



Intelligent Treasury

What will characterize the treasury of the future?

Whitepaper

www.kpmg.de/intelligent-treasury



Dear readers,

The technological progress that has been made over the past years and decades is nothing short of remarkable. New processes, new possibilities for production and new devices have become central to our day-to-day lives. It is hard to imagine a day without smartphones or other digital devices. As well as changing the way we live, new technologies and developments are also having an impact on Corporate Treasury.

Five years ago, KPMG Finance & Treasury Management published its position paper "Treasury 4.0". In it, we primarily focused on the potential impact of increased process automation on treasury departments. For some years now, however, automation has been far from the only key facet of digitalisation. The importance of an intelligent interconnection of data, information and systems has also long become evident. This provides a good opportunity for us to put our idea of the treasury of the future to the test, make any necessary adjustments, and investigate new aspects of the digitalised treasury.

For this reason, we are delighted to present our vision of the "Intelligent Treasury" – the treasury of the future – in this white paper.



Ralph Schilling
Partner
Finance & Treasury
Management



Nils Bothe
Partner
Finance & Treasury
Management



Börries Többens
Partner
Finance & Treasury
Management

Contents

Executive Summary	4
Introduction and hypotheses	5
The survey	6
The results of the survey	7
Processes and organisation	7
Willingness to change	9
Technology	10
Verification of hypotheses	12
Summary: The treasury of the future	14
The dimensions of the “Intelligent Treasury”	14
About KPMG	15

Executive Summary

Five years ago, we published our position paper on the “Treasury Organisation 4.0”. Although only half a decade has since passed, the sheer momentum in terms of the development of new technologies and solutions has prompted us to think hard about the treasury of the future. Key questions in this respect include the extent to which automation will change existing treasury processes, the areas in which innovative solutions will be particularly important, and how the demands placed on treasury employees will change.

We recently conducted a survey on the subject of “Intelligent Treasury” with several dozen participants. The main focal points of the survey were the aspects of process and organisation, willingness to change, and technology.

The results illustrate the fact that the majority of treasury organisations are facing significant change. Fewer than half of all participants said that their companies intend to retain their traditional organisational structure. One of the main drivers of this change is a desire for centralisation. However, the responses to our survey also show that many treasury departments have already initiated or even already completed this change process. Another finding is that the forthcoming changes will substantially affect the relevant job profiles in treasury departments. In turn, this will have an impact on the skill set that employees are expected to possess. The technical affinity of applicants is becoming increasingly important, and existing employees are also expected to demonstrate a pronounced willingness to develop.

The planned changes in the organisational structure go hand in hand with the introduction and connection of new technologies. For example, half of the treasury

departments surveyed are planning to make significant changes to their technical platforms in the next three years. The participants consider cash management and payment transactions to be the trailblazers of automation.

The results of our survey largely confirm our hypotheses. They underline the fact that treasury departments will change significantly in the foreseeable future in terms of their structure and the technical solutions they use. However, the majority of respondents are extremely receptive to this change.

Only a few of them intend to retain their existing – e.g. paper-based – processes.

Introduction and hypotheses



Five years ago, we published a position paper in which we set out our expectations of the “Treasury Organisation 4.0” and our vision of the corporate treasury of the future. This concept was founded on four central hypotheses:

1. The use of professional treasury IT becomes mandatory.
2. There is no alternative to centralised treasury organisation in core areas.
3. Technical developments make the traditional trader a thing of the past.
4. Back office is no longer an independent organisational entity.

In the intervening years, these hypotheses have become a reality in corporate treasury to a varying extent. For many corporates, “Treasury Organisation 4.0” is the benchmark and the objective of their business and corporate transformation.

Since 2015, the pace and momentum of the developments taking place under the banner of digitalisation have yet accelerated further. Automation, innovation and agility have become the guiding principles of many corporate strategies. Digitalisation is a stated aim at board level – and there is growing pressure on many business areas to contribute to achieving this aim. Detailed strategic considerations of this nature also apply to the processes, the organisational structure and the technologies used in treasury departments.

In light of these transformations, changed expectations and new specifications, it is reasonable to suggest that treasury has reached the next stage in its evolution: from “Treasury Organisation 4.0” to “Intelligent Treasury”. We define this as a concept that intelligently connects systems and technologies, encompassing end-to-end processes and enabling real-time treasury management.

