

**Deloitte.**



**2019 Global Treasury Survey**

A journey toward adoption  
of new technology



# Introductory message

Adoption of new treasury technology is still at an early stage

## **Deloitte is pleased to release its 2019 Global Corporate Treasury Survey.**

In preparing this year's survey, our team considered the following:

- What challenges and mandates are treasurers facing?
- What is the current use of Treasury Management Systems (TMS)?
- What new technologies are available to treasurers?
- To what extent have treasurers utilized opportunities and solutions that new technologies offer?

While liquidity and financial risk management remain the top two CFO mandates for treasurers, acting as a strategic partner and adviser to the business is becoming more critical than ever.

Treasury is demonstrating its value as a core leadership function by supporting both M&A and organic growth activities.

Further evidence of the shift away from the traditional operational model is the requirement to become a profit center, and though this is still deemed as not important to over half of respondents, it has almost doubled from 15 percent in 2017.

Although our survey reveals that many treasurers are comfortable in deploying TMS technology across companies ranging drastically in scale, adoption has not extended widely to some of the newest available technologies such as Robotic

Process Automation (RPA), Artificial Intelligence (AI), Visualization, Big Data, and Blockchain.

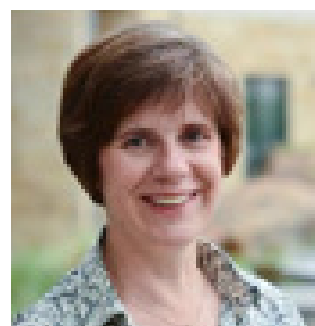
This is in contrast to the wider finance function in many companies, where the adoption of these new technologies is happening at an ever-increasing pace.

From a Deloitte perspective, we believe that the treasury profession is only at the early stage of this evolution, which could disrupt the way we consider companies using technology in the future.

These new technologies are starting to become commonly available within finance organizations and it is therefore helpful to understand existing areas where these technologies are being implemented. The enclosed survey results provide insights as to where this might be beneficial to your organization.

Practical treasury use cases of such technologies are available in all regions. However, lack of insight as to specific solutions combined with unknown costs are cited as the most common challenges for applying these in the treasury function.

Deloitte has one of the largest treasury practices, with subject matter specialists across areas of treasury strategy, transformation, and technology. If this survey resonates with any issues your company is facing or if you would like to explore use cases, please contact us. Our international contacts are listed on page 18.



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# Executive summary

## Survey demographics

- Over 208 companies participated in the 2019 survey.
- The largest percentage of respondents were from the Consumer & industrial products industry.
- Around 70% of the companies in this survey have between 1 and 15 FTEs in their treasury function.
- More than 30% of participants have a revenue above 10bn USD equivalent.
- The information obtained during the survey was taken “as is” and was not validated or confirmed by Deloitte.

## Top treasury goals and mandates

- Liquidity risk management and being a steward for financial risk management remain as the most important CFO mandates.
- Being a “value-add partner to the CFO,” which jumps a place in this year’s survey, reflects the transfer of strategic tasks requiring experienced treasury knowledge.
- The treasury function is also considered a critical enabler in supporting company growth, both organically and in-organically.

- Strategic challenges for treasury organizations.
- Visibility of data is now the most challenging area for treasury, up from second-highest challenge in 2017.
- Foreign Exchange (FX) volatility is still a key challenge at 50%, but moved down from the top position in 2017.
- Inadequate treasury systems infrastructure grew from 30% to 47% over the past two years.

## Treasury technologies

With TMS now embedded as essential for corporate treasury teams, the new treasury technologies considered in this survey are:

- Robotic/RPA
- Machine Learning
- Visual Analytics
- Big Data
- Blockchain

A glossary defining these terms is provided on the following page.

## Treasury technology – criticality & familiarity

- The pace of technology adoption is directly linked to the awareness and perceived need of implementation of new technologies in order to stay ahead in your industry.
- The main drivers for applying new technologies are risk mitigation and process automation.
- The extent to which technology can be used to achieve scalability, reduce cost, and gain a competitive advantage is not yet fully appreciated.
- There is unanimous agreement that cost and applying the right technologies are the main challenges.

## Regulations

- Brexit concerns and the adoption of various IFRS requirements are cited as the main regulatory challenges facing treasurers.

# Glossary

## **Robotic/RPA**

RPA is the software (commonly known as a “robot” or “bot”) used to capture and interpret existing applications for the purpose of automating transaction processing, data manipulation, and communication across multiple technology systems. Robots can perform recurring processes just like their human counterparts, and multiple robots can be used to create a “virtual workforce.”

## **Big Data**

Big Data is complex large data sets that cannot be processed by traditional processing software. With Big Data, it is possible to process at a higher velocity, larger volume, and with a variety of different, often unstructured data such as audio.

## **Artificial Intelligence**

AI builds on Machine Learning (ML) and cannot exist without it, while ML can exist without AI. AI can mimic human intelligence by learning from pattern recognition in large data sets and adjust to changes in input.

## **Machine Learning**

Machine Learning (ML) is a subset of AI and uses statistical techniques and algorithms to learn based on data. Initially the machine needs to be programmed by a human; but once the machine knows how to adjust to new data on its own, it can train itself to improve accuracy without human intervention.

## **Visual Analytics**

Visualization is the process of presenting data visually in a form that allows rapid understanding of relationships and findings that are not readily evident from raw data. Visualization complements business intelligence and analytics platforms, offering rich graphics, interactivity, and usability.

## **Blockchain**

A blockchain is a type of database for recording transactions—one that is copied to all of the computers in a participating network. It is thus sometimes referred to as a “distributed ledger.” A blockchain stores every transaction ever executed between

the participants of the network and through an innovative validation process ensures consensus of the entire network at all times. Blockchain technology allows for the secure management of a public ledger or database, where transactions are verified and securely stored on a network.

## **Cloud (single or multi-tenant)**

With single tenancy, each customer has his or her own independent database and instance of the software. Essentially, there is no sharing happening with this option. Multi-tenancy means that a single instance of the software and its supporting infrastructure serve multiple customers. Multi-tenancy cloud is the backbone technology of Software-as-a-Service (SaaS) offerings.

