

FIVE TRENDS FOR CFOs TO WATCH

How analytics, robotics, next-gen cloud computing, cybersecurity, and evolving budget tools will shape tomorrow's organizations

CFOs are tasked with ensuring that the accounting basics, such as processing payments and reconciling accounts, are handled without a hitch. But simply having the bare minimum in terms of financial infrastructure won't get an organization, or a career, very far.

Modern senior finance professionals need to think strategically about how automation and streamlined processes will impact the finance team — and ultimately the business — five years down the road. To be tactical partners with business leaders and the C-suite, chief finance officers need to be scanning ahead to help the company thrive and meet continuously evolving demands.

This white paper outlines five financial technology trends that CFOs need to consider as they establish priorities for the finance team and the enterprise:



Predictive analytics and data will continue to drive business decisions with more precision and insight than ever before. By further "democratizing" data, business leaders will be able to have greater insight into real-time spending as well as better forecasting capabilities — both can help maximize the return on spend.



- Robotics will take over more back-office operations in areas such as Accounts
 Payable (AP) and Accounts Receivable (AR).
 The result is that in the next five years,
 many transactions will be handled without
 intervention, streamlining workflow management such as expense approvals and
 reimbursements.
- The next-generation of cloud computing will spark the explosion of connected devices and more real-time user interfaces over the next four to five years, according to a recent Gartner report. The architecture of IT will flip upside down, as data and content move to centralized cloud data centers and other platforms.
- **Cybersecurity will remain a hot topic,** given that 2017 was riddled with high-profile attacks. CFOs need to step up their game as risk managers and ensure that they have the latest processes to protect

the sensitive data of customers, employees, and business partners, and in turn ensure that third parties are also safeguarding company information. The new Global Data Protection Regulation (GDPR) — which will impact companies doing business in the European Union — is expected to refocus attention on privacy and cybersecurity.

Budgeting processes and technologies will continue to evolve. As a result, finance will need to hone its tech skills during the budgeting process: The focus must be on building platforms that enable integration and integrity, thereby solving the issue of too many data sources. Technology supporting the budgetary process should also enable flexible analysis (line-item detail, what-if analysis, ongoing adjustments, and on-the-fly analysis).



UNSTRUCTURED DATA FOR BETTER DECISION-MAKING

Today's business decisions can no longer be based solely on experience and instinct. Progressive CFOs are partnering with business leaders to deliver insights for better decision-making. Predictive tools are helping organizations become more adept at forecasting the future rather than just examining past performance.

CEOs and business unit leaders are increasingly relying on their finance chiefs to stretch beyond their accounting roots and drive business performance, hence the greater reliance on advanced analytics, including machine learning, natural language processing, optimization, and predictive and prescriptive analytics. Advanced analytics can uncover hidden patterns behind big and unstructured data, model hundreds of possible scenarios, and determine the best action plans among all alternatives.

A wider swath of data — including information such as changing weather patterns and geopolitical shifts — will also be incorporated into the decision-making process. Data integrity will require that CFOs understand the life cycle of data as well as the sources and uses of the data.

Leaders want insights to run the businesses better, but many are overwhelmed by the unlimited data currently available. "Going forward, the big issue will be converting data into what the business cares about — better,

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Data is more valuable when it can be leveraged to influence future behavior, rather than simply confirming past trends. "It is helpful to alert a department head if his/her team is on pace to exceed its travel budget for the quarter, but it is even better if you can analyze the data and offers solutions, such as using a different class of airfare, to stretch their budget," said Jason Woods, CFO, SAP Concur, a leading provider of expense, travel, and invoice management solutions.

Implementing predictive analytics will depend largely on new finance teams' and senior finance executives' abilities to evolve new skill sets that are not commonly part of their traditional functions, according to James Bone, cognitive risk consultant and author of Cognitive Hack: The New Battleground in Cybersecurity ... the Human Mind. "Data has been a task driver, not a value driver, but that is changing. But predictive analytics is not a given. It must be carefully designed."

Benefits: More efficient processes; lower costs over time; improved decision-making; and the ability to ask and answer better and more strategic questions about business performance.

Challenges: Large amounts of unstructured data are costly and time-consuming to clean; limited supply of qualified data analysts; increased regulatory scrutiny of data storage offshore; and evolving cyber-risks with expanded data capacity.

WORKING SMARTER WITH ROBOTS

While many back-office functions such as AP and AR continue to be handled manually, the tide is shifting toward greater automation. "There will be no reason for a human to touch something if they aren't going to improve it, because of course there is the potential that they will make it worse," said Kalish.

More than half (58%) of companies expect robotic process automation (RPA) to have a significant impact on

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their financial planning and analysis (FP&A) processes over the next two years, according to *Finance in the Digital Age*, a recent survey conducted by the Genpact Research Institute and analyst firm HfS Research.

