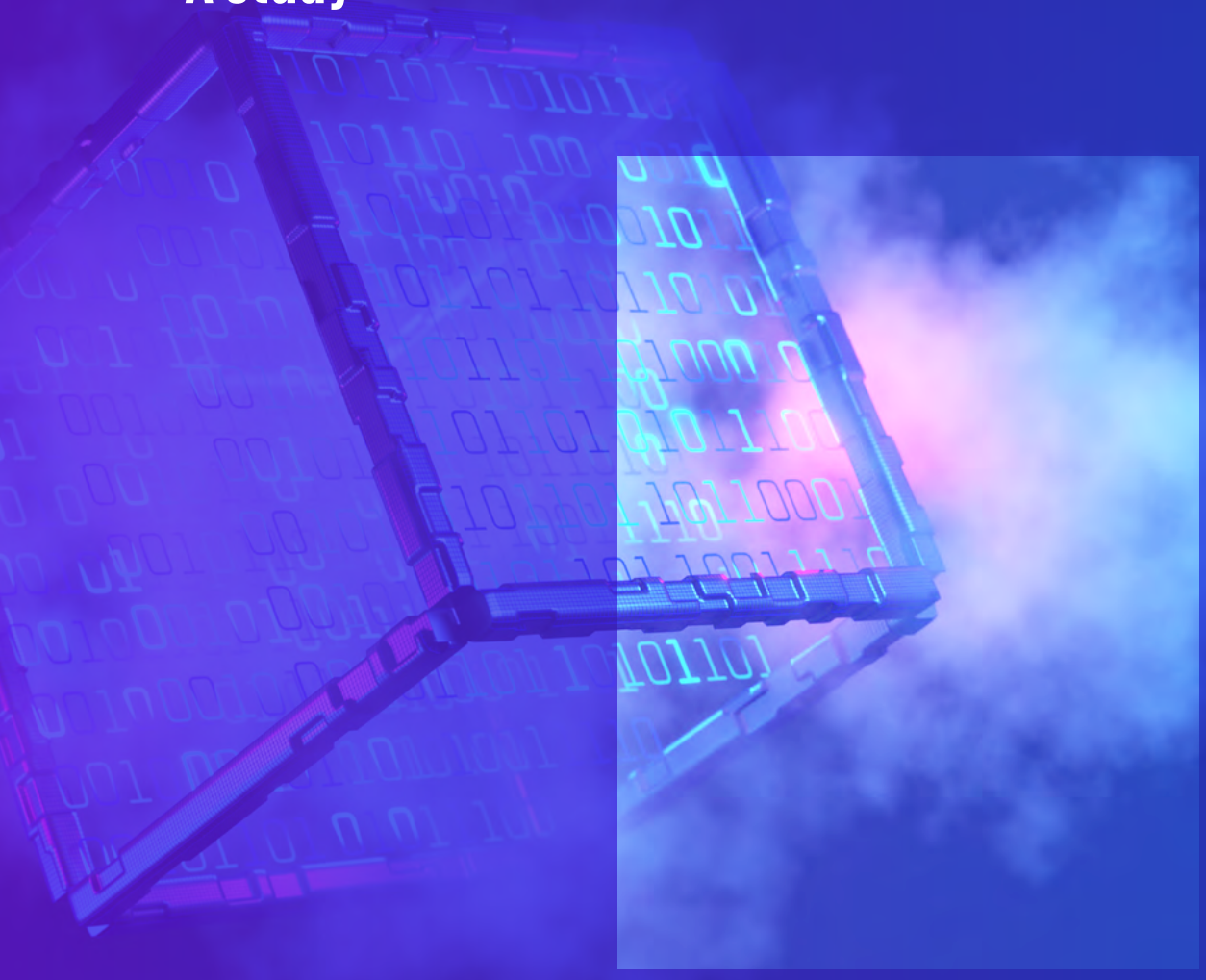
KPMG

Digitalisation in Accounting

2023/2024 edition

A study



Contents

Foreword

Digitalisation has completely revolutionised the way we communicate and work. In order to remain competitive companies need to adapt to the new requirements and configure their processes and working methods accordingly. In the accounting department significant progress has been made over the past few years in critical digitalisation topics, such as the homogenisation of the system landscape or paperless accounting. Related developments have already triggered transformative processes in many companies, which include fundamental changes like adapted job profiles and job descriptions.

This study continues the “Digitalisation in Accounting” series into its seventh year. The study offers insights into both the current status and ongoing developments with regards to digitalisation in accounting for companies in Germany, Austria and Switzerland (DACH region). It presents results from a comprehensive online survey, which are supplemented by practical case studies, as well as interviews with experts in the accounting

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field. As in the previous issues, the aim of the study is to provide readers with well-founded insights into the digitalisation efforts being carried by various companies from the DACH region.

Similar to the previous years, this year's study deals with technologies and systems used in accounting. Due to its chronological nature it's possible to highlight and compare year-on-year developments regarding those topics.

The in-depth focus of this particular issue is on the strategic consideration and importance of digitalisation, as well as its influence on efficiency and effectiveness in accounting. The study also sheds light on the changes in the field that are the result of digitalisation.

The study is the result of a long-term cooperation between KPMG and Prof. Dr. Thomas Hess, Prof. Dr. Thorsten Sellhorn, Dr. Antonia Meythaler and Victor Sehn from the Ludwig Maximilian University of Munich.

Our special thanks goes to all participants, especially our interview partners and the survey respondents. We would also like to extend our gratitude to Dr. Jens Günther, Enya Hakensohn and Christoph Schauerte from Vonovia SE, Dr. Jochen Schmitz from Siemens Healthineers AG, as well as Dr. Christian Multerer, Melanie Dörr and Gunther Rothermel from SAP SE. We also offer thanks to Daniel Fusshöller from Deutsche Telekom Services Europe SE for permission to publish the case studies and interviews in this study.

We wish you an inspiring read and look forward to engaging with you on the topics raised in this study, or any other digitalisation in accounting related issues.

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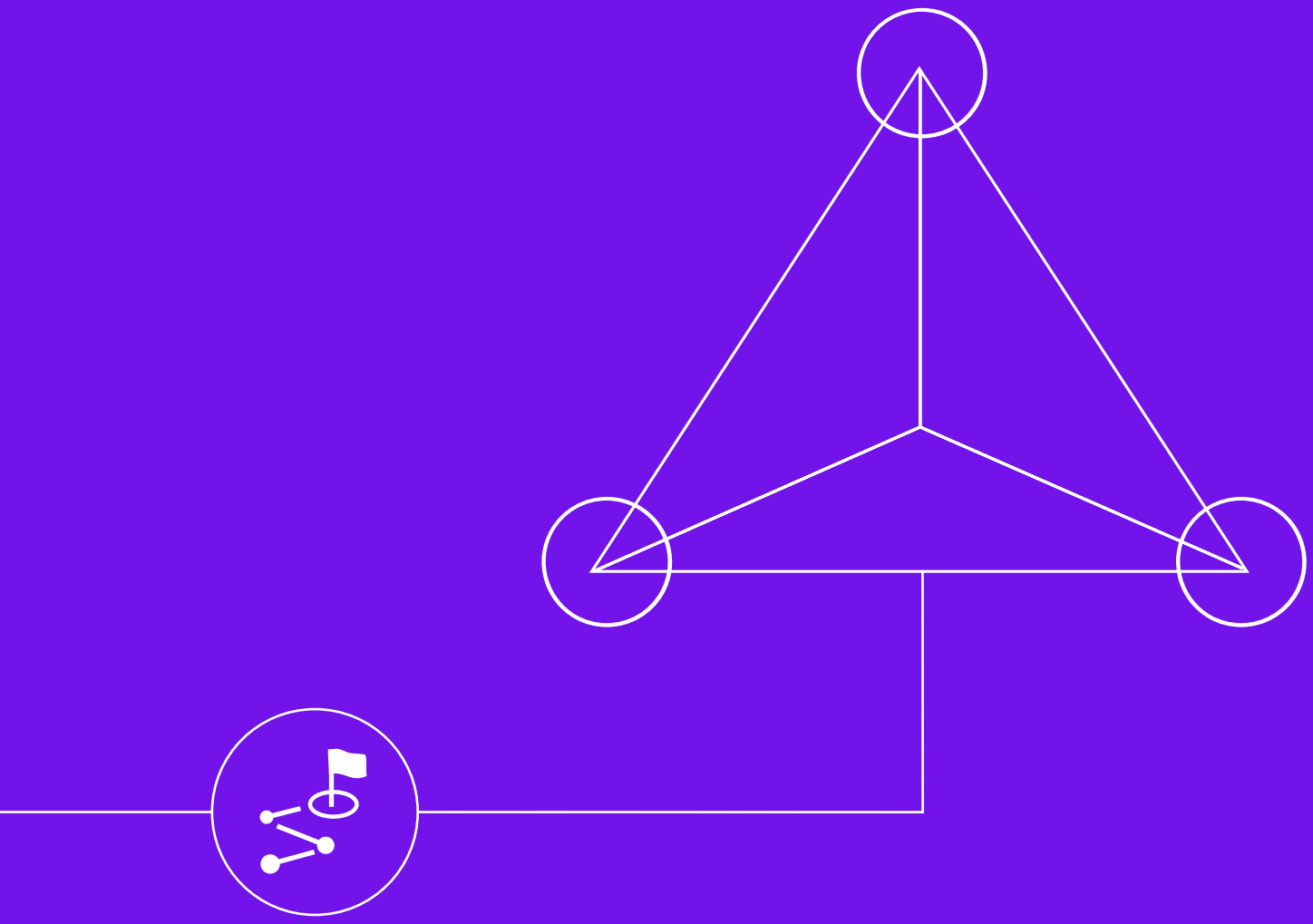
Executive Summary

Continuous progress in digitalisation in accounting

Companies are consistently pushing forward with their efforts to implement fundamental digitalisation elements in accounting and significant progress has, indeed, already been made in this regard. It has been shown throughout several years that within technological innovations cloud solutions are a particular focus of digitalisation efforts. On the other hand, AI-based solutions have yet to fully take hold across the board. Only 16 percent of the companies surveyed actually use learning systems in accounting today.

Efficiency and effectiveness of digitalisation in accounting

A notable insight from this year's survey is that the digitalisation efforts undertaken did not result in cost reductions for the majority of respondents. The effects have rather been notable on saving time in relation to the accelerated preparation and review of financial statements, as well as qualitative improvements. Those improvements are particularly characterised by the potential of expanded data evaluation, increased transparency of company data and improved data quality.



The vital importance of a digitalisation strategy in accounting

With regard to future digitisation efforts and the next steps, it is worth asking whether digitalisation should be embedded in a strategic framework. While the majority (57 percent) of companies consider it vital to develop a clear digitalisation strategy, only 19 percent have so far implemented such a strategy, specifically for their accounting. A further 31 percent are currently in the planning phase or are in discussion about adopting such a strategy.

Methodology

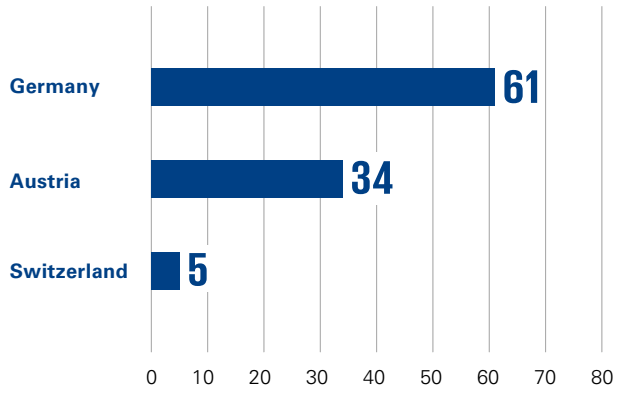
The study data was collected as part of an extensive online survey between April and June 2023, in which questions were asked about digitalisation in accounting and sustainability reporting. A total of 232 people contributed full answers; the study's contents and graphics are based on this sample. In addition, interviews were conducted with experts to delve deeper into selected topics and enlarge the study's insights.

