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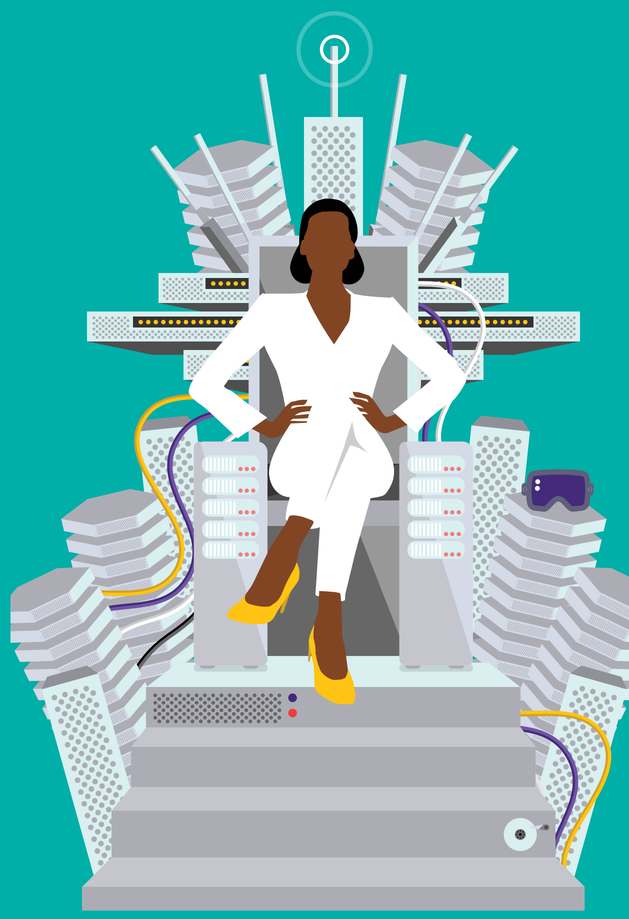
Tech Innovation to Reinvent the CFO Suite

Machines will help humans do higher-level work



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The Practical Guide to Disruption

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Over the next two decades, the function of the Chief Financial Officer will see its biggest technological changes since the introduction of personal computers in the 1980s. Just as technology has increasingly replaced humans on factory floors, it will take over many of the historic functions of the CFO, according to John Mulhall, Lead Partner of KPMG's Financial Management Consulting Practice.

"We're entering an era of extreme automation," says Mulhall. The convergence of cloud technologies, artificial intelligence (AI), robotic process automation (RPA) and blockchain will absorb much of the manual work that has traditionally consumed the resources of CFO offices and will lead to a sea change in talent and skills in the CFO organization.

Over the next decade, "we will see a lot more advanced automation in the back office in the CFO suite," says Matteo Colombo, a Principal in KPMG's Innovation and Enterprise Solution Group. That technology will enable humans to make better decisions, faster. Then, over the following decade, the cognitive capabilities of the technology are likely to become so good that humans will begin to perform new roles in connection with the core accounting functions of the CFO's back office, he predicts.

Bloomberg data and insights about the CFO function—prepared independently of KPMG—support their contentions. Here's how the CFO's office will change over the next decade and beyond, and the practical steps companies can take today to prepare for that future.

1 Big Data + Big Tech = Big Changes

A good chunk of finance work is around financial planning and analysis," says Mulhall. And of that work, "60 to 80 percent is gathering the data and making sure it's appropriately comparable between different sets. That data extraction and manipulation process will be largely automated. The thing that's going to blow the lid off of the finance function is essentially getting rid of all of that data manipulation and analytical calculation by humans."

There will always be a need for ad hoc financial analysis, and that will continue to be done by humans, he says. And humans will need to verify the work of machines. But routine work—which is the bulk of the work—will be automated.

What tasks will the machines take over? CFOs are typically "involved in pricing decisions to make sure that the pricing of products is profitable at market rates. Those sorts of decisions will be automated," Mulhall says. The increasing ability to automatically analyze very big data sets will help CFOs decide when to invest capital to expand capacity, says Colombo. And machine learning will enable CFOs to consider many more factors than just internal company metrics and econometrics when considering risks that may affect the business, he says. A significant impact of this will be a change in talent profile from accounting focused to more analytical thinkers, data scientists and modelers.

