when assessing the usual level of Management Board remuneration within Software AG, the Supervisory Board takes into account the relationship between Management Board remuneration and that of senior management and the staff as a whole, and how remuneration has developed over time.

The following table illustrates the rate of change of Management Board members' remuneration compared with Software AG's earnings development and employees' (FTE) average remuneration year-on-year. The basis for the rates of change presented are the amounts indicated as "granted and owed remuneration" in section 2.6 in accordance with section 162 of AktG. Significant fluctuations in the rate of change are because of one-off effects (e.g., from severance payments) or because members of the Management Board only received pro-rated remuneration in certain fiscal years due to having joined or left the Company mid-year.

Earnings development is shown in accordance with legal regulations based on the development of Software AG's net income under German commercial law. Because Software AG's net income under German commercial law is regularly influenced by subsidiaries' dividend disbursements to varying degrees, the comparison is only of limited significance. A comparison of Management Board remuneration relative to Software AG's operating earnings (EBITA, non-IFRS) was therefore also carried out.

The average remuneration of Software AG's staff worldwide is used in the comparison with the development of employees' average remuneration. This assessment examined the remuneration of all employees, including senior managers, in accordance with section 5(3) of BetrVG (German Works Constitution Act). Additional compensation for employees serving on the Supervisory Board of Software AG is not included. Furthermore, a comparison with all managers who report directly to the Management Board was also conducted.

Comparison of Annual Change in Management Board Remuneration

	% change 2022 vs. 2021	% change 2021 vs. 2020
Remuneration of current Management Board members		
Sanjay Brahmawar CEO	-20.9	
Dr. Elke Frank CHRO (until Oct. 31, 2022)	66.2	
Dr. Matthias Heiden CFO (until Dec. 31, 2022)	-15.0	
Joshua Husk CRO (since Aug. 1, 2022)	100.0	
Dr. Benno Quade COO (since Aug. 1, 2022)	100.0	
Dr. Stefan Sigg CPO	-68.0	
Remuneration of former Management Board members		
John Schweitzer former CRO (until Feb. 28, 2021)	-100.0	
Karl-Heinz Streibich former CEO (until July 31, 2018)	3.0	
Arnd Zinnhardt former CFO (until Sept. 30, 2020)	-88.7	
Software AG's financial performance		
Operating EBITA (non-IFRS) Software AG Group	9.0	
Net income after tax Software AG	399.7	
Average employee salary growth		
Salary growth of all employees	5.8	1.9
Salary growth in the second tier of management	3.5	4.9

2.8 ASSESSMENT OF THE APPROPRIATENESS OF MANAGEMENT BOARD REMUNERATION

Software AG's Supervisory Board assessed the appropriateness of Management Board remuneration in 2020 and arrived at the conclusion that Management Board remuneration is appropriate from a legal point of view in accordance with section 87(1) of AktG.

To assess the appropriateness of Management Board remuneration and pensions, the Supervisory Board called upon an external consultant. On the one hand, the relationship of the amount and structure of the Management Board's remuneration with the remuneration of senior management and the staff as a whole was evaluated from a company-external perspective (vertical comparison). In addition to the status quo, the vertical comparison also took into account the development of remuneration correlations over time. On the other hand, remuneration amounts and structures were evaluated from the point of view of Software AG's position in comparison with the market (horizontal comparison). The comparative peer-group market consisted of MDAX companies. Companies in the financial services sector were not included because their remuneration is subject to different regulations and their remuneration structures are not comparable with other industries. In addition to fixed remuneration, the horizontal comparison also included short and long-term remuneration components as well as additional benefits and pension benefits. The Supervisory Board compiled the peer group with a sense of perspective in order to prevent an automatic upward remuneration trend.