In our daily dealings with clients, we can see that there are some considerable variations in the status quo when it comes to processes and organisational structures, employees’ willingness to change and the technologies used. In terms of their phase of evolution, some of our customers are still in the process of implementing the “Treasury Organisation 4.0” we described in 2015, while others have already completed the transition to the “Intelligent Treasury”.

This white paper aims to answer the following questions:

How will the “Intelligent Treasury”, the treasury of the future, look like?

What are the characteristics of the “Intelligent Treasury”?

How will the results affect the specific target vision?

We conducted our survey within the treasury community in order to harmonise our assessments and observations on these questions with those of practitioners. The results presented in this white paper form the basis for our answers to these three questions.

As in the previous paper, we formulated hypotheses for the respective survey areas in advance with a view to covering the key aspects of the “Intelligent Treasury”:

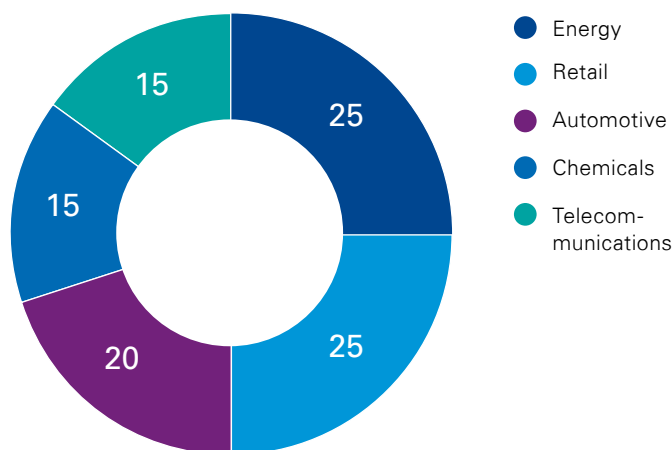
1. The intelligent connection of state-of-the-art technologies will be the enabler for fundamental change in the organisational structures of treasury departments.
2. Cash management will position itself as a trailblazer for digitalisation and automation.
3. The job profile and skill set of a treasury employee will change fundamentally.
4. The change in the job profile will require employees to demonstrate a pronounced willingness to develop.
5. Successful digitalisation will be achieved through the complementary use of state-of-the-art technologies.

The following section begins by outlining the survey process. We then discuss the responses of the participants and examine them with regard to the individual hypotheses. The subsequent conclusion aims to refine our vision of the treasury of the future in terms of the expectations of the „Intelligent Treasury” and its central features.

The survey

The KPMG Finance & Treasury Management team conducted a survey on the “Intelligent Treasury” in the fourth quarter of 2019 and the first quarter of 2020. The aim of the survey was to gain an understanding of the opinions of employees and officers in treasury departments about how digitalisation will transform the treasury business over the coming years.

The survey, which was distributed via various channels in Germany, Austria and Switzerland, was completed by 87 participants from different companies and industries. Looking at the industries in which the respondents are active shows that the survey covered a diverse cross-section of the treasury community.



Figures in per cent
Source: KPMG in Germany, 2020

The size of the companies surveyed also covers the full range of treasury departments, from smaller SMEs through to DAX-listed corporations.

Number of participants	Company sales
87	Highest: EUR 172 billion
	Lowest: EUR 266 million
	Median: EUR 6.8 billion

The survey consisted of a questionnaire with 15 questions, broken down into the categories of “Processes and organisation”, “Willingness to change” and “Technology”.

The results of the survey

Processes and organisation

Is there life in the old dog yet?

The traditional organisational structure will remain relevant in future

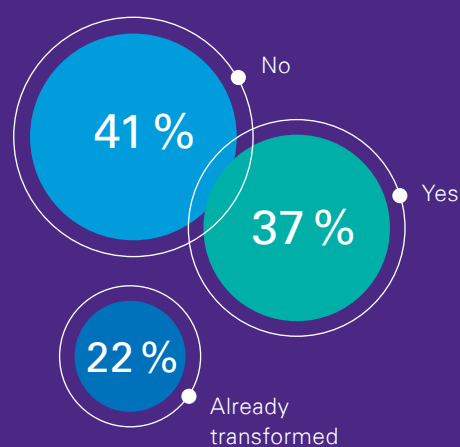
Driven by digitalisation strategies and automation potential, the business transformation in corporate treasury is continuing apace. However, the opinions of the respondents regarding their future organisational structure are anything but uniform and depict a neck-and-neck race.