In today's world, payments are recorded in the internal ledgers of the company buying the product or service, and receipts are recorded in the ledgers of the company selling it. But blockchain technology—in its simplest form, a set of records linked and secured using cryptography—will allow companies to automate and disintermediate the matching of payments and receipts by using distributed ledgers in the cloud. "There will be far fewer disputes between businesses about whether payments and receipts are accurate," reducing the number of people that CFOs need for that accounting function, says Mulhall.

The financial services industry has been on the leading edge of blockchain activity, but it is still a long way from widespread adoption of the technology for distributed ledgers. "Financial institutions will need to adopt blockchain technologies that fit a developing regulatory framework in order to garner widespread adoption and to avoid legal challenges," according to Bloomberg Intelligence. "Banks and other financial firms are focused on developing blockchain protocol to promote interoperability across platforms. Successful technology must not only handle the complexity and volume of cybercurrency transactions, but must also comply with existing and future regulatory constraints placed on banks and securities exchanges."

However, these hurdles haven't prevented companies from exploring how blockchain technology might work, and the number of patents issued and patent applications filed that reference blockchain, distributed ledgers or the cryptocurrency Bitcoin has been rising in recent years.

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>
> — Matteo Colombo Principal, KPMG

2 The War for CFO Talent Will Heat Up

The CFOs of tomorrow will need to think in very different ways than they do today. Knowledge of the rules of accounting will only get them part of the way there, and they'll need at least two new skills, the consultants say.

The first is for CFOs to think of their core accounting duties as a set of processes, and to be able to understand the available technology well enough to make those processes run more efficiently; they need to understand the world of ones and zeros, as well as the world of dollars and cents. Colombo adds that, as these technologies take over the busy work of corporate accounting, fewer companies will send such work offshore to low-cost business process outsourcing markets, such as the Philippines or Thailand.

Second, CFOs will need to conceive of their role as the bridge between their company's operations today and tomorrow. "The CFO sits at the intersection of operational metrics, financial planning and long-term business strategy," says Mulhall. "There is no other role in the organization that sits at that nexus."

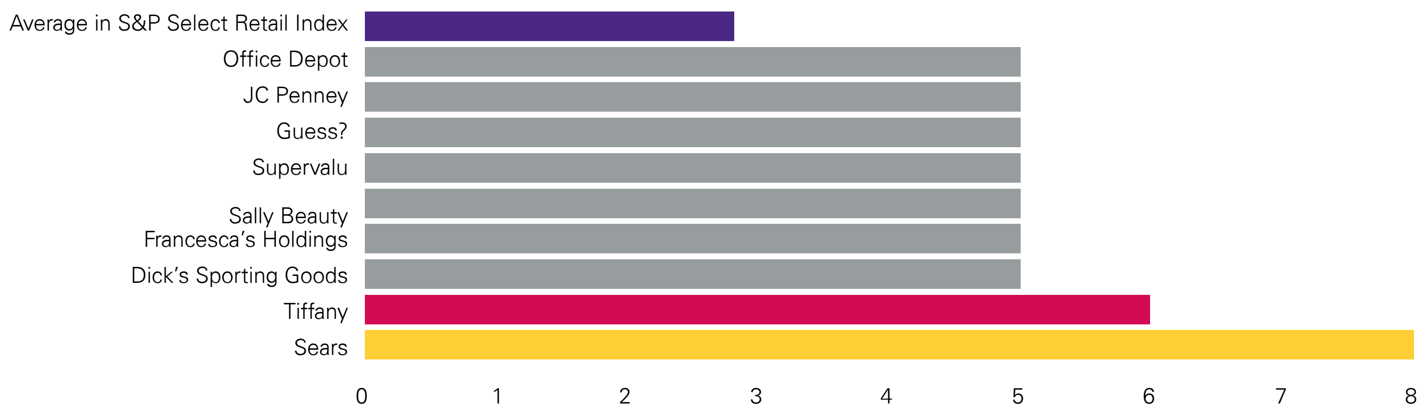
But to fully exploit that position, CFOs need to think differently. "Historically, finance people have been trained in a fiduciary control and rulemaking way, because they're accountants. Tomorrow, they'll need the skill set of assembling a set of ambiguous facts to support strategic decision-making. That's not a skill set in abundance today," says Mulhall.