For new appointments of Management Board members in the 2022 fiscal year, a horizontal comparison with the described peer-group market was carried out for each new position with the help of an external consultant to ensure appropriate remuneration for new members of the Management Board. To account for regional specifics and guarantee competitiveness in the US labor market, the peer-group market for Joshua Husk's remuneration was adjusted accordingly. That comparison used remuneration of CROs and heads of sales at publicly listed companies with revenue between $500 and $1,000 million based on both the East and West Coasts of the USA.

3 Supervisory Board Remuneration

3.1 REMUNERATION SYSTEM

The Supervisory Board remuneration system is approved by the Annual Shareholders' Meeting based on a proposal by the Management Board and Supervisory Board. The remuneration is specified by way of resolution passed at the Annual Shareholders' Meeting. At regular intervals no longer than four years apart, the Management Board and Supervisory Board review whether the amount and structure of Supervisory Board remuneration have remained market-oriented and in appropriate relation to the tasks of the Supervisory Board and to the Company's overall situation. This includes a horizontal comparison conducted by the Supervisory Board for which external independent experts can be consulted. The remuneration system's market suitability was confirmed in the 2021 fiscal year. If there are grounds to change the Supervisory Board remuneration system, the Management Board and Supervisory Board shall make a proposal to the Annual Shareholders' Meeting to amend Supervisory Board remuneration.

The current remuneration system for the members of the Supervisory Board of Software AG was approved at the Annual Shareholders' Meeting on May 12, 2021, by a majority of 99.91 percent of shareholders' voting shares, in accordance with section 113(3), sentences 1 and 2 of AktG, in conjunction with section 14 of Software AG's Articles of Association.

3.2 REMUNERATION AMOUNT AND COMPONENTS

Supervisory Board remuneration consists solely of fixed remuneration, plus compensation for attending committee meetings. There are no variable components or share-based remuneration. The Management Board and Supervisory Board do not consider performance-based remuneration to be appropriate for the Supervisory Board based on the understanding of the Supervisory Board's function. The Management Board and the Supervisory Board are of the opinion that the governing role of the Supervisory Board should be carried out independently of the Company's success targets. Granting remuneration that is entirely fixed reflects common practice in other listed companies and corresponds to recommendation G.18 of the GCGC.

In accordance with the policies approved at the Annual Shareholders' Meeting, the fixed annual base remuneration for the chair of the Supervisory Board equals €145,200, for each deputy chair €99,000, and for every other member of the Supervisory Board €66,000. As per the recommendations of the GCGC, the higher time commitment of the chair and deputy chair on the Supervisory Board is accounted for in the calculation of their remuneration.

The higher time commitment is also accounted for with respect to membership in and chairing committees. Committee members receive €2,000 each time they attend a committee meeting. Attendance compensation is €4,000 for the committee chairs. Attendance compensation is granted only once for multiple committee sessions occurring on the same day or for a session that takes place over consecutive days.

Maximum Supervisory Board remuneration is the sum of fixed remuneration, the individual amounts of which depend upon tasks assumed within the Supervisory Board, and of meeting attendance compensation, the amount of which is calculated according to tasks assumed within the committees and attendance of committee meetings. Supervisory Board remuneration is not capped at a specific amount.

Members of the Supervisory Board are covered by a directors' and officers' liability insurance policy carried by the Company; their premiums are paid by Software AG. In addition, the Company reimburses Supervisory Board members for any expenses incurred in connection with their Supervisory Board activities as well as any statutory value added tax on their income.

The details of Supervisory Board members' remuneration are finalized by the Annual Shareholders' Meeting; no additional or supplementary agreements exist. Remuneration is contingent upon the length of appointment as member of the Supervisory Board.

Members of the Supervisory Board who were only on the Supervisory Board for part of the fiscal year will receive pro-rated fixed remuneration. Their remuneration is adjusted on a pro rata temporis basis and rounded to the next full month. Awards for severance payments, pension plans, and early retirement plans do not exist.

Remuneration policies apply equally to shareholder representatives and employee representatives on the Supervisory Board.