So as to obtain a comprehensive overview of the current situation, the survey incorporates a variety of companies from a number of industries. Of the participating companies, 61 percent are from Germany, 34 percent from Austria and 5 percent from Switzerland (see Figure 1). Chief financial officers (CFOs) (29 percent) and heads of accounting (54 percent) are among the main respondents (see Figure 2). Any participants who do not work in financial departements were not taken into account in the evaluations.

With a share of 92 percent companies with up to 10,000 employees make up the majority of the sample in the survey (see Figure 3). For the rest, 6 percent of participants come from companies with a workforce of between 10,000 and 50,000 and the remaining 2 percent employ more than 50,000 people.

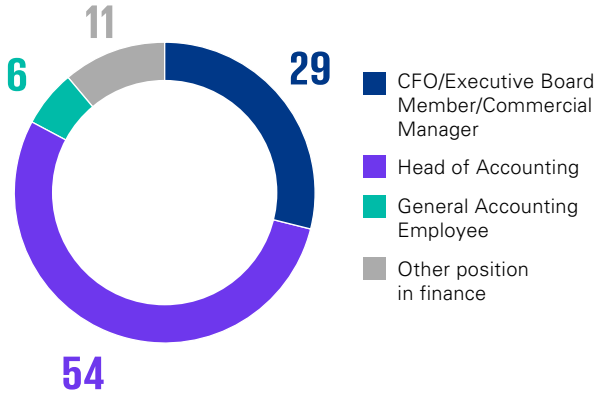
The companies represented in this study operate in a range of market segments (see Figure 4). It should be noted that the classification of large companies, which often operate across several segments, is based on the segment in which they generate the largest number of sales. We also included family businesses (31 percent) in the group of companies we surveyed (see Figure 5).

Figure 1: Country distribution
In which DACH country does your company operate?



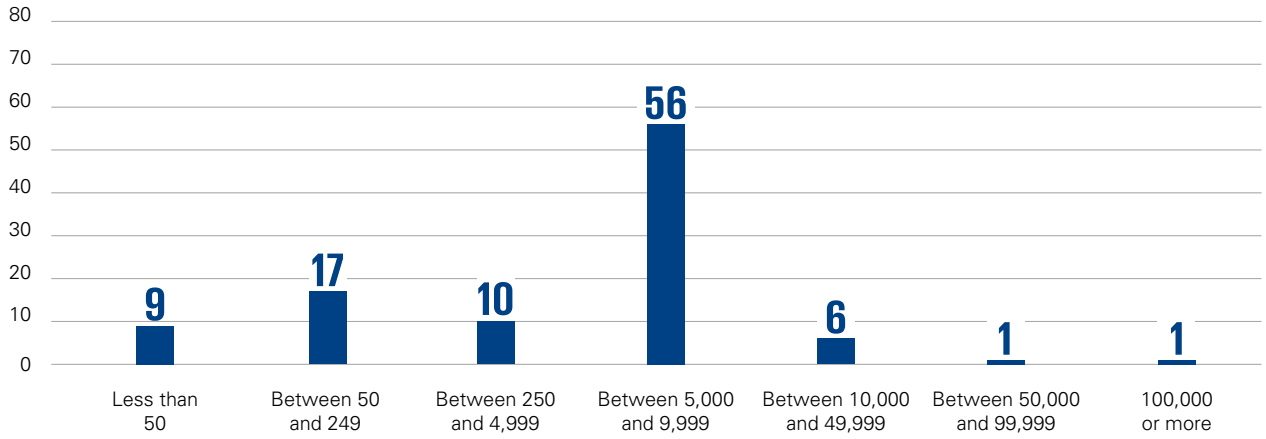
Figures in percent

Figure 2: Role of the survey participants
What position do you currently hold at your company?



Source: KPMG in Germany, 2024

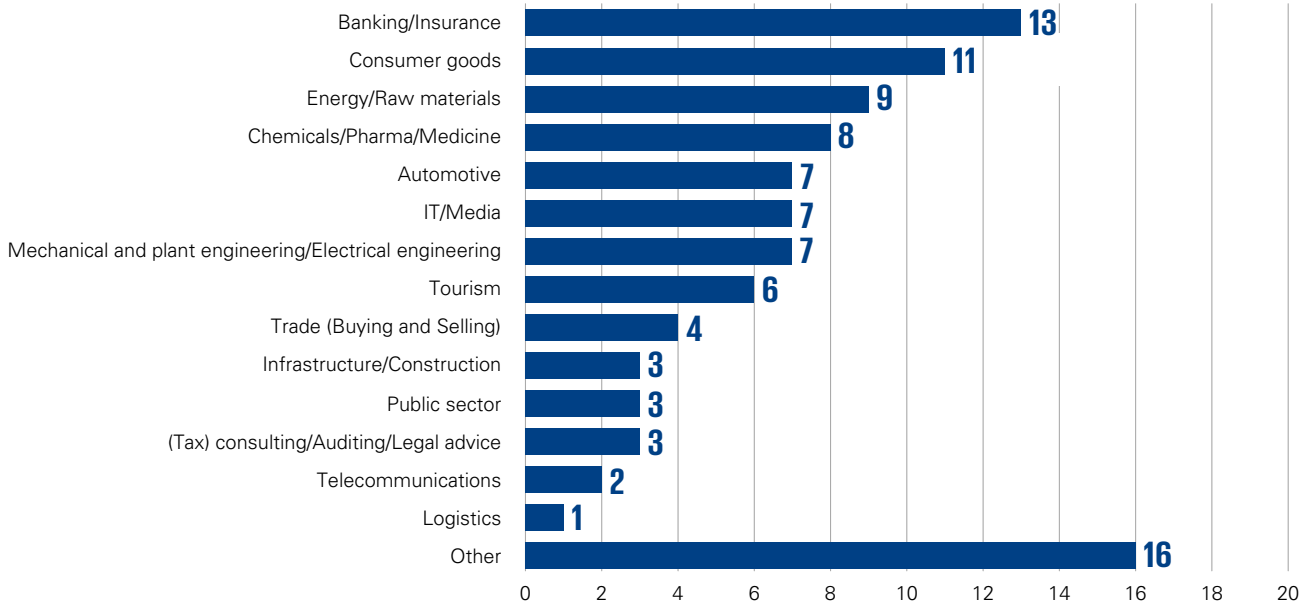
Figure 3: Company sizes
How many people does your group of companies employ?



Figures in percent

Source: KPMG in Germany, 2024

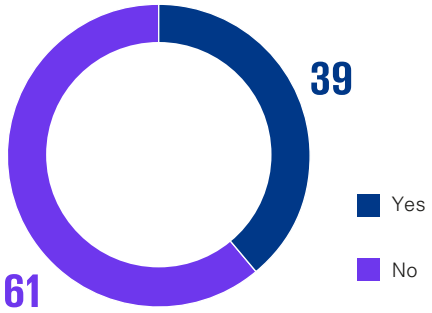
Figure 4: Commercial distribution
In what industry does your company primarily operate? Please select from one of the available categories below.



Figures in percent

Source: KPMG in Germany, 2024

Figure 5: Share of family businesses
Do you work in a family business?



Figures in percent *Source: KPMG in Germany, 2024*

Further insights

The survey results are supplemented by interviews with commercial representatives on the topics of predictive analytics and the European Single Electronic Format (ESEF). Additionally, Dr. Christian Multerer and Melanie Dörr from SAP SE talk about the use of predictive analytics for their company's forecasting. Furthermore, Enya Hakensohn and Christoph Schauerte from Vonovia SE continued their case study on the use of robotic process automation (RPA). The study is rounded off by an interview with Gunther Rothermel from SAP SE on the topics of digitalisation and sustainability.

Quotes from company representatives provide additional insights into how individual companies deal with the challenges of digitalisation in accounting.

Progress on essential digitalisation topics

01 Systems and Technologies

The successful digitalisation of (sub-)processes can make a significant contribution towards accounting being future-fit. It involves various technologies that can be used to increase efficiencies and sustainably optimise processes. This chapter describes which fundamental digitalisation projects companies are currently implementing or have already implemented in their accounting department, and which ones they are planning to. For this purpose, six relevant digitalisation topics were identified, the implementation of which companies have been asked about as part of this study since 2017 (see Figure 6). These topics are paperless accounting, the homogenisation of system landscapes, the standardisation of workflows, the management of master data quality, the creation of a uniform database and the abolition of legacy systems. The results provide insights into the progress companies have made as part of their accounting digitalisation efforts and their priorities in this regard.

According to the survey's results most of the companies have already partially or fully implemented homogenisation of the system landscape and paperless accounting. 62 and 65 percent respectively have either implemented these features across the board or have at least implemented them in some areas.

In contrast, the standardisation of workflows, the management of master data quality and the creation of a uniform database are not yet as advanced in their implementation. Although over half of the companies have already implemented these features at least in some areas, the proportion of them being fully implemented is only between 11 and 15 percent.

The abolition of legacy systems is worth mentioning in this context because this digitalisation step has only been implemented in some specific departments within the companies (29 percent), and less so across the board (21 percent). However, this topic is number one when it comes to the question of what companies are currently concerned with, i.e., which features are currently being implemented or are specifically planned: 25 percent and 13 percent respectively state the same about incorporation of them. In addition, the focus is primarily on the standardisation of workflows (24 and 12 percent) and on the management of master data quality (22 and 14 percent).

In summary, the greatest progress can be seen in paperless accounting, the homogenisation of the system landscape and the standardisation of workflows. With regard to the digitalisation topics asked about the main focus currently for the companies surveyed is on the abolition of legacy systems, followed by the standardisation of workflows and the management of master data quality. In these three particular areas most projects are already being implemented or planned.

In my opinion, master data quality and master data processes are the absolutely crucial basis for all further digitalisation and automation steps; from dependent company processes to the use of artificial intelligence. Simply put, if the input is not right, the output can only be wrong. For this reason the new function works, among other things, by using new technologies to improve master data processes and, thereby, the quality of the financial master data.

Jonathan Townend
Senior Vice President, Head of Group Accounting, Reporting & Taxes, BMW Group

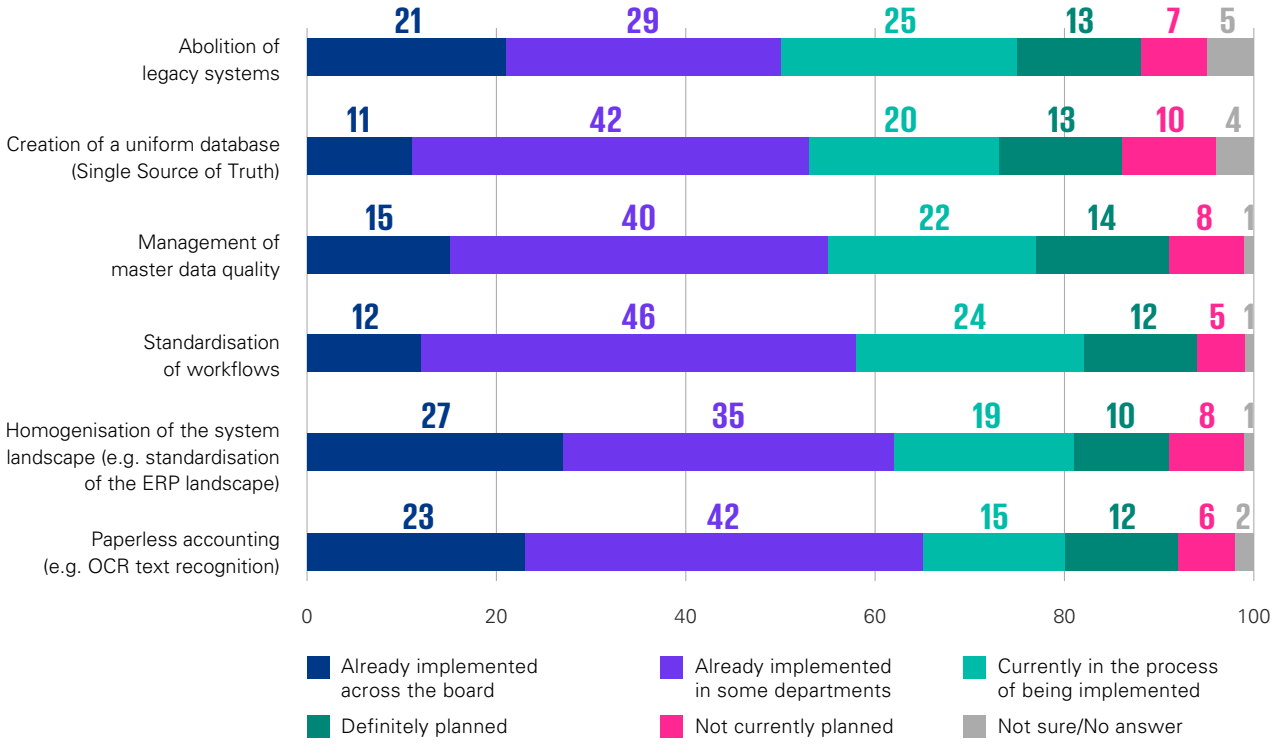
Figure 7 illustrates this hierarchy of digital priorities in accounting at companies. It shows the cumulative survey results in the categories "Already been implemented across the board" to "Currently in the process of being implemented" for the years 2018 to 2023. There has actually been clear progress in the abolition of legacy systems since the beginning of the study series (difference: 25 percentage points), the switch to paperless accounting (difference: 25 percentage points) and the creation of a uniform database (difference: 21 percentage points).