A narrow majority of those surveyed are seeing a fundamental transformation in their organisational structure, with some having already established different structures (22 per cent) or anticipating that this will occur in the coming years (37 per cent). By contrast, four in every ten participants are forecasting no fundamental changes in the structure of their treasury organisation, with the traditional division into front, middle and back office remaining in place.

The strategy is and remains centralisation

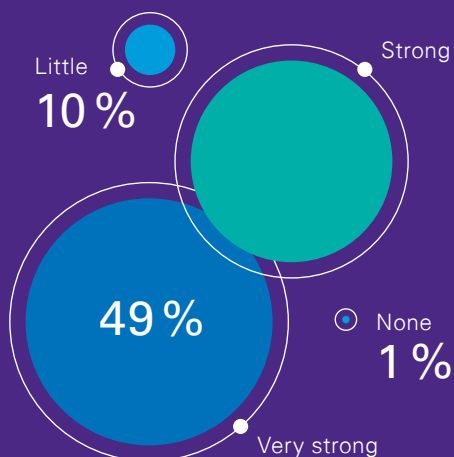
Centralising processes is one of the most prominent strategic focal points and one of the core tasks of treasury units, and this will remain the case. An impressive 89 per cent of participants will continue to adopt a strong to extremely strong focus on centralisation in future. In addition, some respondents stated that their centralisation plans have already been largely implemented and established in practice.

Transformation in the organisational structure?



Source: KPMG in Germany, 2020

Strategy of group-wide centralisation?

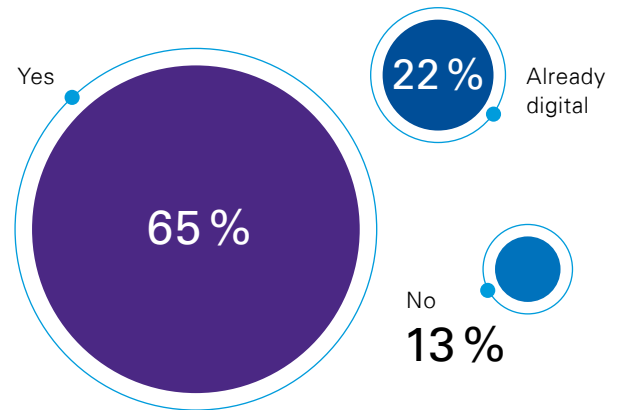


Source: KPMG in Germany, 2020

Digitalisation continues apace

Pursuing a comprehensive digitalisation strategy while also retaining paper-based processes is a tricky endeavour. Most of those surveyed agree. A good one-fifth of them have already digitalised all of their key processes, while this is firmly on the agenda for a further two-third. Only 13 percent of respondents said that they expected paper-based processes to continue to play a notable role in future.

Digitalised process management?



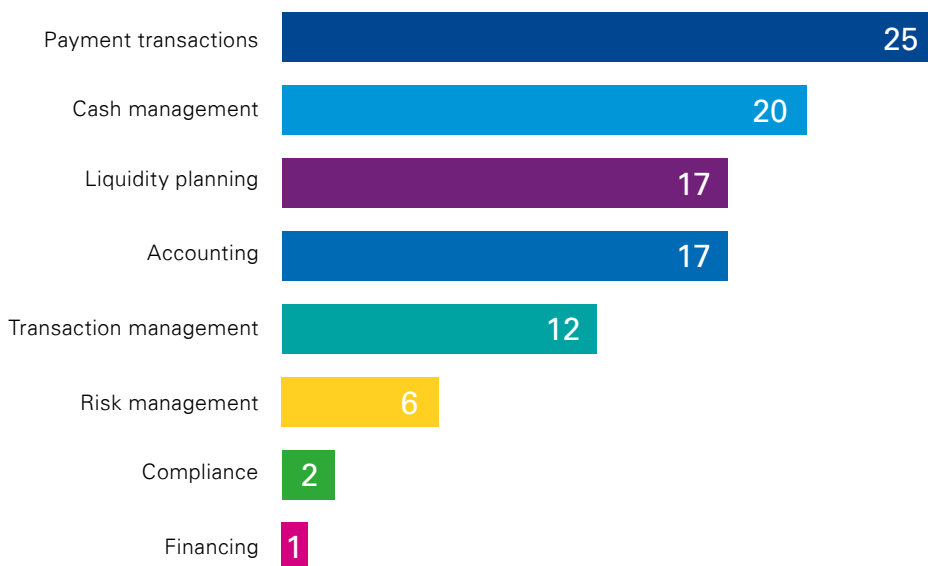
Source: KPMG in Germany, 2020

High automation potential in the core treasury function

A high degree of automation is one of the benchmarks of treasury transformation. However, the potential for automating individual elements or larger sections varies considerably depending on the respective areas of responsibility and their focal points. According to the respondents, the traditional core treasury function