RPA will drive "extreme automation" within rules-based finance processes, resulting in greater capacity for value-added activities. "Processes that were once being done manually are now being automated, freeing up staff hours and resources, but that is only scratching the surface," said Sanjay Sehgal, Principal, KPMG. "Progressive finance teams have a strategy to redesign and automate the entire FP&A process to shift their focus from transactional

to strategic." Adaptive technologies will drastically change work that finance does through the use of smart algorithms that can be leveraged to accomplish activities and tasks.

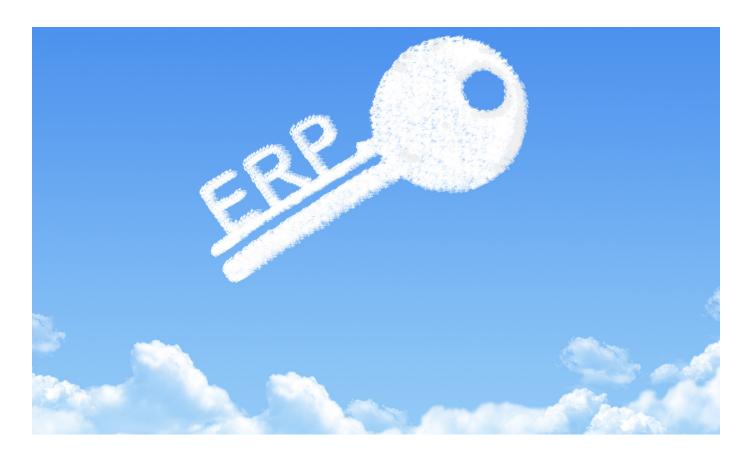
Examining past behavior to predict future outcomes will be an important role for robotics and artificial intelligence (AI). "Automation will continue to take on more of the low-value tasks, such as looking for fraud in expense reports," said Woods. "But artificial intelligence will also be able to identify certain behaviors to predict risk and solve some issues that now require human intervention without further interaction, particularly as machine learning becomes increasingly sophisticated."

Changes to the tax code may spark further investment in artificial intelligence, Michael Shehab, Tax Technology Process Leader for PricewaterhouseCoopers, wrote in a column on CFO.com. "It's complicated, and in the short term, tax reform is going to trigger a new set of challenges, especially for multinational companies. Al can help."

KPMG's Sehgal added that artificial intelligence will move beyond the finance department and change the way that people in the organization interact with data. "Intelligent personal assistants like Alexa enable natural language interactions," he said. In a business setting, this will provide the ability to speak commands such as "What were last month's sales compared to the previous year?"

Benefits: Reduced cost, more automated handling of routine tasks; higher productivity; fewer errors, more time for strategic activities; more responsive to regulatory compliance and risk issues.

Challenges: Skill sets of the finance team and overall workforce will need to shift and machine-human interaction is still evolving.



COMPUTING PLATFORMS EVOLVING TO SUPPORT CONNECTED DEVICES

The cloud is the standard for the modern enterprise, with 70% of all organizations having at least one application in the cloud today, according to the 2016 *IDG Enterprise Cloud Computing Survey*. Cloud computing, according EY's *Global Corporate Divestment Study 2018*,

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has prompted "a wholesale shift to the platform economy, where the 'as-a-service' model now dominates." Brian Kalish noted, however that: "Finance people are conservative, and there is very much of a 'if you lead, you bleed,' attitude, but that is shifting as they see that cloud platforms can provide the flexibility the business needs at a lower cost."

Cloud-based systems give finance the ability to select best-in-class application solutions, offer real-time data accessibility, and support business partnering capabilities, KPMG's Sehgal added. "Cloud ERPs and mobile applications across the organization are here now and becoming the norm, so the march to the cloud will continue to advance."

To ease the transition, many organizations are moving from private clouds to public clouds, often taking a hybrid approach that straddles private and public cloud platforms. Research firm IDC predicts that public cloud will account for 32% of IT infrastructure spending in 2020, while private cloud will take a 20% percent slice of the budget pie, i.e.,

totaling more than half (52%) of all infrastructure spending for the first time. In the meantime, hybrid cloud adoption grew three-fold in the past year, according to *Building Trust in a Cloudy Sky: The State of Cloud Adoption and Security*, a report from security firm McAfee.

The cloud computing platform will continue to evolve to support new technologies, new requirements, the explosion of connected things, and the real-time user interfaces that will fundamentally change computing topologies over the next four to five years, according to Gartner's report, *Maverick Research: The Edge Will Eat the Cloud*.

Garter defines edge computing as a method of optimizing cloud computing systems by performing data processing at the edge of the network, near the source of the data. Forty percent of large enterprises will be integrating edge computing principles into their 2021 projects, up from less than 1% in 2017, according to the report. Immersive technologies and real-time interfaces will push computing and data closer to users to meet their needs for real-time analysis.

Benefits: More flexibility to adopt new technologies to meet changing business needs; ease of collaboration and data sharing among departments and partners; and greater computing capacity for data storage and analysis, especially as more devices are connected.

Challenges: Transitioning from on-premise computing platforms; becoming more distant from controlling the environments they now depend on to operate; and easing concerns among executives over security of the public cloud.