3.3 GRANTED AND OWED REMUNERATION PURSUANT TO SECTION 162 OF AKTG

Supervisory Board Members' Remuneration in the 2022 and 2021 Fiscal Years

	Fiscal year		Fixed remuneration	Committee remuneration	Total
Remuneration of current Supervisory Board Members					
Karl-Heinz Streibich Chair (until Jan. 31, 2022) Personnel Committee (chair) Nominating Committee (chair)	2022	in €	12,100	4,000	16,100
		% of total	75	25	100
	2021	in €	145,200	32,000	177,200
		% of total	82	18	100
Christian Yannick Lucas Chair (since Feb. 3, 2022) Personnel Committee (chair) Nominating Committee (chair) Audit Committee	2022	in €	–	–	–[1]
		% of total	–	–	–
	2021	in €	–	–	–
		% of total	–	–	–
Madlen Ehrlich Dep. chair Audit Committee	2022	in €	99,000	6,000	105,000
		% of total	94	6	100
	2021	in €	16,545	4,000	20,545
		% of total	81	19	100
Ralf Dieter (until Jan. 31, 2022) Audit Committee (chair) Nominating Committee	2022	in €	5,500	–	5,500
		% of total	100	–	100
	2021	in €	66,000	24,000	90,000
		% of total	73	27	100
Oliver Collmann (since April 4, 2022) Audit Committee (chair) Nominating Committee	2022	in €	49,500	8,000	57,500
		% of total	86	14	100
	2021	in €	–	–	–
		% of total	–	–	–
Bettina Schraudolf Personnel Committee	2022	in €	66,000	4,000	70,000
		% of total	94	6	100
	2021	in €	11,030	2,000	13,030
		% of total	85	15	100
Ursula Soritsch-Renier Personnel Committee Nominating Committee	2022	in €	66,000	6,000	72,000
		% of total	92	8	100
	2021	in €	66,000	10,000	76,000
		% of total	87	13	100
Markus Ziener (until May 17, 2022) Audit Committee (chair Feb. 1, 2022 until May 17, 2022) Nominating Committee	2022	in €	27,500	6,000	33,500
		% of total	82	18	100
	2021	in €	66,000	18,000	84,000
		% of total	79	21	100

[1] The chair of the Supervisory Board, Christian Lucas, waived his remuneration for the 2022 fiscal year.

Supervisory Board Members' Remuneration in the 2022 and 2021 Fiscal Years

	Fiscal year		Fixed remuneration	Committee remuneration	Total
Remuneration of former Supervisory Board Members					
Guido Falkenberg Dep. chair (until Nov. 4, 2021) Personnel Committee	2022	in €	–	–	–
		% of total	–	–	–
	2021	in €	82,455	14,000	96,455
		% of total	85	15	100
Christian Zimmermann (until Nov. 4, 2021) Audit Committee	2022	in €	–	–	–
		% of total	–	–	–
	2021	in €	54,970	8,000	62,970
		% of total	87	13	100
Total Supervisory Board remuneration	**2022**	**in €**	**325,600**	**34,000**	**359,600**
		% of total	**91**	**9**	**100**
	2021	**in €**	**508,200**	**112,000**	**620,200**
		% of total	**82**	**18**	**100**

3.4 VERTICAL REMUNERATION COMPARISON

Analogous to the principles of presentation applied in the vertical comparison of Management Board remuneration in section 2.7, the following table shows a comparison of the rate of change in Supervisory Board remuneration with Software AG's earnings development and employees' (FTE) average remuneration year-on-year. The basis for the rates of change presented are the amounts indicated as "granted and owed remuneration" in section 3.3 in accordance with section 162 of AktG. Significant fluctuations in the rate of change are because some members of the Supervisory Board only received pro-rated remuneration in certain fiscal years due to having joined or left the Company mid-year. Any remuneration received by a member of the Supervisory Board for previous service on Software AG's Management Board is not included in the comparison.