– cash and liquidity management – offers the best conditions for automation. By contrast, contexts relating to the company’s external conditions, such as business risk management or compliance activities, are considered unlikely to lend themselves to more extensive automation.

Greatest potential for automated processes?



Figures in per cent

Source: KPMG in Germany, 2020

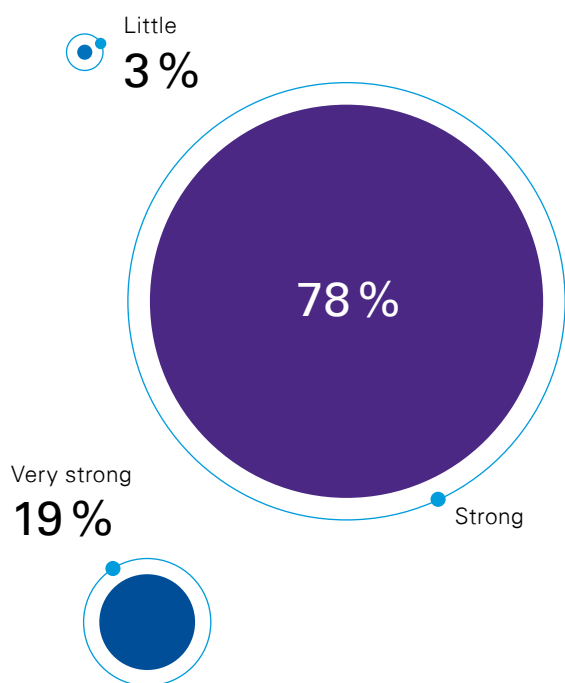
Willingness to change

IT and employees hand in hand – technical progress requires training

In terms of technology, the transformation of treasury relies to a large extent on employees' affinity for IT and their willingness to change. Almost all of the survey participants said that they are keen to continuously integrate future technological developments into their treasury processes (with a greater or lesser degree of urgency) and that they are very receptive towards new solutions.

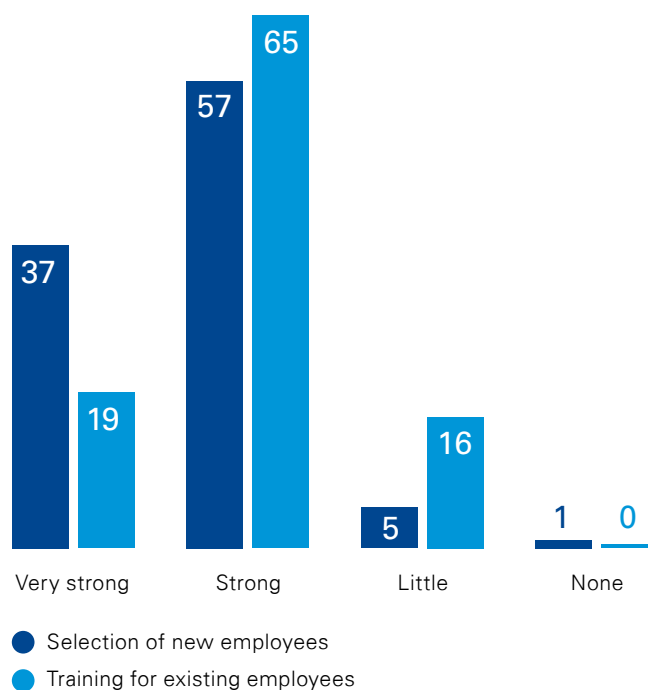
However, IT capacities and budgets could prove to be a sticking point. Employee training is another important aspect of the targeted and systematic digitalisation of treasury. Ensuring that the employee training program is strongly or very strongly geared towards new technologies is a priority for a large majority of respondents. For 94 percent of those surveyed, specific knowledge of new technologies will also play an important role when it comes to selecting new employees.