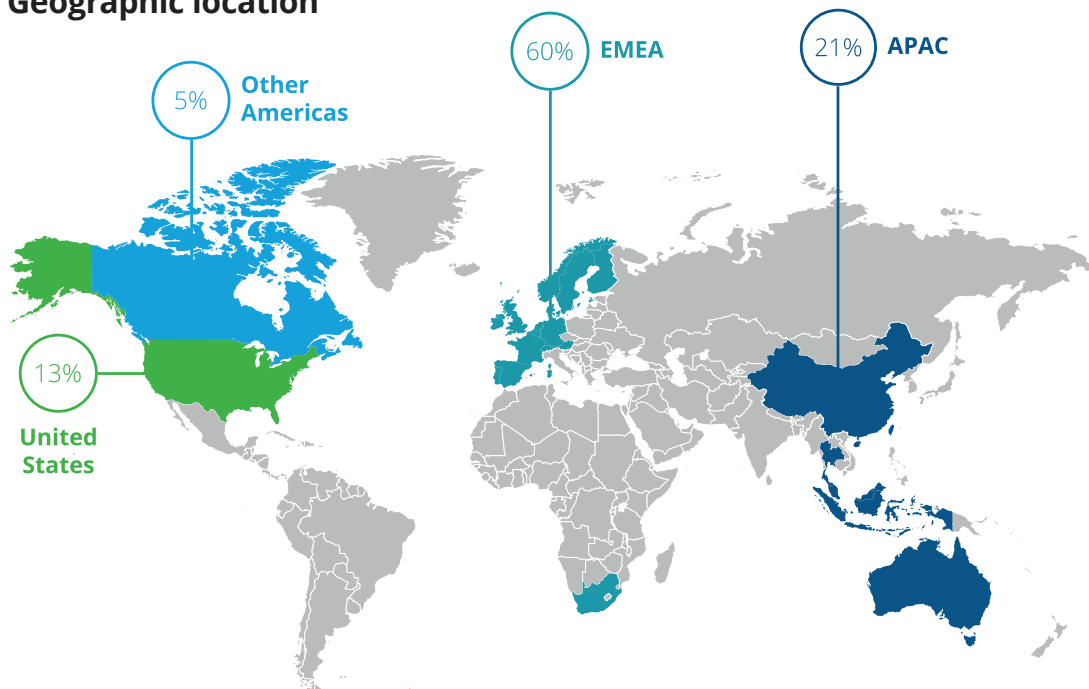
## **Hosted Services**

Hosted Service provides an alternative to organizations by providing access to specialist resources, including systems support on an as-needed basis. This may include hosting a dedicated treasury system on behalf of a client.

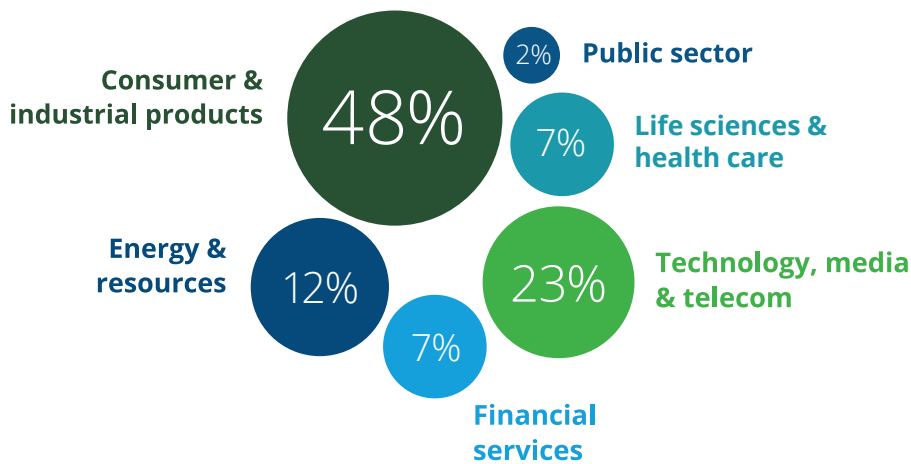
# Survey demographics

The number of participants from the APAC region almost doubled, compared to the 2017 survey