With regard to the multi-year comparison it should be noted that it does not show the progress of individual companies but rather the current situation in the DACH region itself.

The additional effort, for example, that poor master data quality leads to should not be underestimated. As the missing data often only becomes apparent during the invoice payment process it leads to manual intervention and duplication of effort, with the end result being that that the supplier has to wait longer to get paid.

Jonathan Townend
Senior Vice President, Head of Group Accounting, Reporting & Taxes, BMW Group

Figure 6: Systems and Technologies
To what extent does your company deal with the following accounting topics?



Figures in percent (n = 232)

Source: KPMG in Germany, 2024

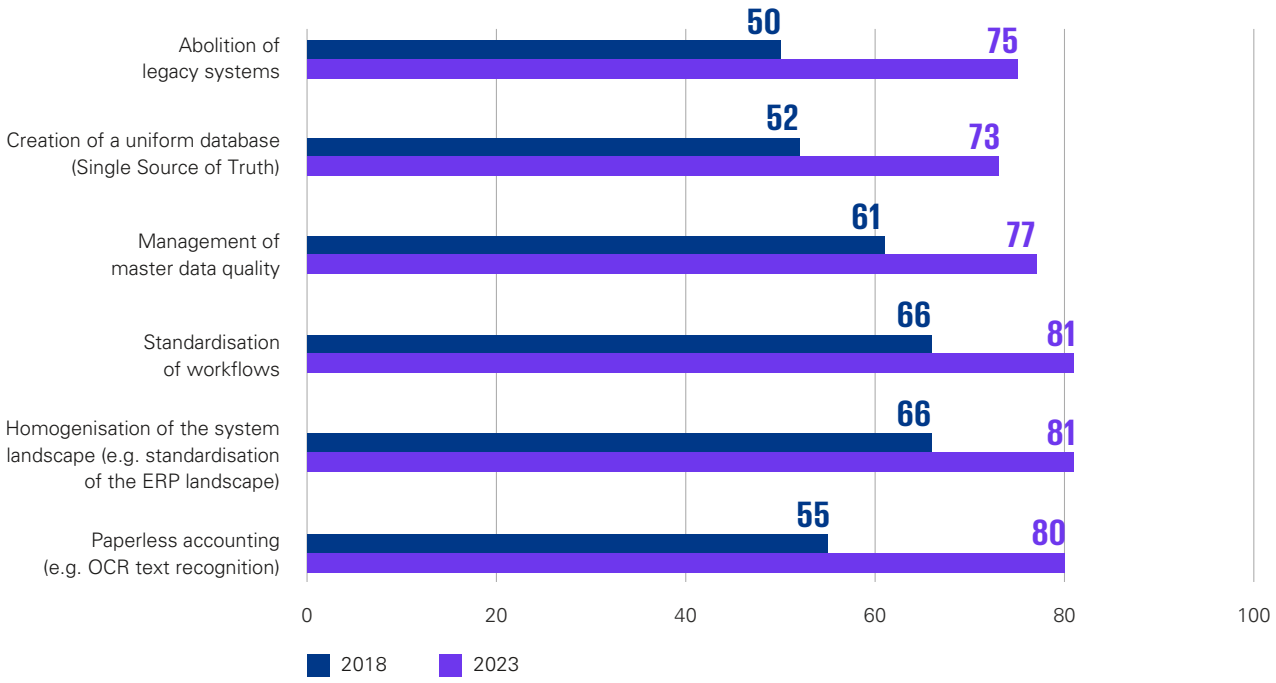
As the survey is anonymous it does not allow for answers to be attributed to specific companies, but a constant fluctuation in the number of participants taking part can still be assumed.

In addition to the six digitalisation priorities already mentioned (see Figure 7) companies were once again surveyed about the use of nine specific technology trends and technology-based solutions in accounting (see Figure 8). The results provide information about those technologies that are already widely in use, those that are being implemented and those which are definitely being planned.

We currently do not use large language models such as ChatGPT in our accounting. However, in the medium term we see the possibility of using a tool such at this to comment on internal reports and perhaps, in the long term, also for the annual report.

Wolfgang Patommel
Head of Processes and Transformation,
Evonik Industries AG

Figure 7: Implementation of technologies
What is the status of digitalisation in accounting at your company with regards to the implementation of the following accounting topics? (Aggregate values of the categories "Already been implemented across the board" to "Currently in the process of being implemented")



Figures in percent (2018 n = 172; 2023 n = 232)

Source: KPMG in Germany, 2024

The survey results show that cloud solutions are the most widespread of technologies in accounting. More than a fifth (22 percent) of those surveyed use this type of solution across the board, and more than another third (37 percent) are already using it in initial pilot projects. This is followed in second place by in-memory databases: 18 percent of survey's participants stated that they were already using this technology to a large degree or in initial pilot projects. The use of self-service reporting stands respectively at 10 and 21 percent in each of the two aforementioned categories, while for rule-based systems (RPA) the results are slightly lower (7 and 17 percent respectively). However, when looking closer at the survey results it also becomes clear that not all respondents plan to use the technologies surveyed and some companies are to some degree unaware of their added value. This primarily concerns blockchain technology (60 or 12 percent), virtual reality tools (44 or 11 percent) and business process management platforms (43 or 4 percent).

We continue to use predictive analytics applications in parallel with human forecasts. Although such AI-based applications have progressed enormously in recent years there are still areas where human expertise is essential for forecasting. For example, we rely on specialist knowledge in the case of major unexpected/difficult to predict events, such as a pandemic.

Dr. Christian Multerer
Chief Controlling Officer,
Corporate Controlling, SAP SE

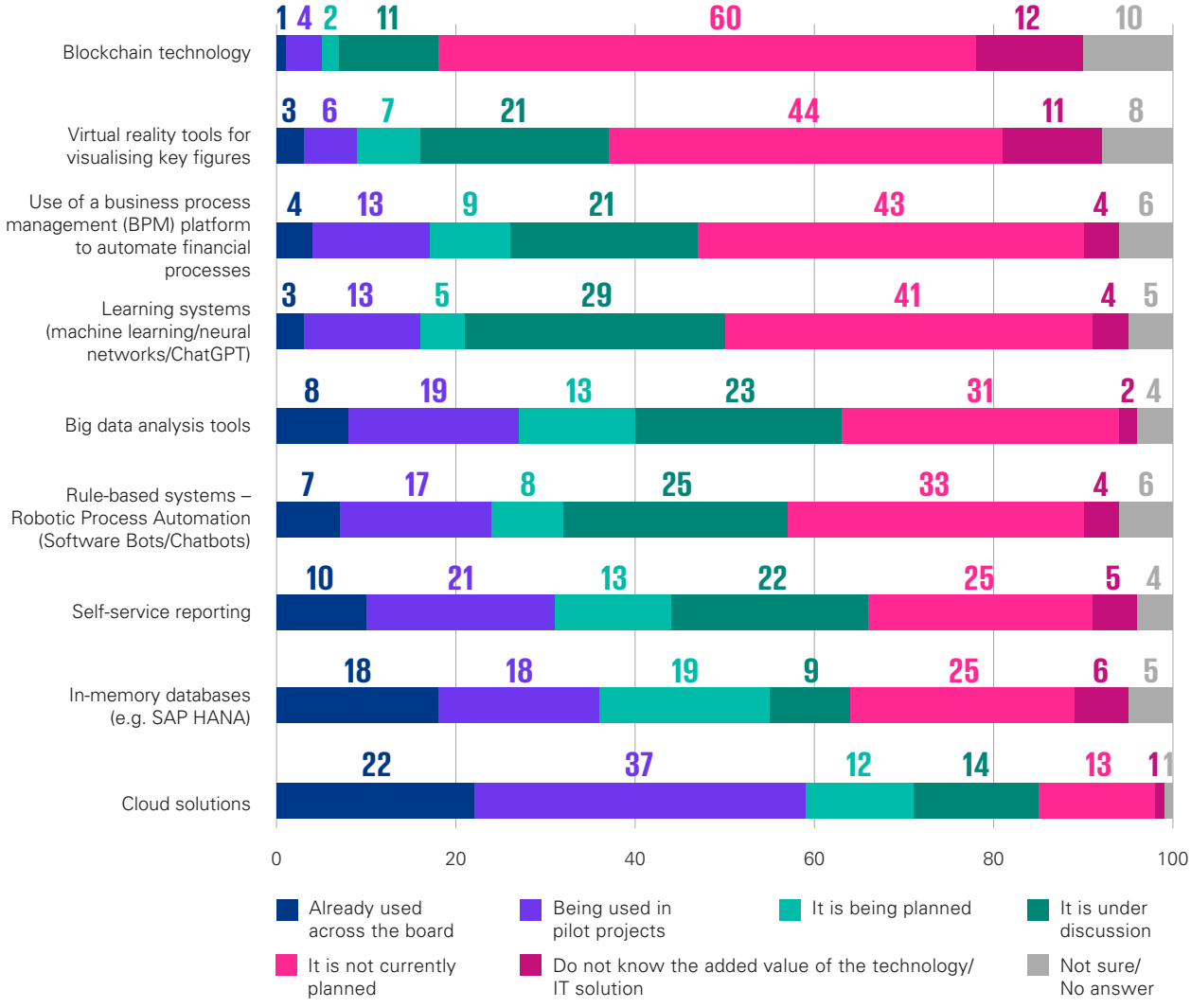
We use machine learning, for example, in the area of invoice booking. While previously a department essentially processed invoices without a purchase order, this process has now been in the main automated. Our application uses past bookings as training data to automatically book future receipts, which allows our employees to concentrate on controls and quality.

Dr. Guillaume Maisondieu
CEO, DTSE (Deutsche Telekom Services Europe SE)
and SVP Accounting & Customer Finance

We plan to reduce the number of manual bookings to zero in the long term. There should, therefore, be a shift in our accounting department activities from creating tasks to controlling ones.

Dr. Jens Günther
Head of Accounting Support Function, Vonovia SE

Figure 8: Importance of current technology trends in 2023
To what extent does your company use the following technologies or technology-based solutions in accounting?