Implementation of new technologies in treasury?



Source: KPMG in Germany, 2020

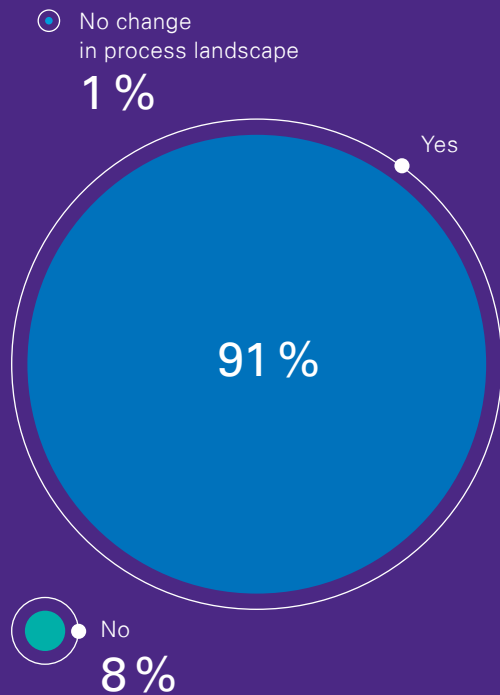
Influence of new technologies on employees



Figures in per cent

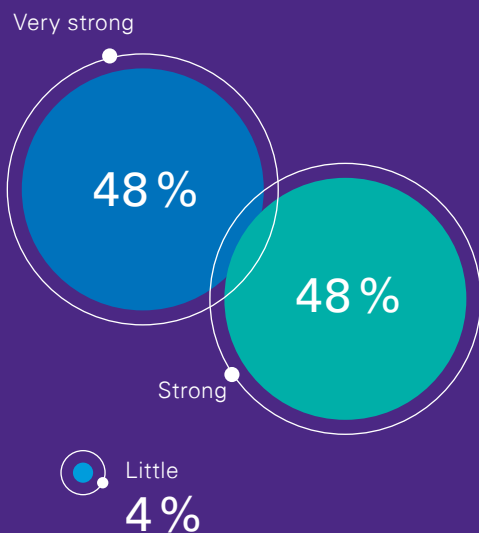
Source: KPMG in Germany, 2020

Change in employees' range of tasks?



Source: KPMG in Germany, 2020

Strategy of connecting all relevant treasury IT systems?



Source: KPMG in Germany, 2020

From repetitive day-to-day tasks to more analytical and strategic activities

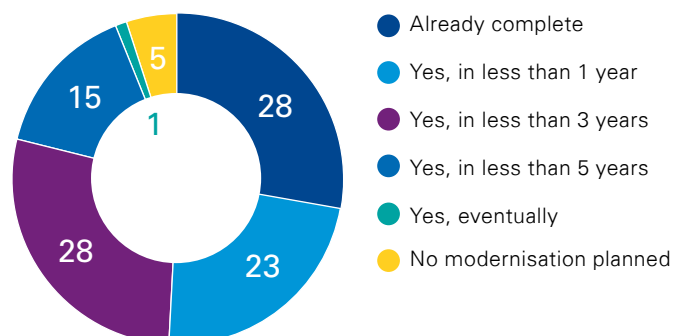
The responses suggest that day-to-day work involving a large number of repetitive manual tasks can expect to see extensive automation, particularly in the core treasury function of cash and liquidity management. Printing out the confirmation of an interest rate swap, signing it, scanning it and sending it to the bank? Already a thing of the past for many companies. A good nine out of every ten companies surveyed expects the general change in the treasury process landscape to be accompanied by a fundamental shift in the responsibilities of treasurers, from manual tasks to more analytical and strategic activities. This will also have an impact on the job profile for future applicants.

Technology

Fundamental modernisation of the treasury IT landscape tops the agenda

The large number of potential systems and technologies and strategic digitalisation campaigns require the existing infrastructure to be continuously scrutinised and optimised. Around two-thirds of those surveyed are planning to significantly modernise their treasury IT systems or the underlying technical platforms for the coming years. Remarkably, almost a third of them say that they have already completed this step. Almost all of the respondents said that their companies are planning to connect all of the relevant treasury IT systems via interfaces or model them in a central system. This involves connecting the individual components to central systems with as few technology discontinuities as possible.