## Geographic location

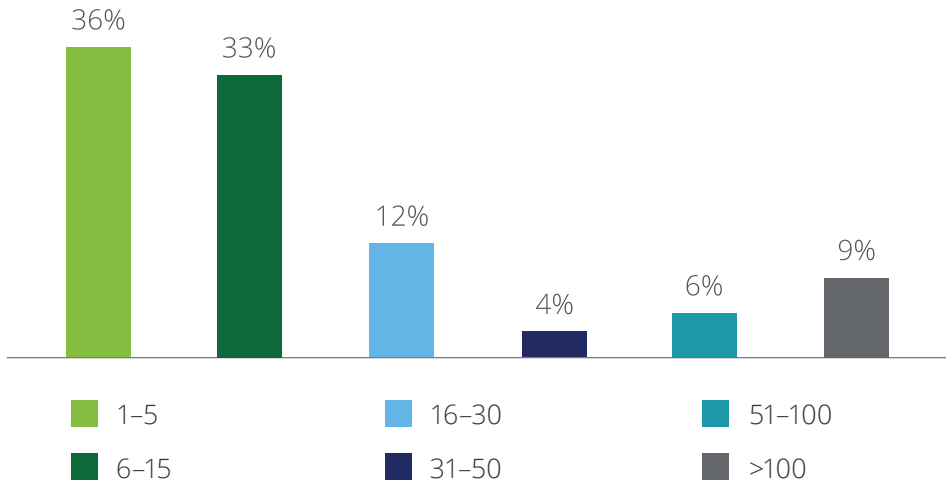


## Industries



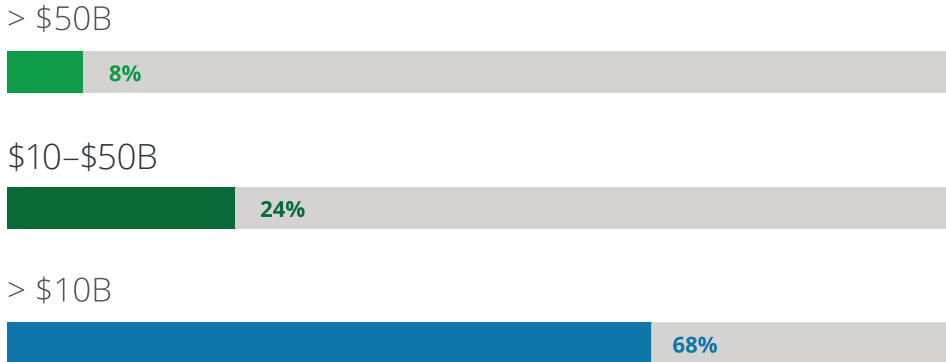
The majority of respondents are from the Consumer & industrial products industry

### Number of FTEs



Around 70% of the companies in this survey have between 1 and 15 FTEs in their treasury function

### Annual revenue (USD equivalent)



More than 30% of participants have a revenue above 10B USD equivalent

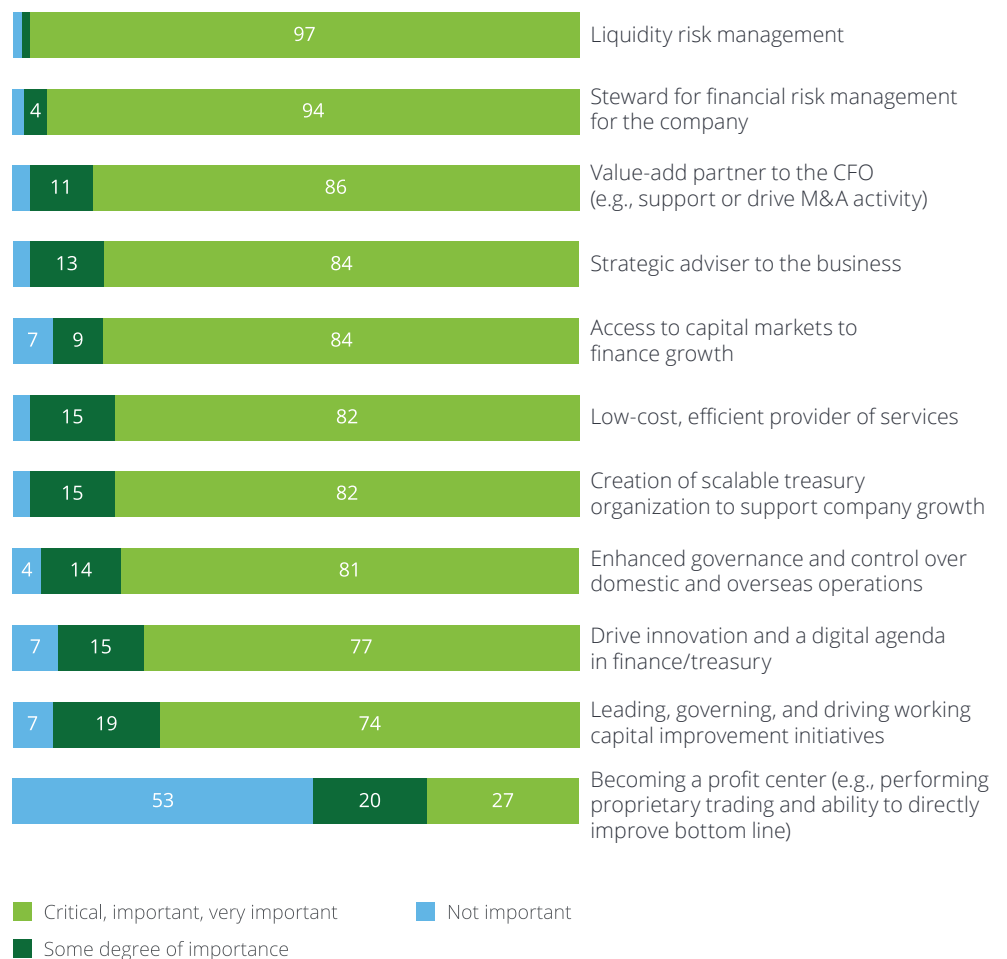


# Top treasury goals and mandates set by CFO

Almost unanimously, liquidity risk management and being a steward for financial risk management are the most critical mandates set by the CFO. The percentage of participants that believe becoming a profit center is a critical mandate has nearly doubled from 15% in 2017 to 27% in 2019, in line with the upward trend we saw in the 2017 results.

- The top treasury goals and mandates are mainly unchanged from the 2017 survey.
- The main exception is being a “value-add partner to the CFO,” which reflects the transfer of strategic tasks requiring experienced treasury knowledge.
- The treasury function is also considered a critical enabler in supporting companies’ growth.

## Top treasury goals and mandates set by CFO





# Strategic challenges for treasury organizations

Improving data visibility and data quality, managing liquidity, and FX volatility remain the most challenging areas\* for treasurers. In a context of the evolution of the global treasury function with the increasing complexity of operations and processes, the lack of effective treasury systems infrastructure is a key constraint.

- Visibility of data moved from being the second-highest challenge in 2017 to being first in the 2019 survey.
- FX volatility is still a key challenge at 50%, but moved down from the top position in 2017.
- Inadequate treasury systems infrastructure grew from 30% to 47% over the past two years.
- Other challenges mentioned are:
  - Cybersecurity
  - Business agility
  - Regulatory risk and compliance
  - Working capital

\*Multiple selections possible



# Treasury technology – overview

The use of spreadsheets has steadily decreased during the past two years given the investment in TMS or Hosted Services solutions. Whilst the move to cloud-based services is more prominent with larger organizations (likely due to the financial benefits and processing capacity cloud brings to widespread demographics), the results reveal that the highest growth pertains to Hosted Services for the whole group.