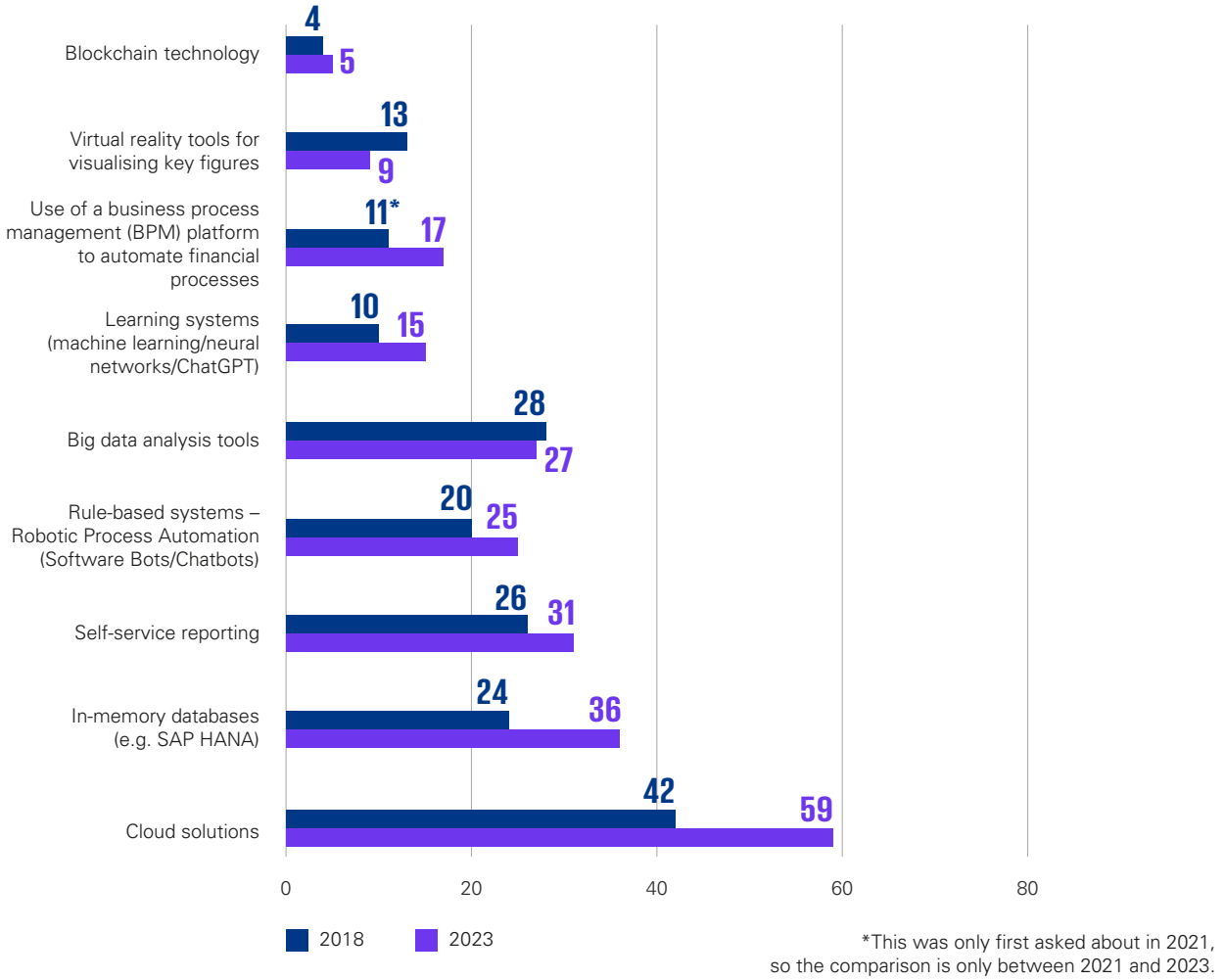


Figures in percent (n = 232)

Source: KPMG in Germany, 2024

On the other hand, as stated earlier, cloud solutions have now become firmly established in accounting: more than half of the companies surveyed (59 percent) are currently using them either across the board or in pilot projects. This represents an increase of 17 percentage points between 2018 and 2023 (see Figure 9). At the same time, it is noted that a growing number of companies are using in-memory databases (now 36 percent of those surveyed). The results indicate that this development will continue: 19 percent of respondents plan to implement such databases (see Figure 8). AI-based solutions have yet to achieve a breakthrough, although 16 percent of companies currently do use learning systems in accounting.

Figure 9: Implementation of technology trends
To what extent does your company use the following technologies or technology-based solutions in accounting? (Aggregate values of the categories "Already being used across the board" and "Currently being used in pilot projects")



Figures in percent (2018 n = 172, 2023 n = 232)

Source: KPMG in Germany, 2024

Figure 9 (a multi-year comparison between 2018 and 2023) shows that cloud solutions not only continue to be the most widespread of all technologies but that they have also significantly increased in importance for the surveyed companies. Self-service reporting and in-memory databases have also become more relevant for respondents (by 5 and 12 percentage points respectively).

Rule-based systems (RPA) and learning systems have also become more important with an increase of 5 percentage points each over the last five years.

On the other hand, big data analysis tools have become slightly less important (by 1 percentage point).

We not only use AI in our Shared Service Centres for our own optimisation but we also make solutions available to our customers in the form of "AI-as-a-Service". Over the last few years we have developed an international team of programmers and researchers in Germany, Eastern Europe and India for this purpose.

Dr. Guillaume Maisondieu
CEO, DTSE (Deutsche Telekom Services Europe SE) and SVP Accounting & Customer Finance

As of this year we have a new process and data governance and digitalisation function with a direct reporting line to me. This is in order, among other things, to put even more emphasis on the digitalisation transformation in the financial sector and to ensure a focus on financial master data in all relevant projects. The new function in the finance department seeks to have a joint end-to-end process outlook with other departments. As an example, I would like to point out our close cooperation with the purchasing department, with a shared focus on the overall Procure-to-Pay process, instead of on the optimising of individual process steps.

Jonathan Townend
Senior Vice President, Head of Group Accounting, Reporting & Taxes, BMW Group

Case study (continued) on the use of RPA at Vonovia SE

Authored by

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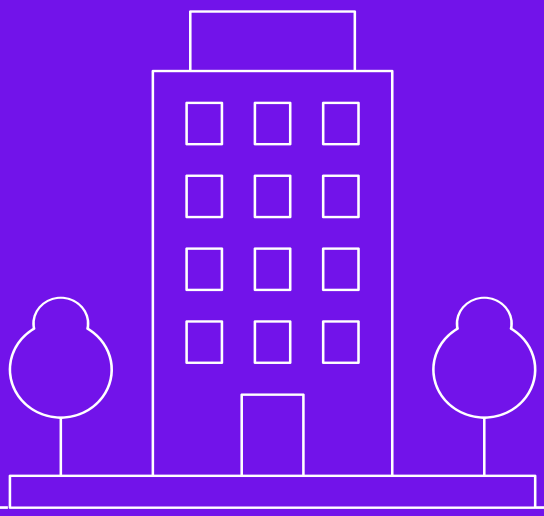
Enya Hakensohn
Accounting Support Officer, Vonovia SE

The Company

Vonovia SE is a leading private housing company that currently employs 15,900 people. At the present time it owns more than 550,000 apartments; all in very attractive cities and regions in Germany, Sweden and Austria. The Bochum-based company's portfolio includes around 72,500 managed apartments and has a total value of around 96 billion euros. Its share has been listed on the stock exchange since 2013 and on September 2015 was included in the DAX 30 (today DAX 40). In September 2020, it was then added to the EURO STOXX 50. The Vonovia SE share is also included in numerous other national and international indices.



Case Study

Robotic process automation in the management of subsidiaries

Initial situation

Naturally, the organic growth of real estate groups has its limits. Apartments can only be rented out once and, in spite of all the new construction targets, these livings spaces cannot be generated arbitrarily. Relevant growth in the real estate industry primarily takes place, therefore, via inorganic growth paths. However, this results in the problem that real estate groups are often made up of a significant number of legal entities which, due to the legal situation of property transfer tax can only be merged at prohibitively high costs.

What at first glance seems like an unintentional anomaly in the regulatory framework is normally a mammoth organisational task for the accounting departments of these real estate corporations. After all, each company has to go through its own annual financial statement separately. It has to clarify, therefore, just who is authorised to sign as a member of the management or as an authorised representative. A size class must be defined in accordance with Section 267 of the German Commercial Code (HGB). In certain circumstances, a shareholder resolution to make use of this relief—in accordance with Section 264 Paragraph 3 of the German Commercial Code (HGB)—must be passed, signed and published. The companies must prepare a balance sheet and a profit and loss statement and, if necessary, even an appendix and a management report. Finally, a determination must be written and signed. Let's not forget that every company must be included in insolvency monitoring and may also have a relationship with a foreign country that must be reported to the German Federal Bank.

The Vonovia subgroup in Germany currently consists of 404 subsidiaries. If one assumes that the previously outlined range of tasks requires twelve working hours per company for preparation and controlling, then they add up to a great deal of working hours in the form of an annual work output of three full-time employees. In an environment in which stakeholders have ever higher (quality) expectations with regard to financial and non-financial reporting, one must be allowed to ask whether these resources are being used sensibly.

Solution

Annual financial statements under commercial law are now mainly supported by automation solutions in Vonovia's accounting department. For example, a bot extracts commercial register items from the register portal, reads company data and signatory authorisations, and then stores this data in a master database. Based on this information another bot determines which companies can take advantage of the relief provided by Section 264 Paragraph 3 of the German Commercial Code (HGB). It then creates resolutions for shareholders to sign.

In the case of annual financial statements a bot ultimately prepares a balance sheet and a profit and loss statement for each company and, at the same time, prepares the approval of the annual financial statements from the shareholders' meeting. Bots are also used, for example, in compiling lists of shareholdings in accordance with Section 285 No. 11 of the German Commercial Code (HGB), in insolvency monitoring, in investment valuation and as part of the processing of foreign trade reporting regulations. In 2024 bots will also create appendices and management reports for the very first time for the annual financial statements. In addition, an analysis of the business transactions that have to be posted has led us to the realisation that most general accounting postings follow clearly formulated rules. So, bots are already being tested that can replicate these rules and make corresponding bookings.

Success factors and current obstacles

All of this might lead to the assumption that Vonovia will soon no longer need an accounting department at all, but rather just a small, specialised accounting IT department. However, this contradicts our actual experience, which is that bots do not replace jobs but instead change them. And although bots have superhuman endurance they are intellectually the weakest employees in the company. Therefore, with this in mind, your output must be constantly monitored—even if only on a random basis. This leads to simple creating activities becoming responsible controlling activities—an enrichment of the job description that noticeably increases motivation, especially among "basic" clerks.

In general it can also be noted that the qualitative and quantitative requirements for accounting are noticeably multiplying, particularly as a result of non-financial reporting and also those increasingly strict regulations around auditing and enforcement. As a result, the technology does not eliminate jobs but rather ensures that there are available resources to process these highly complex requirements.

Surprisingly—given these obligations—the biggest curse of technology also turns out to be a blessing. There is no doubt that highly talented, often young people in dynamic teams must drive the development of development of bots. However, this group of people generally tends not to be known for "jumping up and down" in anticipation at the prospect of a job in accounting. However, the opportunity to work on automation projects is changing this prospect, meaning increased capacity is available for analysing highly complex accounting problems.

Outlook

Without doubt, with the many tasks that bots are currently engaged in, the question arises as to whether they would be better suited if integrated directly into the ERP landscape. And clearly companies often have this desired end state. However, in a world of chronically overloaded IT departments resorting to self-developed bots is a good interim solution. It is arguable as to whether a quite complex master data-based management report created by a bot is still necessary as artificial intelligence (AI) can comprehensively examine the characteristics of companies. However, initial experiments show that freely available AI models are not yet sufficiently developed to generate audit-proof documents.

Predictive analytics in accounting: Present and Future

Interview with Dr. Jochen Schmitz, CFO, Siemens Healthineers AG

Where has Siemens Healthineers already used predictive analytics applications in accounting?

We now use predictive analytics in many of our forecasting applications. They are used intensively, in particular, for liquidity planning. On the other hand, in spite of the great progress in this area we continue to use forecasts from "human" experts.

Why has predictive analytics not yet completely replaced human forecasting?

There are two main reasons. Firstly, AI-based forecasts are largely a black box for our employees. As there are several thousand input variables it is difficult to understand why exactly the predictive analytics application generates a certain value, and what the strongest drivers of such a machine forecast actually are. Secondly, forecasts and planning tasks are intertwined in our company and, therefore, have a direct effect on each other. So, a complete shift of forecasting tasks to a predictive analytics tool is difficult because these forecasts cannot be separated from planning, which remains in the hands of employees.

Do you see areas in which predictive analytics are already completely superior to human forecasts?