Planned modernisation of treasury IT systems



Figures in per cent, source: KPMG in Germany, 2020

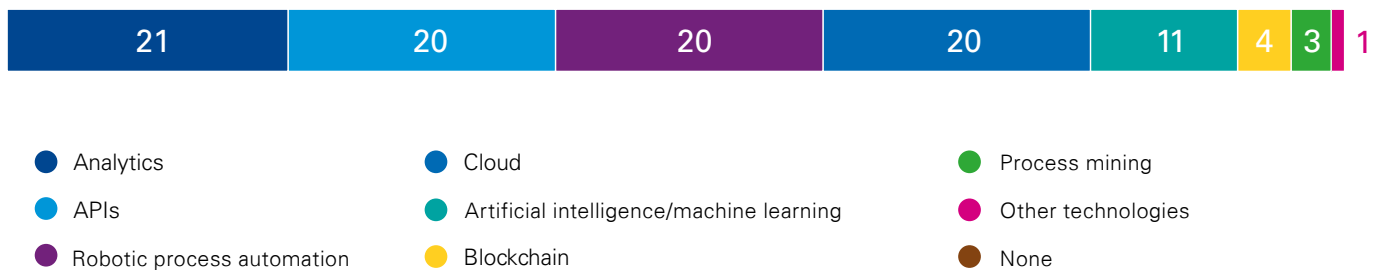
API, cloud, analytics, RPA: a colourful mixture for successful digitalisation

The megatrend of digitalisation has brought a large number of technologies and tools to the attention of treasury departments in recent years. However, the question remains as to which technologies can cover the specific treasury use cases. According to those surveyed, technologies like application programming interfaces (API), robotic process automation (RPA), analytics and cloud services will play a prominent role in future treasury processes (each around 20 percent; single response question). One notable result is that very few participants consider blockchain technologies

– which are generally expected to have a big future across all industries – to be particularly relevant.

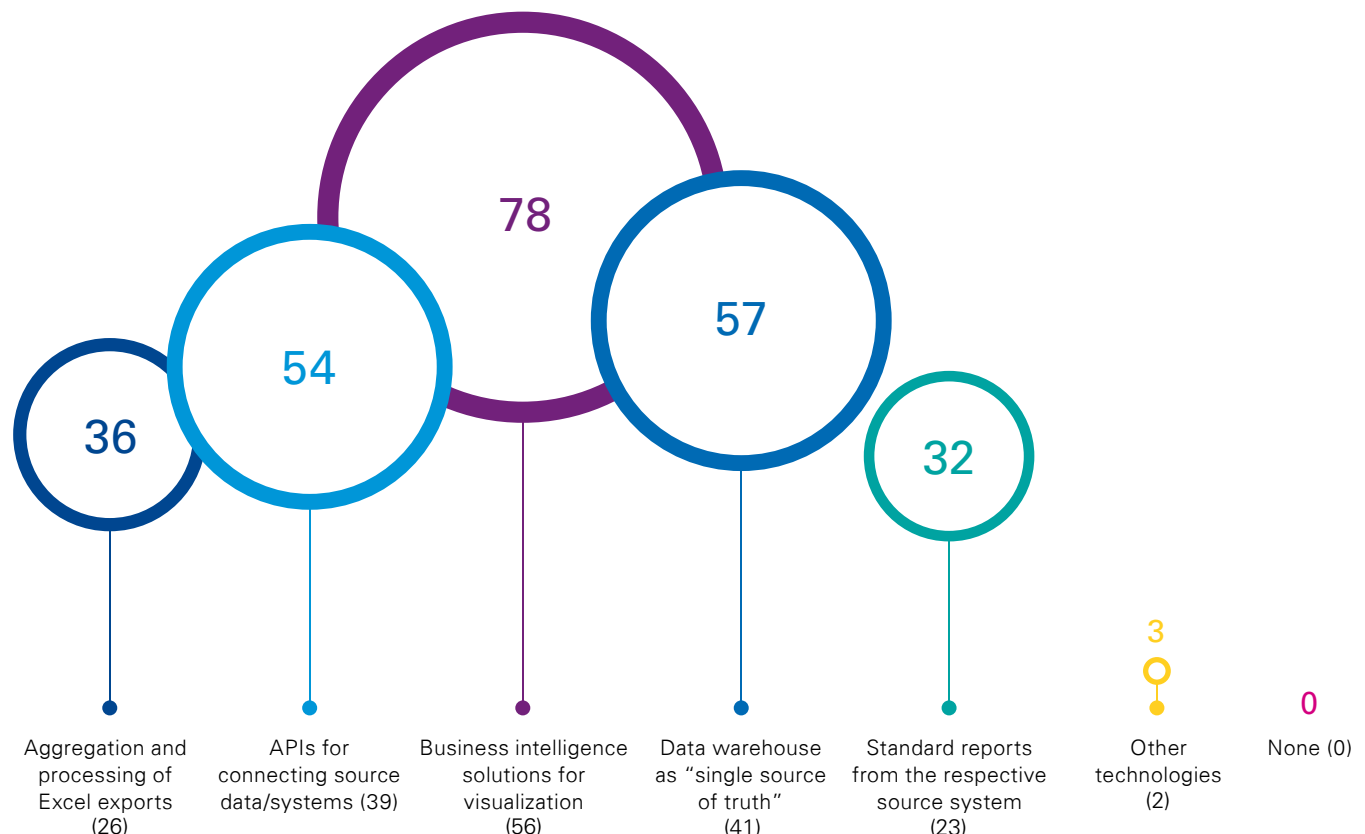
With regard to treasury reporting, 78 percent of respondents stated that business intelligence solutions are relevant to their future needs, while 57 percent intend to establish a data warehouse as a “single source of truth” (multiple response question). More than half of those surveyed (54 percent) aim to use APIs to connect source data and source systems.