There has been an ongoing shift from locally managed deployment to Hosted Services or cloud-based solutions:

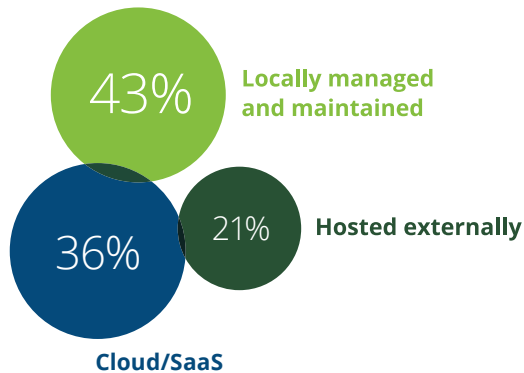
### Hosted Services:

- Hosted Services related to treasury technology is referring to a setup where software applications are being hosted externally, i.e., at a dedicated environment with a third-party data center.

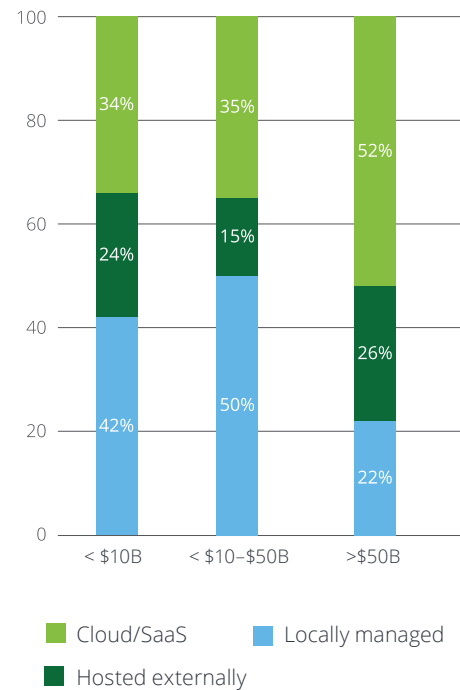
### Cloud/SaaS:

- Corporates are investing more and more in cloud-based technologies at a larger level (ERP systems).
- SaaS can be seen as a way to reduce risk of redundancy and minimize cost, while always having access, across locations, to the latest version of TMS platforms.

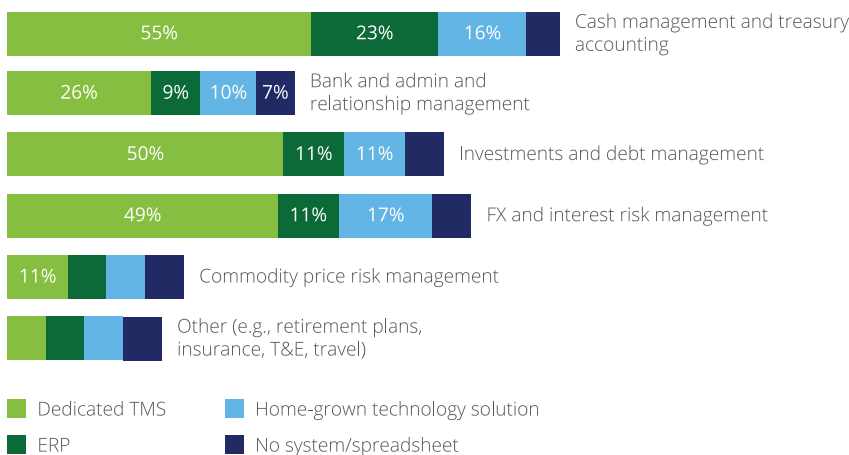
## TMS Deployment Model



## Deployment by revenue



## Functional usage by system type



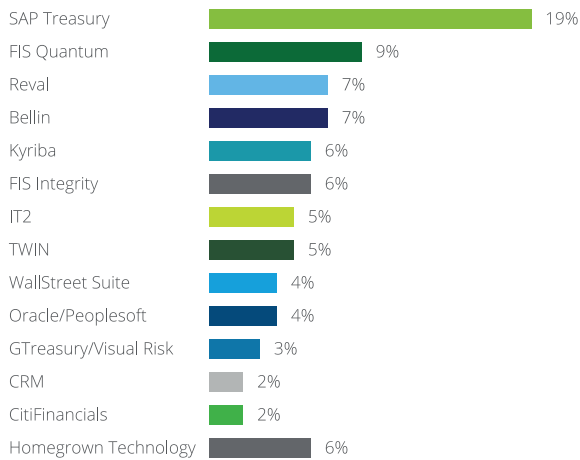
# Treasury management systems functional usage – overview

The cost of ownership and the perceived complexity of implementation and maintenance of treasury systems remain a barrier to adoption of technology. Many systems are still supported or augmented with the use of home-grown solutions resulting in greater operational and cyber risks.

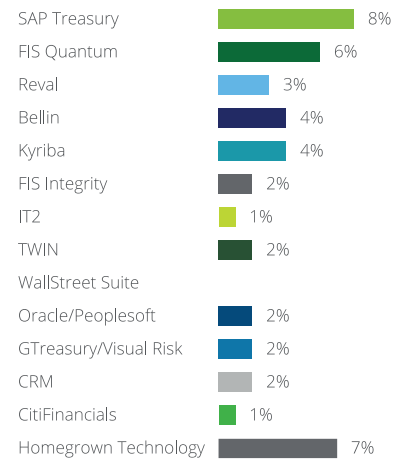
- SAP Treasury remains the most used system among survey respondents in the market for cash management and treasury accounting, particularly by firms with revenue less than \$10bn.
- SAP, FIS Quantum, Reval, Bellin, Kyriba, and FIS Integrity are the most commonly

used systems according to respondents, providing for all main treasury functions: cash management functions, bank administration, investments and debt management, as well as FX & interest rates management.