People who make forecasts follow certain incentives or have certain preferences regarding their work. This subjectivity creates a human bias that a machine is not subject to. Our predictive analytics applications can evaluate an existing issue from a neutral perspective—independent of personal influencing factors—where the data is free of algorithmic biases in its design and training.

How would predictive analytics applications, as well as employee profiles, have to develop further in order to automate forecasts in your accounting to a greater extent in the future?

The results of the applications should be easier to understand for employees without IT knowledge. The key phrase is: explainable AI. At the same time, we must also continuously offer better training in the use of AI-based tools to our employees. This could significantly improve the collaboration in the future between humans and machines when combining forecasting and planning.

How central and decentralised forecasts interplay at SAP

When planning key performance indicators, such as sales or personnel costs, SAP currently utilises a system that combines the results of central and decentralised forecasts. The use of modern predictive analytics methods is, indeed, becoming increasingly important.

Forecasts created centrally as part of group planning provide the board of directors with valuable insights and important data points across the entire company. They are based on algorithmic recognition of historical data patterns. Although these top-down plans do not make it easy to draw direct conclusions about the development of individual divisions, they do support the possibility of group-wide planning and control. In addition, there are decentralised planning teams in individual divisions whose plans are aggregated into group-wide forecasts. This decentralised approach allows a granular forecast of relevant control parameters, sometimes even down to the level of individual account assignment items. For the board, the bottom-up approach results in precise control options for individual departments and the company as a whole. This approach also makes it possible to incorporate the experience and professional skills of the various business areas into planning. At the same time, there can often be a lack of objectivity when creating decentralised forecasts.

The example of cost forecasting clearly shows the strengths and weaknesses of both these approaches. Reliable cost planning is a high priority for companies and is needed both for the granular control of departments and for long-term macro planning. While the central group-level forecast provides a data-driven picture of the cost structure of the entire company and its board, the decentralised forecast provides deeper insights into expected costs. Both approaches are, therefore, used for effective control and planning. The central forecast is used specifically for the intra-year review of financial planning and for management purposes at the company level; the objectivity of the data used is a particular advantage. The decentralised forecast, on the other hand, enables close monitoring of individual departments. In this way management can understand the development of individual cost factors at different levels and counteract unwelcome developments.

SAP currently plans to continue using this dual approach for the foreseeable future and there are several reasons for doing so. Both approaches have complementary strengths and weaknesses. Decentralised planning allows for greater granularity and incorporates personal experience, while centralised planning ensures a higher level of objectivity. When combined they enable comparison and increase the reliability and accuracy of predictions.

Our interviewees

Dr. Christian Multerer
Chief Controlling Officer,
Corporate Controlling,
SAP SE

Melanie Dörr
Head of Center of Expertise
Central
Forecast & Subsidiary
Controlling,
SAP SE

Transformation through digitalisation

02 How digitalisation affects accounting

The topic of digitalisation is omnipresent. The effects on costs and time expenditure play a central role when it comes to the question of the aim of digitalising (sub-)processes. However, the results in Figure 10 show that for a significant proportion of respondents (65 percent) the costs of preparing financial statements have not noticeably decreased. Even more companies (72 percent) state this point with regard to the annual audit. In contrast, a fifth of those surveyed said that digitalisation has caused higher costs when preparing financial statements. A quarter of those surveyed shared this assessment for the final audit.

Nevertheless, digitalisation makes a noticeable contribution to speeding up the preparation and review of financial statements. 50 percent of those surveyed confirm this in relation to the preparation of financial statements and 48 percent to the audit. This suggests that while digitalisation may not directly lead to cost reductions for every company in these areas, for around half of the companies it clearly accelerates their processes.

If the time required is reduced, human resources can be directed toward other value-adding activities. The case study listed in this study on the use of robotic process automation at Vonovia provides a good example for this effect: its employees were relieved of repetitive tasks and were, therefore, able to focus on more complex issues, as well as on controlling activities.

However, not all respondents stated that they were saving time as a result of digitalisation. With regard to both the preparation of financial statements and the audit more than 20 percent of companies said that the time required remained the same. 14 percent noted an increased amount of time spent preparing the financial statements and 20 percent noted an increased amount of time spent on the final audit. One possible explanation could be that employees still need to have more training and have to be introduced to new systems and to test them. The auditors, in turn, must first absorb the newly introduced digitalised processes and understand what additional time will be required in the changeover year.

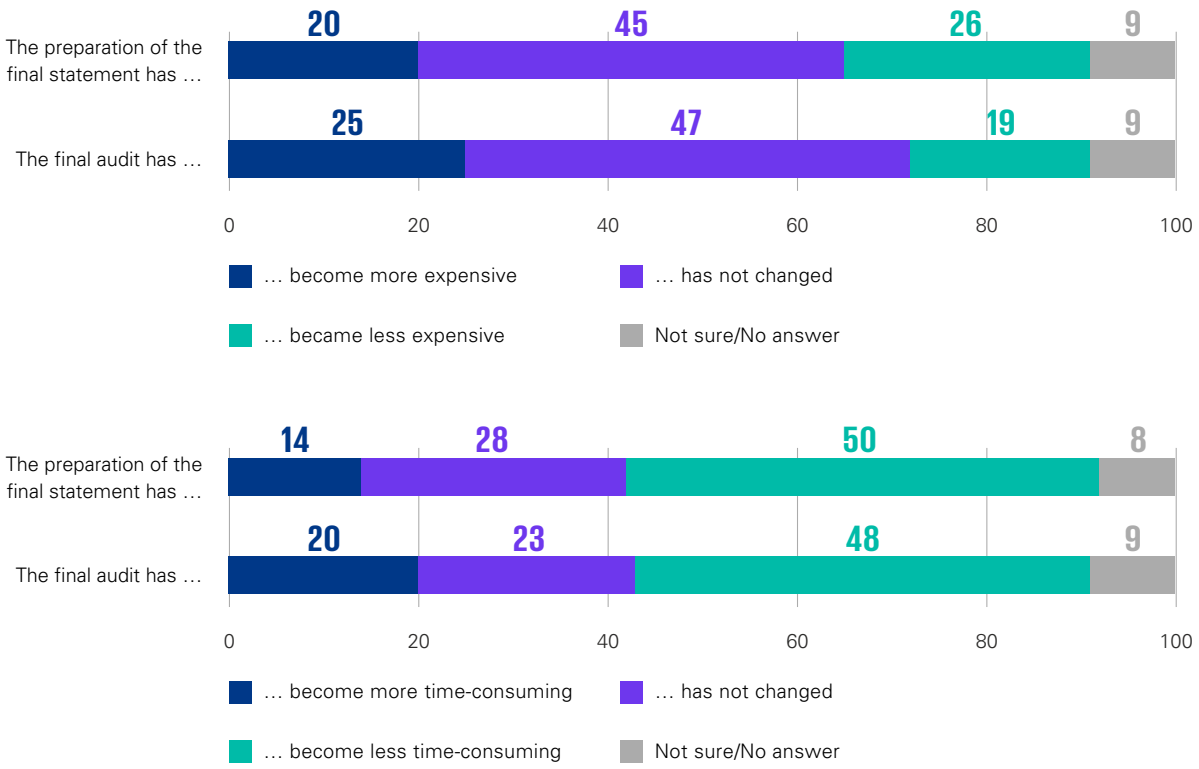
In summary, those surveyed predominantly see digitalisation as having a positive effect in terms of time spent on tasks and, on average, fewer positive effects in terms of costs.

”

While tagging of the main calculators was still easy to prepare, timely block tagging of the appendix posed more of a challenge for us due to changes made shortly before the declaration. This time-consuming manual work might become a real problem, especially if the scope of tagging is further expanded, for example, for the sustainability declaration according to the CSRD, which is mandatory from the financial year 2024 on.

Lothar Demant
Head of Group Accounting Policy & External Reporting,
Evonik Industries AG

Figure 10: Impact of digitalisation on efficiency
What impact does digitalisation have on accounting efficiency in your company?

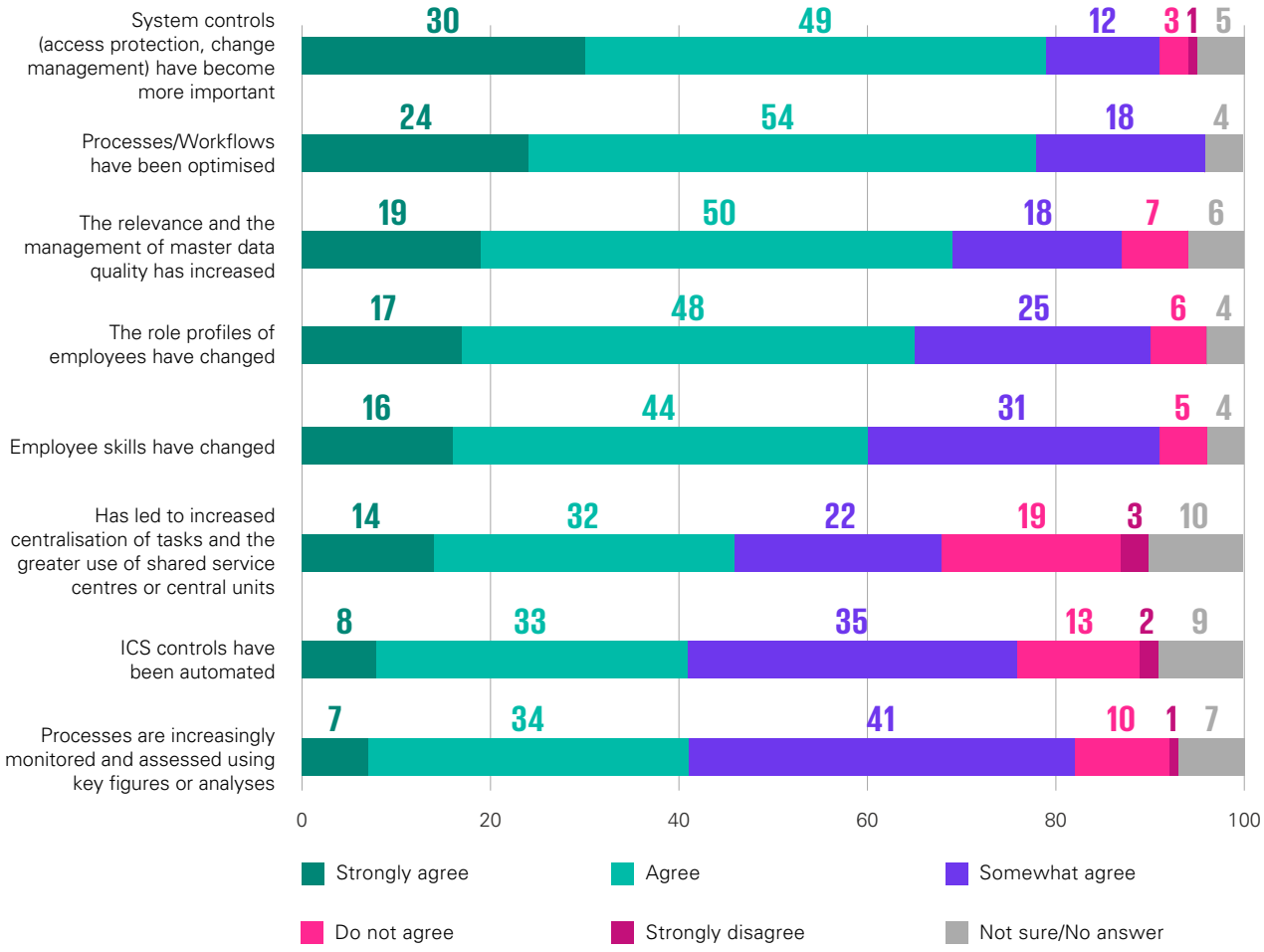


Figures in percent (n = 232)

Source: KPMG in Germany, 2024

In addition to the impact on the efficiency of preparing and auditing financial statements, companies were asked about other changes in accounting that were caused by digitalisation (see Figure 11). The results show that digitalisation has made the topic of system controls (or access protection) more relevant. Four out of five companies have this viewpoint. Plus, the digitalisation led to optimised processes, increased the relevance of master data quality and impacted the role profiles and skills of employees. A lower level of agreement (41 percent) is given for monitoring and assessing processes through key figures or analyses, as a consequence of digitalisation efforts. Nevertheless, in view of the growing sustainability requirements it can be said that there is still potential for companies in key figure-based analysis. Digitalisation makes it possible to gain a deeper insight into sustainability performance and to take measures to improve it.