Treasury processes



Figures in per cent, source: KPMG in Germany, 2020

Treasury Reporting



Figures in per cent, source: KPMG in Germany, 2020

Verification of hypotheses

1

The intelligent connection of state-of-the-art technologies will be the enabler for fundamental change in the organisational structures of treasury departments.

The results of the survey clearly show that new technologies and the connections between them play a significant role at companies, but this is not leading to fundamental changes in all treasury organisational structures. According to the survey participants, a good four out of every ten companies intend to

broadly retain the traditional division into front, middle and back office in the years ahead. This means there will still be variation in terms of the organisational structures of treasury departments in the coming years.

2

Cash management will position itself as a trailblazer for digitalisation and automation.

62 percent of respondents see the core treasury function, under the umbrella term of cash management, as offering the greatest automation potential. As such, the conditions are in place for this area to position itself as a trailblazer for digitalisation and

automation. This is already supported by real-life examples, such as bank integration using APIs for seamlessly sending and retrieving payments and account statements without file exchange.

3

The job profile and skill set of a treasury employee will change fundamentally.

The vast majority of the companies surveyed (91 percent) expect the general changes in the treasury process landscape to be accompanied by a radical shift in the responsibilities of treasurers, from manual tasks to ever more analytical and strategic activities. This will fundamentally change the job profile of some treasury employees. Furthermore, training in new technologies will actively expand the skill set of

existing employees. For 94 percent of those surveyed, knowledge of the new technologies described will play an important role when it comes to appointing new employees. All of this serves as confirmation that the job profile and skill set of treasury employees will change fundamentally over the coming years.

4

The change in the job profile will require employees to demonstrate a pronounced willingness to develop.

The transformation of the job profile and skill set of treasury employees as described in the third hypothesis requires a willingness to develop and an openness to change. This relates in particular to mastering new technologies and learning how and where to utilize them. According to the survey participants, treasury employees are extremely willing to undergo the necessary development.

For example, 94 percent of respondents intend to use new technologies to a significant or very significant extent over the coming years. Accordingly, the change in the job profile and the necessary skills is likely to land on fertile ground thanks to the willingness of the respective employees to develop as required.

5

Successful digitalisation will be achieved through the complementary use of state-of-the-art technologies.

There is extensive discussion within the treasury community as to how to harness new technologies, both now and in the future. According to the survey participants, a combination of different technologies is the best way to successfully digitalise in a targeted manner over the coming years. A contemporary IT landscape with a centralised treasury management system (TMS) provides the essential foundations for achieving this. In terms of new technologies, analytics, application programming interfaces, robotic process automation and cloud technology are at the forefront of companies' considerations, followed by artificial intelligence and machine learning. More than 90 percent of respondents state that they already use at least one of the aforementioned technologies

or that they intend to do so in the coming years. One good example of complementary use in current practice is predictive cash forecasting. In this scenario, a cloud-based data warehouse serves as a "single source of truth" (a data location ensuring that all employees have access to the same uniform information for their business activities), while the data source can be connected to the liquidity tool in the central TMS via an API. Machine learning and artificial intelligence can already be used to update forecast values. TMS manufacturers have also recognised this trend and are successively adding these functions to their repertoire. In short, the value of complementary use is evident.