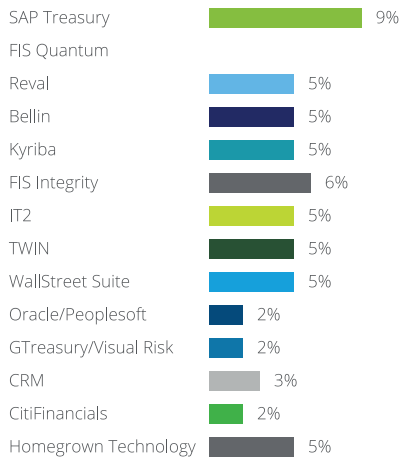
## Cash management & treasury accounting \*



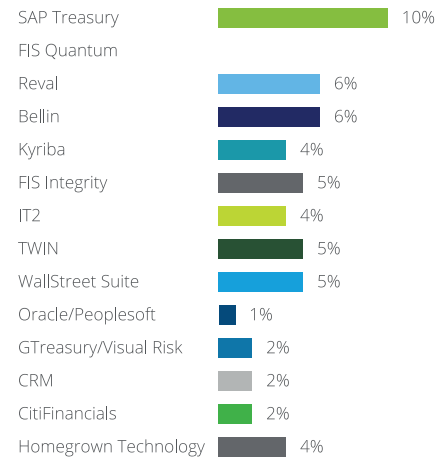
## Bank admin & relationship management \*



## Investments & debt management \*



## FX & interest risk management \*



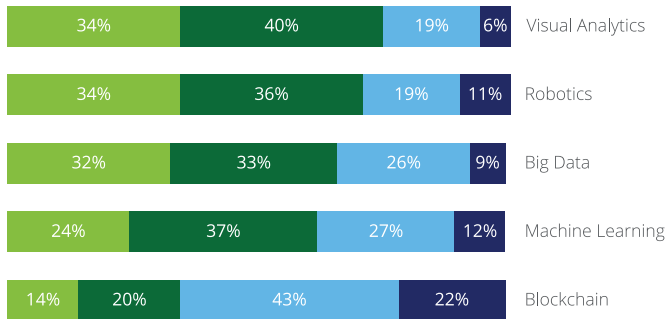
\* For ease of comparison, the systems are kept in the same order throughout the functional areas.

# Treasury technology – criticality & familiarity

The pace of technology adoption is directly linked to the awareness (or lack thereof) and perceived need of implementation of new technologies in order to stay ahead in your industry. Treasurers are aware of the positive disruption that can stem from technology adoption; however, prioritization of implementation is being challenged by the time required to select and test new solutions.

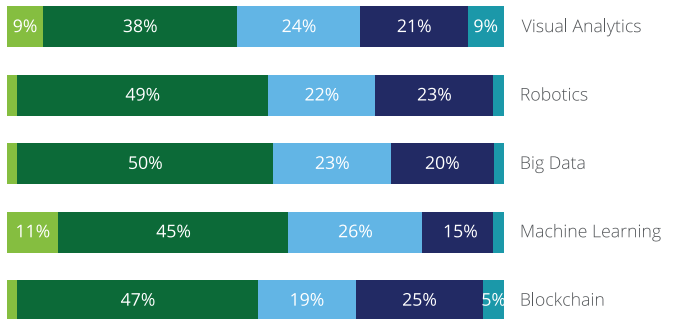
- Approximately 70% agree that Visual Analytics and Robotics are important, or even critical to treasury.
- On average, more than 50% of respondents have a general to well-versed understanding across all new technologies. We expect these numbers to increase as these technologies become more commonplace.
- Despite an increasing understanding about blockchain, treasurers continue being uncertain about this technology and the benefits that its adoption would bring, more of them favoring interest in Big Data and Machine Learning.

## Level of criticality



■ Critical and very important    ■ Some degree of importance  
■ Important    ■ Not important

## Level of familiarity



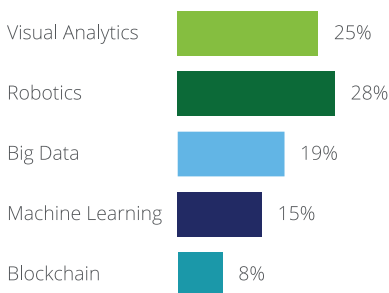
■ Well versed    ■ Trying to get a better understanding  
■ General understanding    ■ Not sure what it is  
■ Decent understanding

# Technologies implementation model maturity level

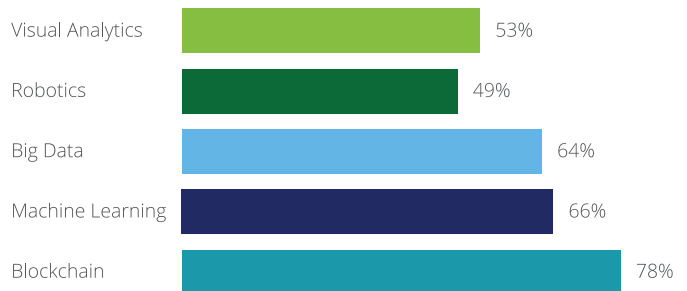
Implementation of new technologies has been limited so far, despite the significant potential benefits that they bring to treasury such as improved cash and financial risk exposure management, working capital management, fraud detection, and reduction in manual handling errors.

- Robotic and Visual Analytics are the most applied technologies so far, likely as a result of implementation in other areas of companies (A/R & A/P, payroll, finance, etc.).
- Blockchain technology is the least carried-out solution for core corporate operations.
- Companies are prone to leverage skills already available in-house with implementation of new technologies, but the trend to hire different skill sets (programmers, data scientists, and external consultants) will likely grow with the need to bridge knowledge gaps and add new capabilities.