Figure 11: Changes in accounting due to digitalisation
What has changed in accounting due to digitalisation?



Figures in percent (n = 232)

Source: KPMG in Germany, 2024

The survey results reveal that the impact of digitalisation on quality in accounting is largely determined by three factors (see Figure 12). Firstly, more extensive data evaluation (recognised by 84 percent of respondents) that allows **deeper insights and analyses** that, for example, can be used to clarify and contribute to the optimisation of business processes. Secondly, the **increased transparency of company data** (confirmed by 80 percent of those surveyed) leads to more well-founded, data-based recommendations for action for decision-makers. Additionally, a deeper understanding of the company's current standing with regards to its accounting is possible.[1] The third factor that significantly influences overall quality is the **improvement in data quality** (76 percent of respondents recognised this). This helps to enhance the reliability of the information collected and improve the basis for digitalisation efforts. In summary, these results show how digitalisation can comprehensively improve quality standards in accounting.

One of our digitalisation priorities is access to previously unused data. The goal is to have data available everywhere and centrally, for even the most complex corporate data landscapes.

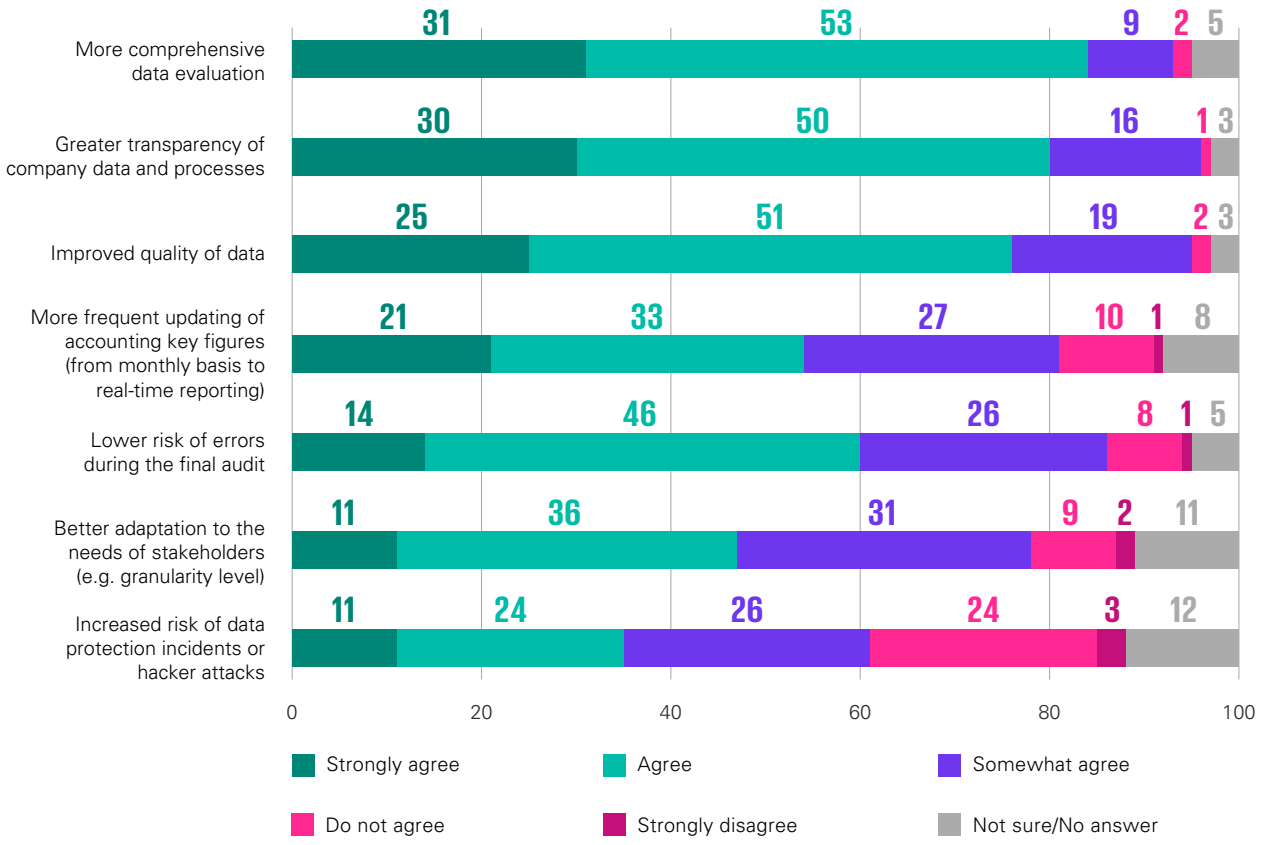
Dr. Jochen Schmitz
CFO, Siemens Healthineers AG

Due to the increasing automation of processes in our accounting the role of employees is shifting more and more from creating to controlling, as well as ensuring high quality. For all automation steps it is always important to us that humans remain in control and are responsible for the quality of the results.

Dr. Guillaume Maisondieu
CEO, DTSE (Deutsche Telekom Services Europe SE) and
SVP Accounting & Customer Finance

1 See the interview with Prof. Dr. Johann Kranz from Ludwig Maximilians University on the topics of digitalisation and sustainability in the sister study of this document on Sustainability Reporting – Stocktaking and Trends, edition 2023/2024, pp. 16 f., 34 f. Prof. Dr. Johann Kranz addresses the importance of company-wide transparency in the context of sustainability reporting. He also highlights challenges and emphasises the added value of transparency beyond meeting regulatory requirements.

Figure 12: Effects of digitalisation on quality
What impact does digitalisation have on the quality of accounting in your company?



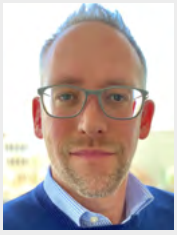
Figures in percent (n = 232)

Source: KPMG in Germany, 2024

European Single Electronic Format (ESEF): Pros and Cons

Interview with Christoph Schauerte, Head of Accounting, Vonovia SE and Daniel Fusshöller, Head of External Reporting, Deutsche Telekom Services Europe SE

The introduction of a uniform European Single Electronic Format (ESEF) has been widely discussed in German companies for several years. How is its implementation going at your company and what are your experiences with it?



Daniel Fusshöller: The additional provision for our annual financial statements via ESEF represents a sizeable extra burden for our company. The implementation itself and the coordination with the auditors are both very time consuming. As a result, this even led to a deliberate "uncoupling" of the preparation and declaration dates and, thus, to alterations in the committee process. And we have yet to see any significant advantages for us from the new standard.

Christoph Schauerte: I agree. The implementation causes enormous cost—a huge additional burden—and does not create any direct added value for us. Currently the regulations sometimes even cause the disruption of the creation and testing processes. The upcoming ESEF reporting according to the Corporate Social Responsibility Directive (CSRD) is going to make the situation even worse.

Can you go into a little more detail? In your opinion what are the weakest points of ESEF and what do they mean in relation to your company?

Daniel Fusshöller: One of the biggest problems we see is a lack of timing regarding data. Our ESEF information appears at least one month after the annual report, press conference and other forms of reporting. At this point the data is no longer really relevant to decision-making for the capital market. We also know this to be true from the number of accesses to the Federal Gazette where there has been little demand for the ESEF report so far. And we have not received any inquiries about this via our investor relations channel either. ESEF has, therefore, not yet had any tangible positive effects for us as a company.

Christoph Schauerte: Unfortunately, I cannot assess the timing and extent of the views. But the concurrency of the "regular" certificate and the ESEF hash value means that late changes by the audit committee, for example, are no longer possible. This is due to the auditors only wanting to certify that changes are reflected in the ESEF after at least 24 hours of additional examination. The result is a de facto incapacitation of the audit committee. Indeed, even small changes to the financial statements require new ESEF conversion and verification, which is almost impossible within the existing schedule. And in a cross-comparison there has hardly been a company that has gone through ESEF reporting without any problems. Another issue is that the auditors have no experience with ESEF tagging and this leads to conflicts when using it.

How do you assess the technical implementation of ESEF? Is there room for improvement here?

Daniel Fusshöller: So far all of our reporting has only worked with a great deal of effort. In addition, technical implementation is very unreliable. Significant improvements would need to be made here in order, on the one hand, to simplify the creation for companies and, on the other, to make the information attractive to a larger group of recipients.

Christoph Schauerte: The very detailed tagging in the iXBRL format we use means a lot of additional effort with arguable benefits. For us the question arises as to whether a structured approach like EDGAR—with forms and stricter specifications à la

SEC—would not have been a better solution. In addition, the current design lacks a focus on user acceptance and an evaluation of actual usage. It is also questionable whether ESEF is really still needed in light of AI applications, such as ChatGPT and the like.

Which areas benefit most from ESEF reports at the moment?

Daniel Fusshöller: The regulation simplifies data access overall. There is, therefore, an advantage for users who do not process the data in a time-critical manner. So ESEF reports are particularly interesting in terms of statistical purposes.

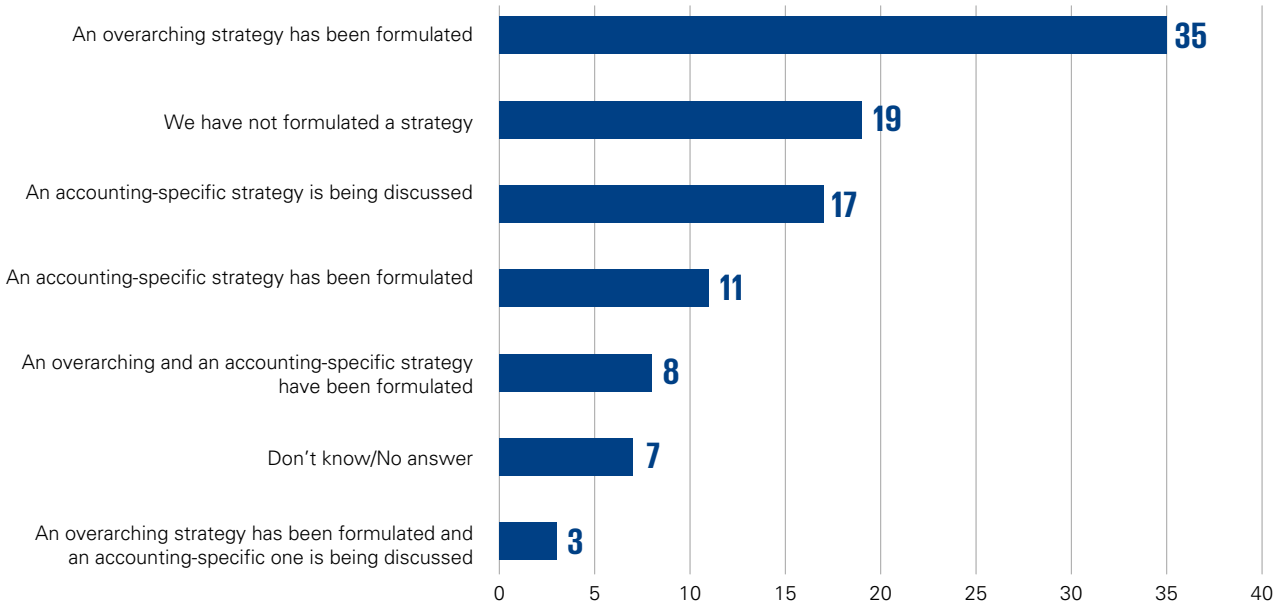
Christoph Schauerte: Against a backdrop of AI-supported analysis options it is questionable whether simplified data access actually remains an advantage. With the help of such algorithms it is now possible to generate information directly from existing PDF reports.

03 The strategic importance of digitalisation in accounting

A variety of technical options for digitalisation and corresponding providers have now established themselves on the market. It is of central importance which of these solutions is selected for a specific company (consciously excluding other options when doing so) if digitalisation is to be driven forward in a targeted manner.