Summary: The treasury of the future

The results of our survey show that treasury organisations are facing change in terms of the systems and technologies used. This will be accompanied by changes in the demands placed on individual treasury employees. As the responses demonstrate, the majority of treasury departments are receptive to these changes – and very few say that they are planning to retain conventional processes.

According to the survey participants, automation will be particularly relevant in the core treasury functions of cash management and payment transactions. However, we also see future potential in areas that the participants classified as less important. One example is risk management: If liquidity management and risk management are successfully consolidated, predictive analytics methods can be used to update forecast values, meaning that the foreign currency risk can be automatically derived using currency-differentiated liquidity planning. This example serves to illustrate the wide range of potential use cases for new technologies in treasury applications, and this can be expected to lead to significant changes in future.

It is important not to overlook employee training when establishing new technology-driven processes. This is because, in addition professional expertise, technical affinity is set to become increasingly important when it comes to day-to-day tasks. Although neglecting this aspect would endanger the smooth running of the relevant processes, the results of the survey suggest that the participants are aware of this.

The dimensions of the “Intelligent Treasury”

The treasury of the future is characterised by the centralisation of treasury activities and the increased use of digital solutions. As such, we define “Intelligent Treasury” as a concept that prioritises end-to-end processes, eliminates media discontinuities and intelligently connects processes. The technical solutions involved allow workflows to become increasingly paperless and automated. Technologies like machine learning offer continuous improvements in forecasting if used over a long period of time. In turn, this means an even greater focus on data availability and quality. The skilled use of these solutions can generate significant time savings and efficiency improvements. In future, for example, liquidity forecasts can be generated at the touch of a button and with no manual intervention. As a result of these developments, employees will increasingly find themselves performing strategic and analytical activities.

Given the fundamental changes in the existing processes, implementation in the respective treasury departments will be a process lasting several years. In the meantime, the simultaneous enhancement of the various technologies will require the target vision to be regularly scrutinised and adjusted or optimised as necessary.

About KPMG

KPMG is a company network with around 220,000 employees in 147 countries and territories.

KPMG is also one of the leading auditing and management consultancy firms in Germany and is present at 26 locations with around 12,600 employees. Our services are divided into Audit, Tax, Consulting and Deal Advisory. Our Audit services concentrate on the statutory audit of consolidated and annual financial statements. The Tax function provides KPMG's tax consultancy service. Consulting and Deal Advisory integrate our extensive specialist knowledge of business, regulatory and transaction-oriented issues.

We have established teams of interdisciplinary specialists for key sectors of the economy. These pool the experience of our experts around the world and further enhance the quality of our advisory services.

With the expertise of more than 60 experienced employees in Germany, our Finance & Treasury Management team provides support for issues in areas including financial risk management, cash and liquidity management, commodity and energy management, corporate payment transactions, organisation, strategy and processes, accounting, treasury IT, regulation, and tax and legal.

Our comprehensive, interdisciplinary consulting approach closely combines our consulting areas with our implementation expertise in issues relating to treasury and financial risk management, treasury accounting, cash-oriented corporate management, treasury tax, capital markets, and working capital management and the underlying treasury IT.

Contact

KPMG AG
Wirtschaftsprüfungsgesellschaft

Ralph Schilling

Partner
Head of Finance & Treasury Management
Frankfurt am Main
T +49 69 9587-3552
rschilling@kpmg.com

Nils Bothe

Partner
Finance & Treasury Management
Stuttgart
T +49 711 9060-41238
nbothe@kpmg.com

Börries Többens

Partner
Finance & Treasury Management
Köln
T +49 221 2073-1206
btoebbens@kpmg.com

www.kpmg.de

www.kpmg.de/socialmedia



The information contained here is of a general nature and is not intended to address the particular circumstances of any individual or legal entity. While we make every effort to provide reliable and up-to-date information, we cannot guarantee that this information will still be as accurate at the time you receive, or that it will be accurate in future. No one should act on the basis of this information without suitable professional advice and without a thorough analysis of the situation in question.

© 2020 KPMG AG Wirtschaftsprüfungsgesellschaft, a corporation under German law and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.