Comparison of Annual Change in Supervisory Board Remuneration

	% change 2022 vs. 2021	% change 2021 vs. 2020
Remuneration of current Supervisory Board Members		
Karl-Heinz Streibich Chair (until Jan. 31, 2022) Personnel Committee (chair) Nominating Committee (chair)	-90.9	
Christian Yannick Lucas Chair (since Feb. 3, 2022) Personnel Committee (chair) Nominating Committee (chair) Audit Committee	–	
Madlen Ehrlich Dep. chair Audit Committee	411.1	
Ralf Dieter (until Jan. 31, 2022) Audit Committee (chair) Nominating Committee	-93.9	
Oliver Collmann (since April 4, 2022) Audit Committee (chair) Nominating Committee	100.0	
Bettina Schraudolf Personnel Committee	437.2	
Ursula Soritsch-Renier Personnel Committee Nominating Committee	-5.3	
Markus Ziener (until May 17, 2022) Audit Committee (chair Feb. 1, 2022 until May 17, 2022) Nominating Committee	-60.1	
Remuneration of former Supervisory Board Members		
Guido Falkenberg Dep. chair (until Nov. 4, 2021) Personnel Committee	-100.0	
Christian Zimmermann (until Nov. 4, 2021) Audit Committee	-100.0	
Software AG's financial performance		
Operating EBITA (non-IFRS) Software AG Group	9.0	
Net income after tax Software AG	399.7	
Average employee salary growth		
Salary growth of all employees	5.8	1.9
Salary growth in the second tier of management	3.5	4.9

Report of the Independent Auditor

To Software Aktiengesellschaft, Darmstadt/Germany

We have audited the accompanying remuneration report of Software Aktiengesellschaft, Darmstadt/Germany, ("the Company") for the financial year from January 1 to December 31, 2022, including the related disclosures, which has been prepared to comply with Section 162 German Stock Corporation Act (AktG).

Responsibilities of the Executive Directors and of the Supervisory Board

The executive directors and the supervisory board of Software Aktiengesellschaft, Darmstadt/Germany, are responsible for the preparation of the remuneration report, including the related disclosures, that complies with the requirements of Section 162 AktG. The executive directors and the supervisory board are also responsible for such internal control as they consider necessary to enable the preparation of a remuneration report, including the related disclosures, that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities

Our responsibility is to express an opinion on this remuneration report, including the related disclosures, based on our audit. We conducted our audit in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW). These Standards require that we fulfill the professional responsibilities and that we plan and perform the audit so that we obtain reasonable assurance as to whether the remuneration report, including the related disclosures, is free from material misstatements.

An audit involves performing audit procedures in order to obtain audit evidence for the amounts stated in the remuneration report, including the related disclosures. The choice of the audit procedures is subject to the auditor's professional judgment. This includes assessing the risk of material misstatements, whether due to fraud or error, in the remuneration report, including the related disclosures. In assessing these risks, the auditor considers the system of internal control, which is relevant to preparing the remuneration report, including the related disclosures. Our objective is to plan and perform audit procedures that are appropriate in the circumstances, but not to express an audit opinion on the effectiveness of the Company's system of internal control. An audit also comprises an evaluation of the accounting policies used, of the reasonableness of accounting estimates made by the executive directors and the supervisory board as well as an evaluation of the overall presentation of the remuneration report, including the related disclosures.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Audit Opinion

In our opinion, on the basis of the knowledge obtained in the audit, the remuneration report for the financial year from January 1 to December 31, 2022, including the related disclosures, complies, in all material respects, with the accounting principles of Section 162 AktG.

Other Matter – Formal Audit of the Remuneration Report

The content audit of the remuneration report described in this report comprises the formal audit required under Section 162 (3) AktG including the issuance of a report on this audit. Since our audit opinion on the content audit is unmodified, this audit opinion includes that the disclosures required under Section 162 (1) and (2) AktG are contained, in all material respects, in the remuneration report.