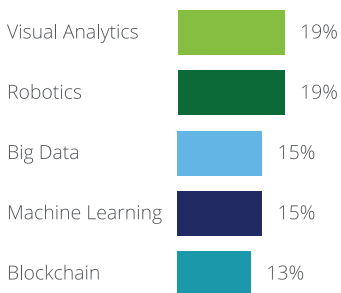
## Whole dedicated team or a few in-house experts



## Not using this technology



## Currently educating existing staff or looking for new talent



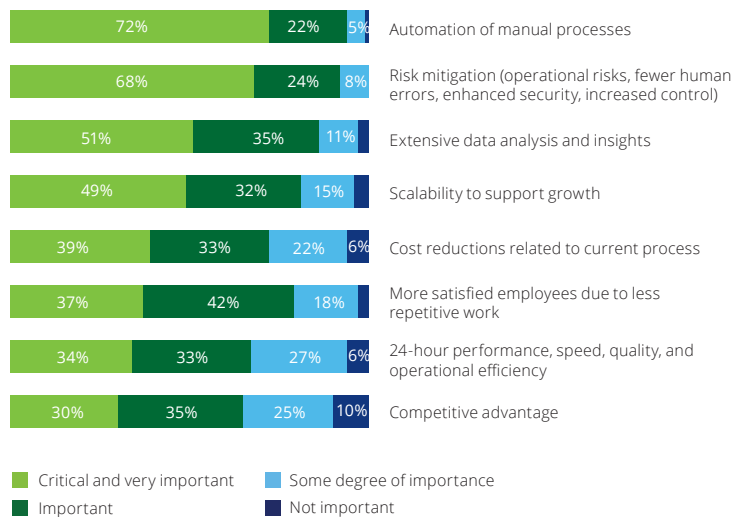
# Treasury technology – drivers vs. challenges

It is clear that there are many drivers for applying technologies, with all areas having some representation of being critically important; however, respondents are faced with the decision of what to select and how to apply sophisticated and fit-for-purpose solutions to their specific context.

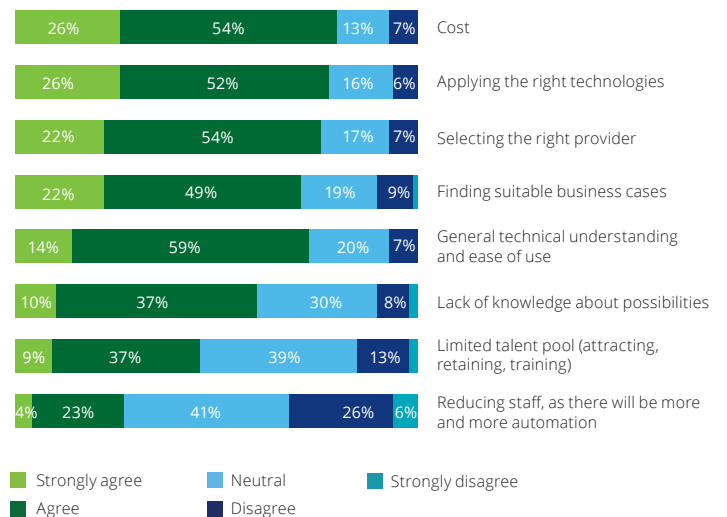
- Main drivers for applying new technologies are mitigating risk and process automation.
- There is overall agreement that the cost factors and the application of the right technologies are the main criteria for decision making.

- A certain proportion of respondents have a neutral view on the challenges for applying technologies; this is most likely the population of treasurers who are trying to get a better understanding of the solutions where they are not sure what they are.

## Drivers for applying technologies



## Challenges for applying technologies

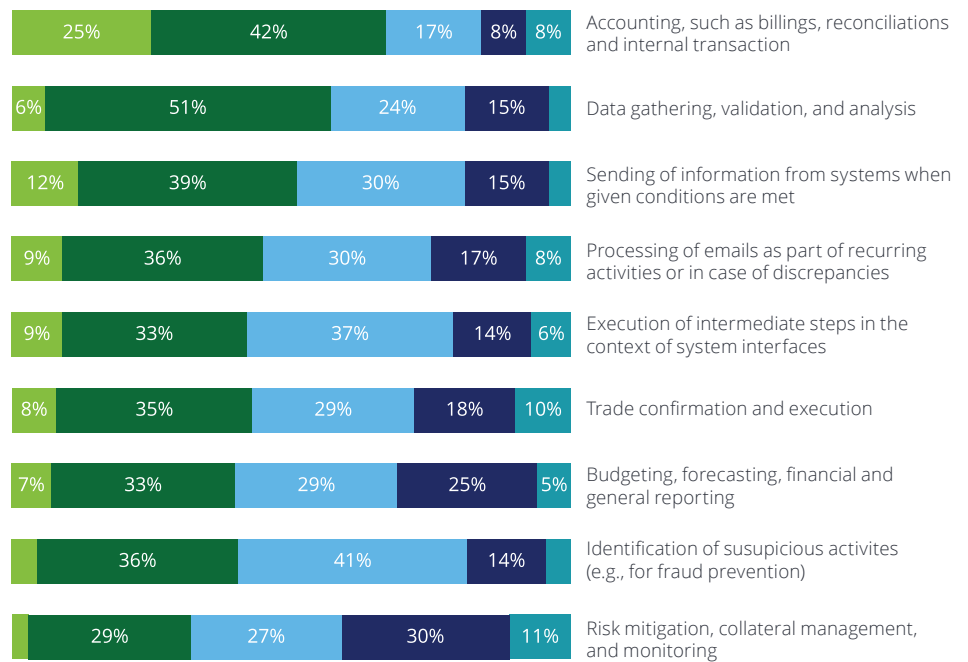


# Treasury technology – areas of implementation

New technology is already applicable and being used in many areas. We expect that the level of adoption will likely continue to rise within the treasury function as it grows in the overall organization.

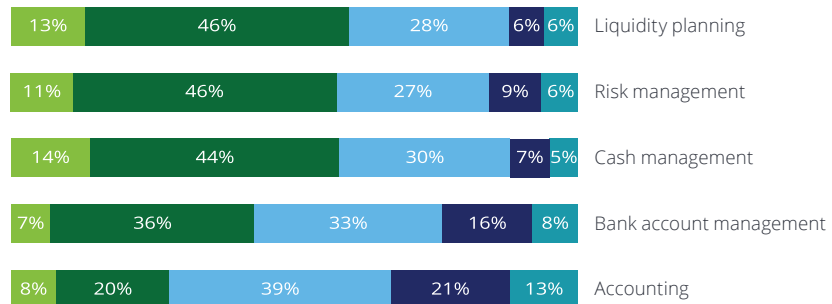
- Implementation efforts have been focused on RPA, followed by Visual Analytics.
- Data processing is deemed to be the most likely use case for implementation across RPA and Visual Analytics, with risk mitigation and fraud prevention being at the lower end.