Cybersecurity is projected to be the top risk in the coming year, according to The Hackett Group's 2018 Key Issues Study. While relentless cyber-attacks have kept the issue front and center, the importance of data security was further heightened by recent global

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regulatory requirements established by GDPR, which is set to become enforceable in May 2018.

As risk managers for their organizations, finance chiefs need to protect the enormous amount of financial, customer, and regulatory data that is being collected, stored, and analyzed. Bone noted: "CFOs must understand the implications of a data-driven organization in respect to cyber risks."

Finance chiefs need to be collaborative when dealing with cybersecurity issues and tap into internal and external expertise, according to SAP Concur's Woods. "This is potentially a blind spot for many finance chiefs, as it not necessarily core to their role, but you can't afford to get it wrong. You only need to be hacked once, and the price is high in terms of costs to repair the damage of the hack itself and the damage to your organization's reputation. You need a strong plan and clear ownership."

Bone added: "CFOs must advocate for an enterprise risk management approach because no one person or department can manage these risks alone."

As more data is stored in the cloud, the risk is higher because it is more valuable to hackers who rely on reselling the information. That said, trust in the cloud



is growing, with 74% of respondents to the McAfee survey reporting that they store at least some sensitive data in the public cloud.

In a bit of a twist from conventional logic, the transition to cloud computing may provide greater data security, Bone noted. "Ironically, cloud providers may be in a better position to manage cyber-risks than individual organizations."

Benefits: Regulations and threats are pushing organizations to prioritize cybersecurity, and CFOs are in a strong position to lead the discussion and help shape the vision.

Challenges: Threats are continuously evolving; resources are scarce; and greater volumes of data in the cloud provide larger, high-value targets for hackers.



The key to better budgeting and forecasting is better data. But more data doesn't mean better data. One important responsibility of the modern CFO is to ensure the integrity of the data flowing in from departments and external sources.

Current budgeting processes are often far from speedy. According to the *Association of Financial Professionals Benchmarking Survey*, it takes an average of 77 days to produce an annual budget. At that pace, the budget is outdated by the time it is finalized.

This is a result of data being managed in vertical silos, with each silo responsible for maintaining its own data and providing the finance department with the inputs it needs for budgeting and forecasting. Many organizations rely on spreadsheets for budgeting and forecasting, which aren't collaborative, consistent, or updated regularly with fresh data.

Progressive organizations are moving away from the tedious and unproductive process of preparing a budget and then putting it on the shelf for the remainder of the year. Annual, static budgets are being replaced with more advanced dynamic financial reporting — including enhanced cost and profitability reporting, rolling forecasts, and zero-based budgeting.

The availability and integrity of data are particularly relevant issues as organizations look for more agile and accurate budgeting and forecasting processes.

Kalish noted: "Modern finance chiefs are seeing tools that will help them make the best budgeting decisions throughout the year. Just because I thought I would need a certain amount of resources at the beginning of the year doesn't mean I should have to spend the remainder of the year managing to an educated guess that I made months earlier."

Kalish added that cloud-based platforms that can help analyze data for better business decisions are critical to more agile and accurate forecasts. Market

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conditions, sales trends, and other factors need to be taken into account when managing budgets, he said. What-if scenarios are critical when determining the financial impact of a major business strategy, such as entering a new market or introducing a new product line.

The tools and strategies are evolving, and CFOs need to take the lead, SAP Concur's Woods concluded. "To drive the business, budgeting and forecasting tools need to be predictive, not just a record of what happened. The role of the finance chief is to convince the business that it needs to change the way it has been doing budgeting and forecasting for decades."

Benefits: More relevant and accurate data supports better budgeting and forecasting; more frequent updates; and more flexible tools for data-driven forecasts.

Challenges: Concerns over scrapping traditional budgeting and forecasting processes; difficulty recruiting team members with the skills needed for modern FP&A.



CONCLUSION: INNOVATIONS IN DATA AND PLATFORMS SHAPE CFO TRENDS

The job of the CFO is evolving beyond the accounting function, and modern CFOs need to be well-versed in the latest fintech trends. Knowing your way around a spreadsheet will no longer suffice. Successful CFOs should look to the tools and strategies that will shape the next five years:

- Mastering data and analytics will be critical to the expanded role of the CFO.

 The future hinges on not just collecting piles of data, but also presenting the data that matters in a format that is meaningful for stakeholders and supports growth.
- Robotics and other business intelligence tools will take on many of the routine accounting tasks, freeing up the finance team to be strategic business partners.

- Next-generation platforms will house the data and provide the robust computing power necessary for agile decision-making.
- As data storage shifts from on-premise systems to cloud computing platforms and beyond, CFOs will need to stay focused on protecting data and mitigating risk.
- Finally, modern finance platforms and data will evolve the budgeting and forecasting process from an annual exercise to a continuous look at the factors impacting the company's financial position, optimizing strategy for the challenges ahead.

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