Intended Use of the Report

We issue this report as stipulated in the engagement letter agreed with the Company. The audit has been performed for the purposes of the Company and the report is solely intended to inform the Company about the result of the audit.

Liability

This report is not intended to be used by third parties as a basis for any (asset) decision. We are liable solely to Software Aktiengesellschaft, Darmstadt/Germany, and our liability is also governed by the engagement letter dated December 12, 2022 agreed with the Company as well as the "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften (German Public Auditors and Public Audit Firms)" promulgated by the Institut der Wirtschaftsprüfer (IDW) in the version dated January 1, 2017 (IDW-AAB). However, we do not accept or assume liability to third parties.

Frankfurt am Main/Germany, March 8, 2023

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

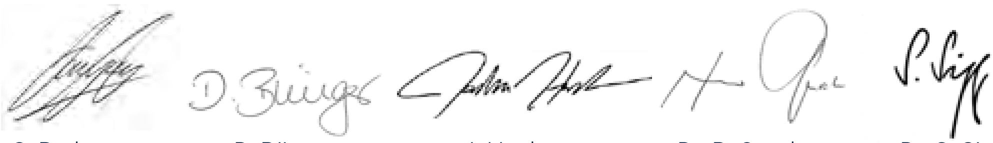
(Kirsten Gräbner-Vogel)	(Dr. Steffen Umlauf)
Wirtschaftsprüferin	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Additional Information

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Group. The Combined Management Report includes a fair review of the development and performance of the business and the position of the Company and Group, together with a description of the principal opportunities and risks associated with the expected development of the Company and Group.

Darmstadt, March 8, 2023
Software AG



S. Brahmawar | D. Bünger | J. Husk | Dr. B. Quade | Dr. S. Sigg

Five-Year Summary

Key Group Figures

in € millions (unless otherwise stated)	2022	2021	2020	2019	2018
Revenue	**958.2**	**833.8**	**834.8**	**890.6**	**865.7**
By type					
Product revenue	795.6	684.0	671.1	702.8	682.4
thereof licenses	314.5	240.5	217.2	245.1	249.4
thereof maintenance	405.3	399.4	422.6	435.0	415.4
thereof SaaS	75.8	44.1	31.3	22.7	17.6
Services and other revenue	162.6	149.8	163.7	187.8	183.3
By business line					
Digital Business	549.7	469.5	448.5	474.5	464.7
Adabas & Natural (A&N)	245.9	214.5	222.8	228.9	218.3
Professional Services	162.6	149.8	163.6	187.2	182.6
EBIT[1]	**78.1**	**122.1**	**136.4**	**214.8**	**231.6**
as % of revenue	8.2	14.6	16.3	24.1	26.8
Net income	**19.2**	**84.3**	**96.1**	**155.3**	**165.2**
as % of revenue	2.0	10.1	11.5	17.4	19.3
Employees (FTE)	**4,996**	**4,819**	**4,700**	**4,948**	**4,763**
in Germany	1,306	1,385	1,314	1,278	1,243
Balance sheet					
Total assets	**2,678.4**	**2,221.4**	**2,039.9**	**2,116.1**	**2,007.9**
Cash and cash equivalents	427.1	585.9	480.0	513.6	462.3
Net cash position	-240.0	277.3	220.1	217.0	149.0
Equity	1,511.2	1,438.2	1,312.5	1,357.5	1,239.1
as % of total assets	56.4	64.7	64.3	64.2	61.7

[1] EBIT: net income + income taxes + other taxes + net financial income/expenses.

Financial Calendar

HIGHLIGHTS OF 2023

April 27	Q1/23 financial results (IFRS, unaudited)
May 17	Annual Shareholders' Meeting (Darmstadt, Germany)
July 27	Q2/23 financial results (IFRS, unaudited)
October 26	Q3/23 financial results (IFRS, unaudited)

For the latest information on events and roadshows, please visit our website at
→ softwareag.com/FinancialCalendar

Publication Credits

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