A digitalisation strategy can help in this regard, which is why the topic is a focus of this year's study. The survey results show that some companies have already formulated strategies or are currently discussing them (see Figure 13). When it comes to an overarching strategy for the entire company, 46 percent say they already have one in place. 19 percent have an accounting-specific digitalisation strategy implemented and 20 percent are currently discussing one. 19 percent say they have no digitalisation strategy at all, while 7 percent did not want to or could not provide any information.

Figure 13: Digitalisation strategy for accounting
Has your company already formulated a digitalisation strategy? Please select the correct answer. (Multiple answers possible)

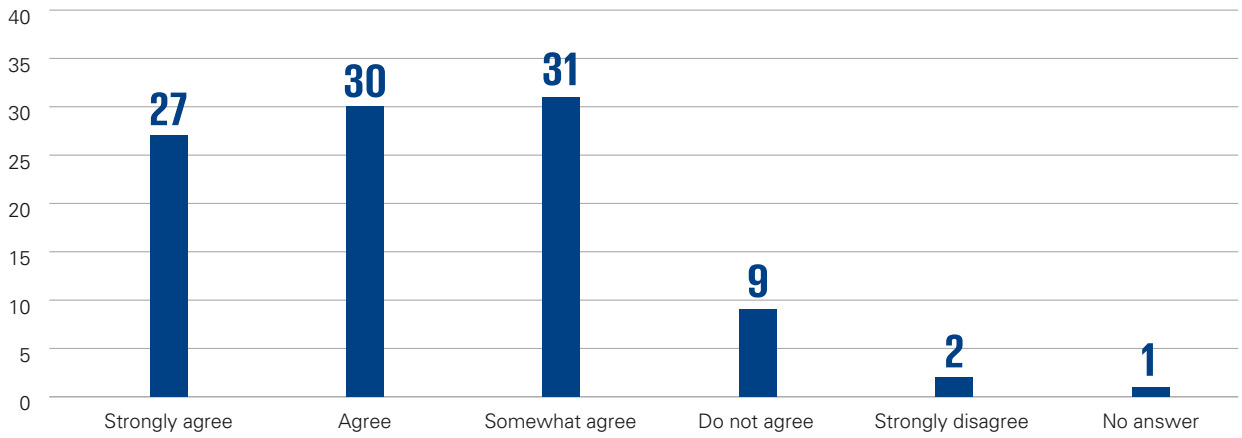


Figures in percent (n = 232)

Source: KPMG in Germany, 2024

When asked about the importance of a digitalisation strategy for the accounting department more than half (57 percent) of respondents agree that accounting needs a strategy of this kind (see Figure 14). The responses clearly underline the growing recognition of the strategic importance of digitalisation in accounting to companies of different orientations and sizes.

Figure 14: Importance of digitalisation to accounting
Accounting needs its own digitalisation strategy.



Figures in percent (n = 187)

Source: KPMG in Germany, 2024

Digital and transparent — the future of ESG reporting

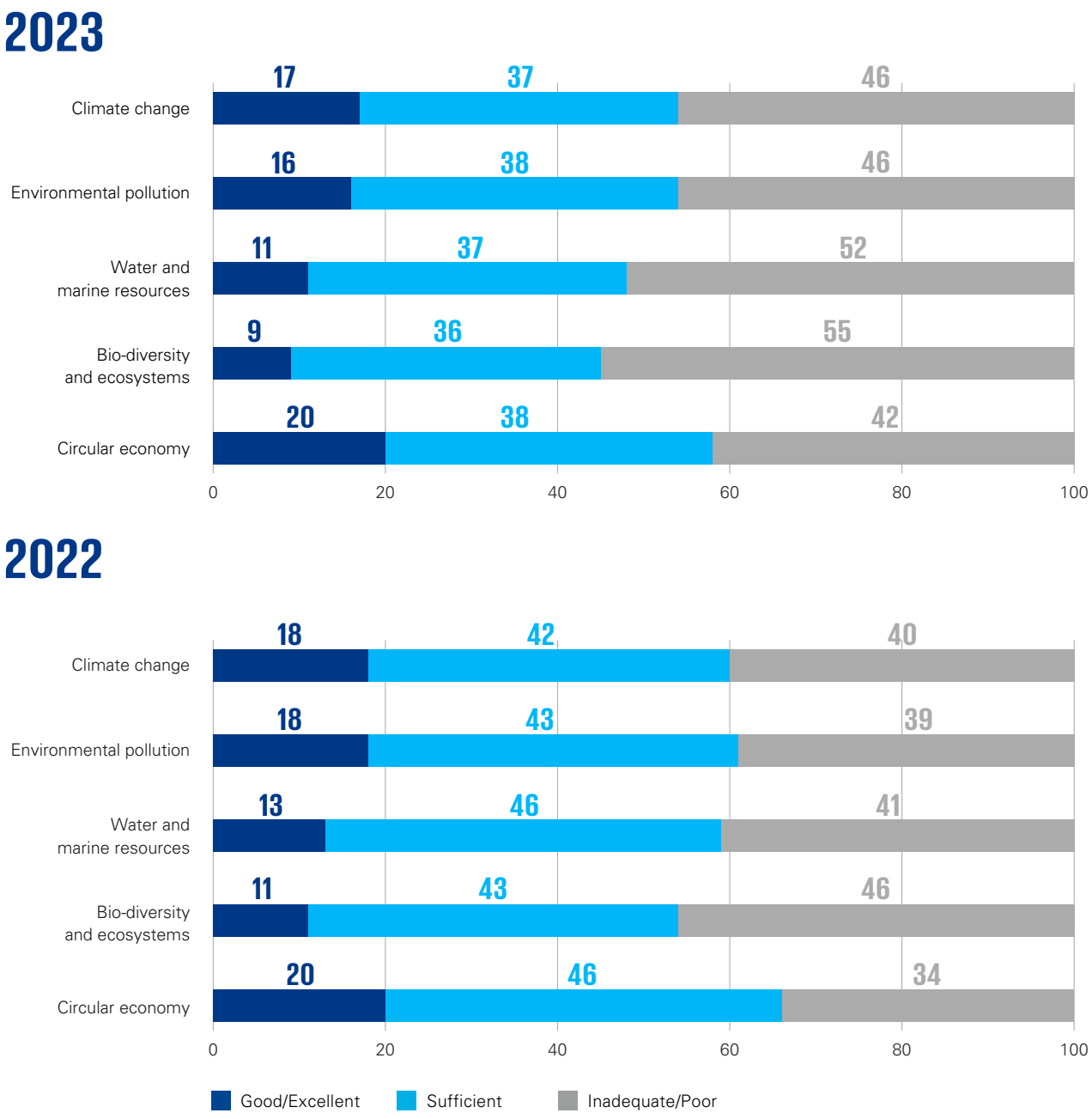
04 Digitalising sustainability reporting

Digitalisation and sustainability are two megatrends that companies and their departments have to deal with now and in the coming years; both to ensure compliance with increasingly extensive regulatory requirements and to remain competitive. To get a comprehensive picture of sustainability reporting in companies the range of questions on this topic was very much expanded this year and the evaluation was published in a separate publication. In addition, the results of the online survey were widened to include in-depth expert interviews (including with Prof. Katharina Hombach, Prof. Jörg-Markus Hitz and Prof. Christian Leuz on ESG reporting), as well as a case study on the introduction of CSRD at BHS Corrugated. You can download the complete current edition of the study "Sustainability Reporting – Stocktaking and Trends" from our website. In this current edition of the study "Digitalisation in Accounting" we summarise selected key statements from the aforementioned sister study.

Ensuring data quality and availability plays a central role in any type of corporate reporting, both in data collection and in the reporting itself. Since the quality of the reports depends largely on the quality of the underlying data, respondents were asked to assess these with reference to sustainability reporting.

The results in Figure 15 make it clear that many of the companies surveyed are noticeably dissatisfied with data quality and availability in the context of sustainability reporting, as they consider this to be inadequate or poor. Sustainability topics include: the circular economy, pollution, climate change, biodiversity, ecosystems and water and marine resources. On average 48 percent of companies express dissatisfaction with data availability and quality. The specific values per topic range from 42 to 55 percent. It should be emphasised that dissatisfaction has increased since the 2022 survey. This perception can possibly be attributed to the fact that awareness of environmental and sustainability issues in business practice has increased. Companies have become ever more focused on understanding and assessing their environmental impact, which may have led to a greater awareness of gaps and challenges. With sustainability reporting as a new form of reporting the question also arises as to where in the company it is organisationally located and who is responsible for it.

Figure 15: Environmental data availability and data quality
How do you assess data availability and its quality in relation to the following sustainability topics in your company?



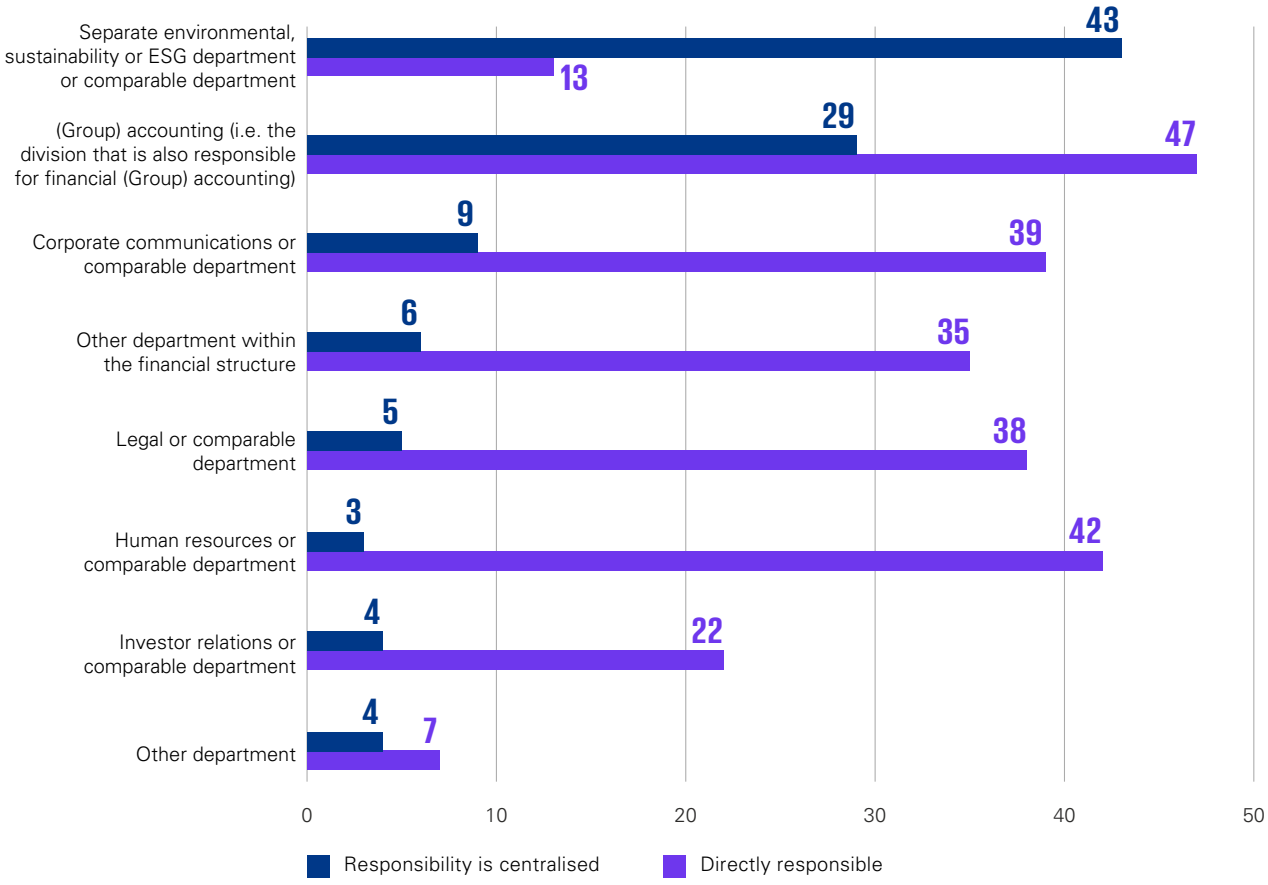
Figures in percent (2023 n = 232; 2022 n = 300)

Source: KPMG in Germany, 2024

The survey results show that sustainability reporting is carried out by specialised departments in 43 percent of the companies surveyed. Nevertheless, the overall group accounting department plays an important role. In 48 percent of companies the latter is directly involved in the reporting process and in 29 percent of companies it is even in charge. In addition, other departments like human resources and corporate communications also provide important data.