## Robotic process automation



■ Already implemented     ■ Maybe     ■ Not relevant  
■ Likely and very likely     ■ Not likely

## Visual analytics



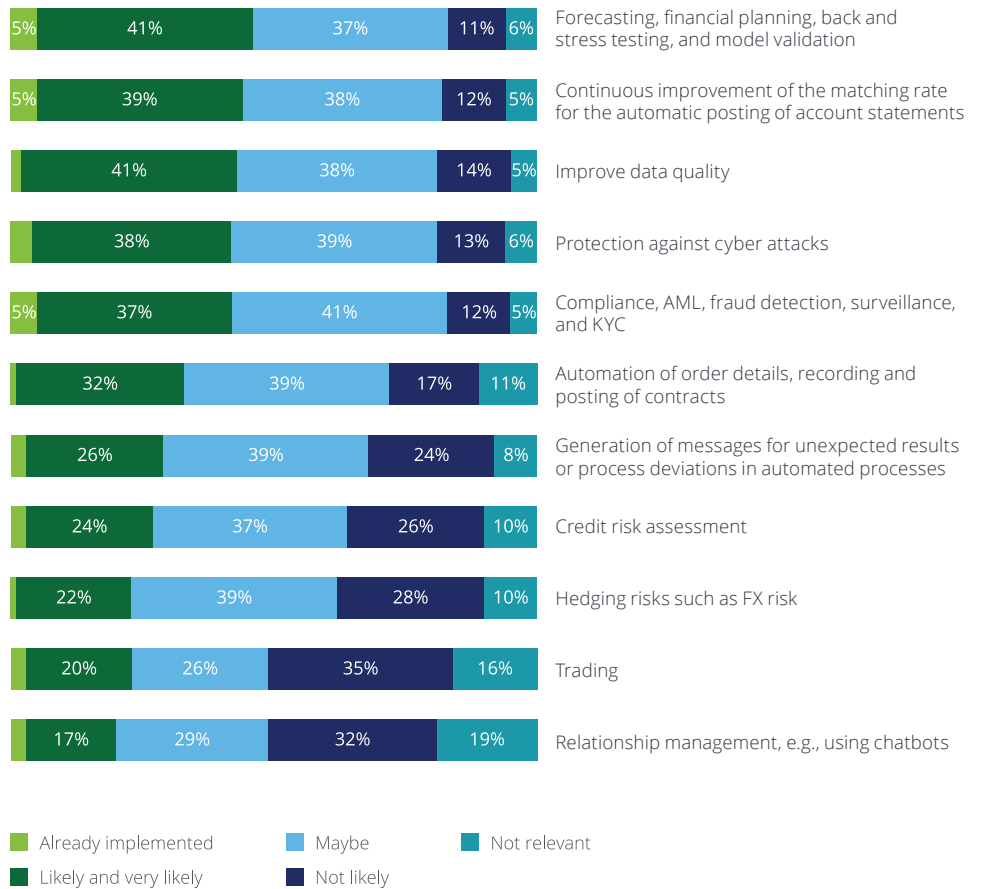
■ Already implemented     ■ Maybe     ■ Not relevant  
■ Likely and very likely     ■ Not likely

# Treasury technology – areas of implementation (2)

New technology is already applicable and pioneers in treasury are starting to adopt. We expect that the level of adoption will likely continue to rise within the treasury function as it grows in the overall organization.

- ML/AI increase the pace and scale at which corporates can automate their processes.
- Forecasting, reconciliation, and back testing are areas that are deemed most applicable for AI.
- Currently, the potential upside of implementing ML/AI could be significantly larger than for other technologies.

## Machine learning/artificial intelligence

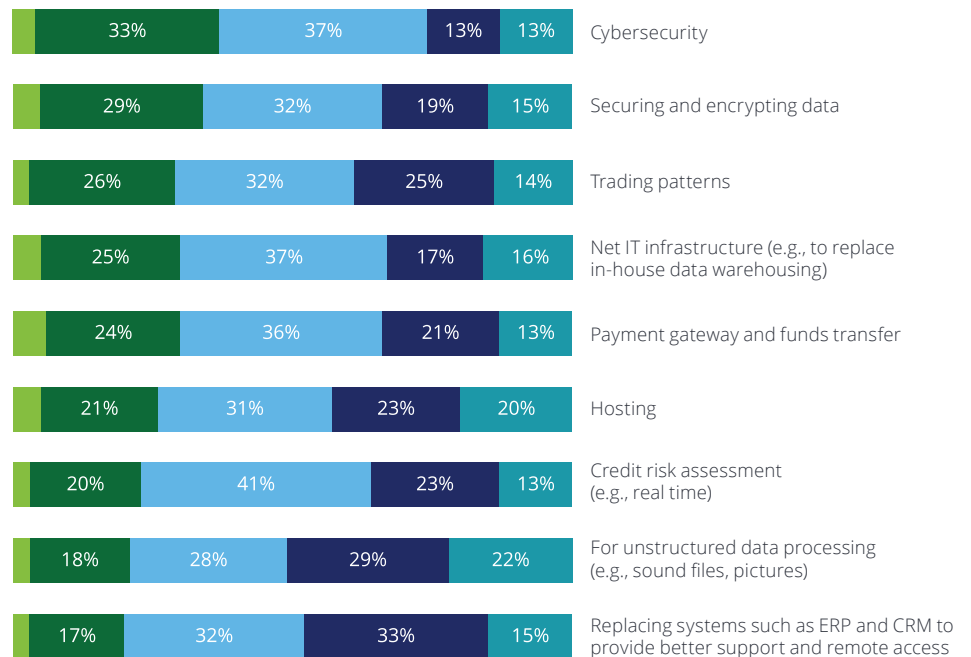




# Treasury technology – areas of implementation (3)

- As previously mentioned, implementation efforts have been focused on RPA & Visual Analytics, but some respondents have implemented Big Data solutions as well.
- The majority of these Big Data solutions are related to IT infrastructure and payment processes.
- Almost a quarter of respondents do not see there to be any benefit or relevance in using Big Data for unstructured data processing.