On top of the topics enquired about, such as data quality and availability and organisational responsibility for sustainability reporting, the surveyed companies that are subject to the EU Taxonomy were asked to assess the current degree of digitalisation with regard to their sustainability reporting.

Figure 16: Departments responsible for reporting
Which department is responsible for and coordinates sustainability reporting?



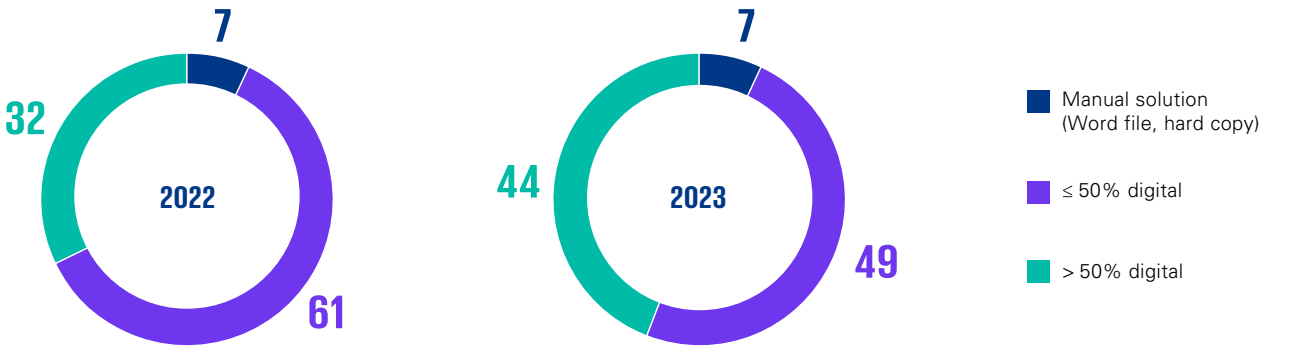
Figures in percent (n = 232)

Source: KPMG in Germany, 2024

The results of the 2023 survey show that almost all companies (93 percent) use digital solutions to comply with the disclosure requirements of the EU Taxonomy (see Figure 17). Only 7 percent use solutions that are exclusively manual.

44 percent of the companies surveyed mainly use digital solutions (i.e. a degree of digitalisation that is above 50 percent). Compared to the survey of 2022 this is an increase of 12 percentage points, which illustrates the trend towards digitalised reporting.

Figure 17: Degree of digitalisation of EU Taxonomy requirements
To what extent are digital systems/applications used in your company to implement the EU Taxonomy requirements?



Figures in percent (2022 n = 112; 2023 n = 71)

Source: KPMG in Germany, 2024

Gunther Rothermel
Gunther Rothermel was instrumental in defining and deploying SAP platform technology and SAP's entire integration portfolio. Design-led innovation, DevOps and cloud engineering are essential parts of his leadership approach.

Digitalisation and Sustainability

Interview with Gunther Rothermel, Co-General Manager and Chief Product Officer, SAP Sustainability, SAP

Why is sustainability becoming increasingly important for companies and, in turn, for their customers?

Sustainability is crucial to our customers for three reasons: Regulations serve as a driver for companies to pursue their ambitious goals, however, it must be said that many companies also set these ambitious sustainability goals voluntarily. A company's sustainability increasingly determines their competitive advantage going forward. Yet, it isn't just about compliance as those companies that act quickly and decisively will stand out the most and will also have a more positive impact on the community and environment. In addition, competition demands that companies use sustainable products. For example, in the steel industry it is crucial to offer green steel as that is what major car manufacturers are demanding.

You named the three drivers of sustainability. How do you view the regulatory requirements, especially in other countries?

The key regulatory issues we deal with in Europe include the EU Taxonomy, the Supply Chain Due Diligence Act, the CSRD (Corporate Sustainability Reporting Directive) and the Greenhouse Gas Protocol. In addition, the ISSB (International Sustainability Standards Board) is becoming ever more important as an overall framework. Although some regulations are linked to one another it is generally a lack of or different reporting standards that are one of the biggest challenges for companies. Our goal as a software provider is to create common ground, which then allows our customers to efficiently comply with multiple regulations, while still achieving transparency around their own goals.

What other sustainability issues and local challenges do you see besides the carbon issue?

In addition to reducing emissions there are many other sustainability issues that are often very local and/or market-specific. One such example is the building of a circular economy. There are 120 to 130 relevant regulations for extended producer responsibility worldwide and five to seven different plastic taxes that need to be taken into account. These issues require accounting to adapt to specific local conditions and markets. Another important point is overall ESG data management. The main aim is to link environmental, social and financial data holistically so as to allow for business decisions based on real values.

To get on top of everything how do you deal with the issue of ESG at SAP?

SAP gives attention to four areas that are based on a comprehensive analysis of our customers' requirements: climate protection, with a particular focus on greenhouse gas emissions; circular economy, which includes topics such as material transformation and plastic taxes; social responsibility, which also includes elements such as the Supply Chain Due Diligence Act and; ESG, where we are trying to create an overarching database that covers all three areas (environmental, social and regulatory). This is how we approach holistic reporting.

An important element is data acquisition. How do you deal with this? What level of significance does extrapolation of data have for you?

We are convinced that sustainability must be integrated into business processes from the start. It should be collected as early as possible instead of calculating or estimating it after the fact. For example, when determining a car's carbon footprint the supplier's values instead of the average value should be used. Our goal is to efficiently combine top-down and bottom-up calculations. All material flows are included: from the raw materials to the products in the warehouse. Companies are demanding more and more that their suppliers provide real values. We are convinced that in the long term we will move towards measured data (actuals).

So your approach is to integrate the carbon footprint and other sustainability data directly into the booking of business transactions in a similar way to financial data?

Yes, that is essentially the idea of a Green Ledger. We want sustainability data to be treated in the same way as financial data by it being embedded directly into business process documentation. This will enable accurate accounting and budgeting for sustainability aspects. However, not all ESG-relevant areas can be reflected in accounting (e.g. key figures in the area of social responsibility).

That sounds like an ambitious goal, how is it going?

We have developed various components, including SAP Sustainability Footprint Management for calculating carbon footprints at product and company levels and have integrated them into the ERP system. This allows our customers to capture the relevant data directly at source. We also support the exchange of sustainability data between companies using open standards such as WBCSD PACT 2.0. Finally, we are working on integrating sustainability data into accounting in the form of the abovementioned Green Ledger.

One question that all your customers are probably asking is time frame. When will companies be able to use the Green Ledger and similar applications?

We already have products that are currently available and are being used by customers. These products are part of our vision and are preparing customers for the Green Ledger. We are currently still working on the basic structures and hope to realise the initial versions of the Green Ledger next year. However, the time frame also depends on the development of regulations and audit requirements.

From a technical perspective the question arises as to how these modules and services are integrated into the existing environment?

The new modules are independent cloud-based services that are built on the SAP Business Technology Platform. We rely on modern Software-as-a-Service solutions (SaaS) to enable customers to use the platform quickly and easily. At the same time, we connect these solutions with each other using data technology

so as to offer the customer a holistic view of their ESG world. We call this a Sustainability Data Fabric that, where possible, reuses and merges data from different cloud services.

In a modern SaaS architecture, each service has its own application and is resource independent, which increases resilience. So, if there are problems it means only one module will remain offline for a short period while the others continue to function; this is the principle of all architecture based on microservices. We link these modules at the data level, which is the basic concept behind our data fabric.

That sounds like an interesting approach. How will the Green Ledger and similar products be commercially deployed?

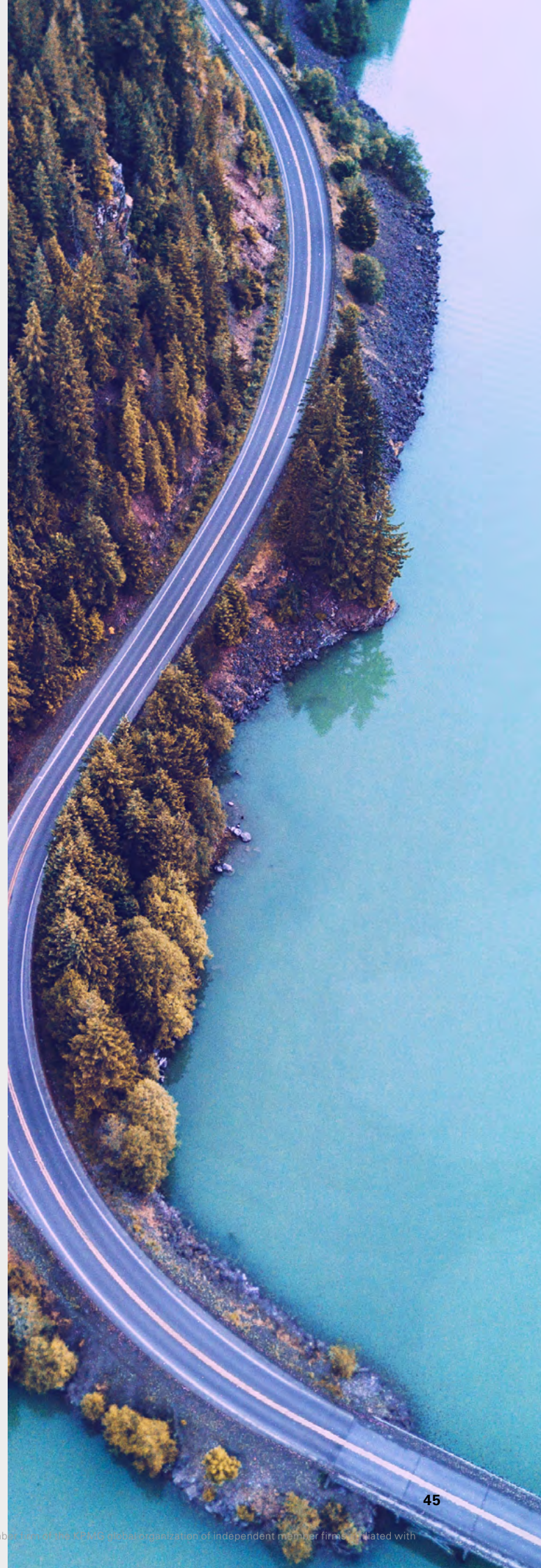
Commercially speaking the Green Ledger will be part of the SAP S/4HANA Cloud. When a customer purchases this cloud solution the Green Ledger is integrated as a separate service. What this does is allow customers to use the products and services modularly and in steps.

What is your view on the importance of artificial intelligence in the area of sustainability?

AI plays an important role in making working life easier for customers. A well-structured database is crucial for this: "AI needs structured big data." One possible use case could be the creation of extensive reports that are set out according to sustainability regulations, such as the Greenhouse Gas Protocol or the EU Taxonomy.

At the same time, we have to keep in mind that lots of data also requires lots of energy. The longevity of AI is, therefore, also dependent on developing AI as sustainably as possible. SAP has been implementing sustainable programming measures for many years—such as energy-efficient algorithms—but also putting in place instructions for finding a balance between functional goals and economical and sustainable resource consumption.

Thank you very much for your insights and expertise.



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KPMG is an organisation of independent member firms with more than 273,000 employees in 143 countries and territories.

KPMG is also one of the leading auditing and consulting firms in Germany and is present at 27 locations where it employs over 14,000 people. Our services are divided into the business areas of Audit, Tax, Consulting and Deal Advisory. The focus of Audit is the audit of consolidated and annual financial statements. Tax stands for the tax advisory activities of KPMG. Consulting and Deal Advisory bring together our high level of technical know-how with regards to business, regulatory and transaction-oriented topics.

We have implemented cross-divisional specialisation for key sectors of our economy. This is where the experience of our worldwide experts comes together and contributes further to the quality of the advice we offer.

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