## Big data

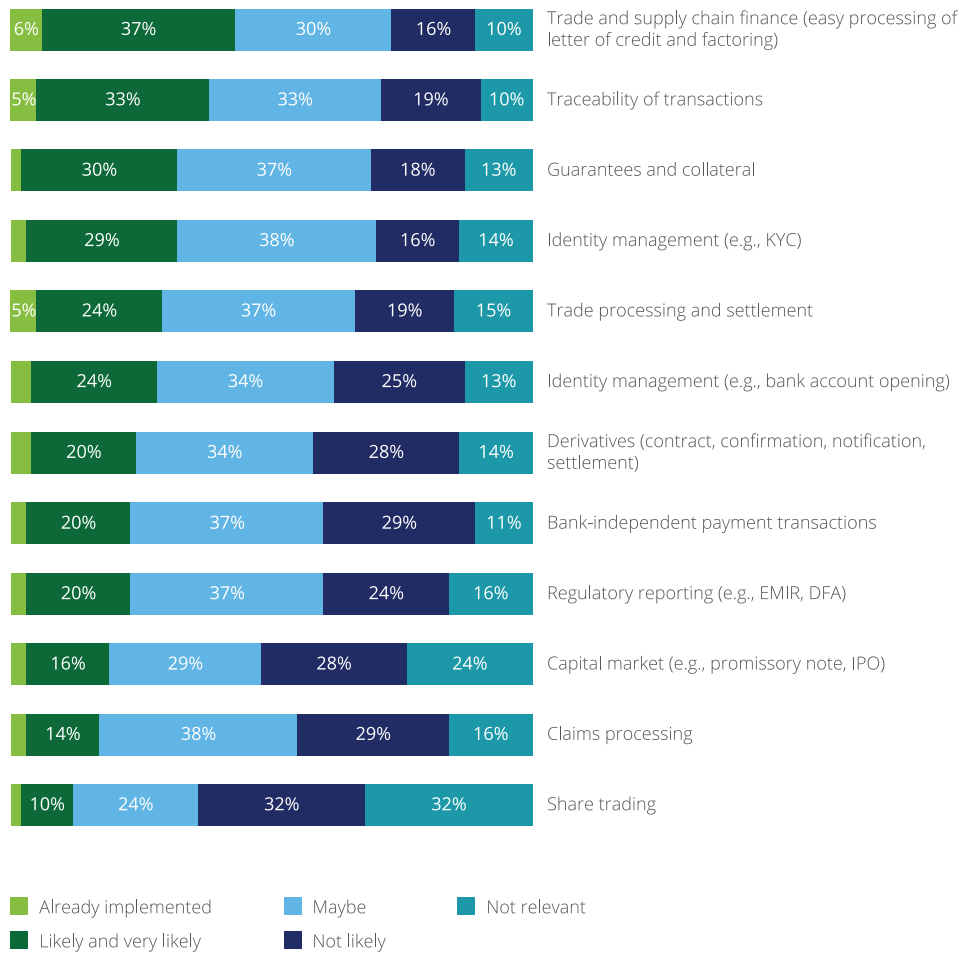


■ Already implemented     ■ Maybe     ■ Not relevant  
■ Likely and very likely     ■ Not likely

# Treasury technology – areas of implementation (4)

- The most implemented solution, although at a very low level, under this area is Trade and supply chain finance, which also has the highest selection for Likely and Very likely.
- Most respondents do not see this technology being used for areas such as share trading, claims processing, or capital market type processes; these are areas that would potentially be driven from other providers (e.g., innovative exchanges or financial services firms).

## Blockchain

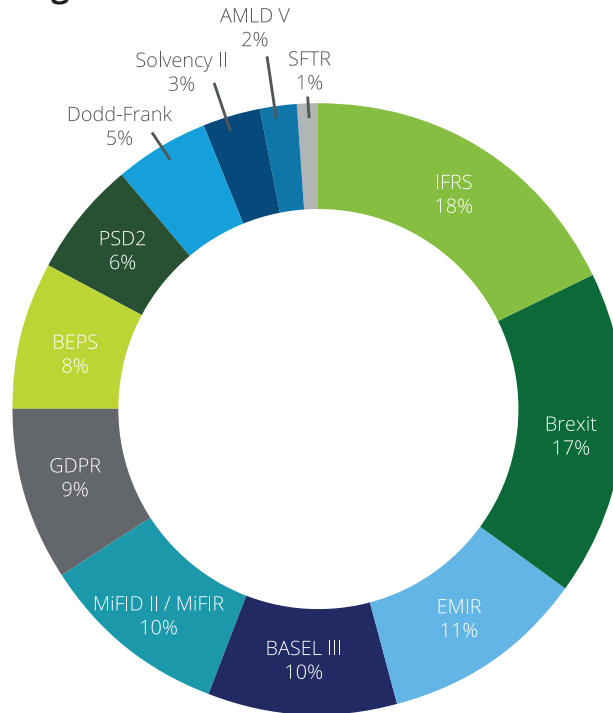


# Regulations

Treasury professionals should proactively monitor regulations, as this can have direct or indirect operational and compliance effects. Changes to the International Financial Reporting Standards (IFRS) and ripple effects of Brexit are most likely to affect treasury functions over the next 12 months.

- Regulations such as IFRS, MiFID II, etc., extend to finance and markets as well as the processing of personal information of individuals (GDPR). This adds complexity to the treasurer's role within the organization, specifically in relation to segmenting data and performing risk compliance.
- The high percentage selection for IFRS is likely due to IFRS 9 - financial instruments standard and the changes to hedge accounting rules.

**Regulations**



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