The retail sector may be among the first to feel this need for new skills in the CFO suite. The finance chiefs of at least 45 major retail companies worldwide left their jobs in 2016, including those at Neiman Marcus Group, Kohl's and Nordstrom, according to a Bloomberg tally.

"Retailers are shifting spending away from stores and into technology and e-commerce operations, to better compete with Amazon and satisfy customers who increasingly prefer shopping online. Other useful skills for a retail CFO these days include closing stores, executing turnaround plans and slimming down corporate structures," according to Bloomberg Gadfly, which publishes data-driven commentary.

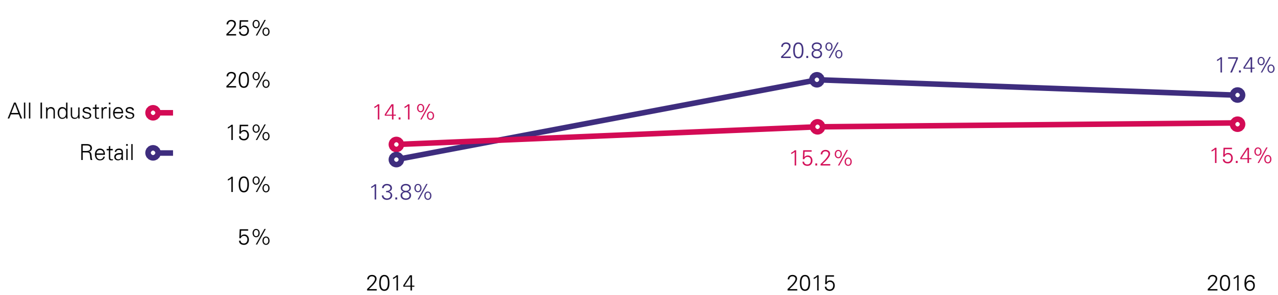
Number of CFOs at Select Retail Companies, 2005-2016

The quick CFO turnover at so many retail brands is one indicator of how difficult it is to find CFOs with the right skills



Source: Bloomberg

CFO Turnover at Retailers Outpaces Norm



Korn/Ferry International, 2017. Based on top 1,000 U.S.-based companies by revenue

Although Home Depot's CFO remains, Carol B. Tome's responsibilities have changed in recent years, with less time spent opening new stores, and more time spent on technology and e-commerce operations, Gadfly reports. She was given "the additional title of Vice President of Corporate Services, essentially leading strategy and business development, reflecting how the CFO office has evolved beyond number-crunching," according to Gadfly.

3 The Cloud Becomes the Dominant Platform

"The speed of change in business and in technology in recent years, including the explosion of easy-to-implement cloud-based analytic point solutions, only increases the urgency of the finance organization's effort to define its data and analytics agenda," says Mulhall.

The cloud will increasingly become the platform of choice for finance applications, rather than the company's own systems, the consultants say. That's because the best applications are often cloud-based and are constantly updated with improved features, and the data is accessible from any device worldwide in real time. And the CFO is in the perfect position to drive cloud adoption, since it's traditionally their role in the organization to address inhibiting factors such as risk, security and compliance.

A related benefit of the move to the cloud is the data standardization it forces on companies, says Colombo. "Because you're running someone else's application apart from your own system, we know it limits your degree of freedom. We know that adopting cloud technologies leads to enhanced process and data standardization," he says.

So far, the cloud computing market has been ruled by software-as-a-service, which claims almost 70 percent of the market, Bloomberg Intelligence reports. It dominates infrastructure-as-a-service and platform-as-a-service—which split the rest of the market—because "clients don't have to make dramatic changes to their core IT infrastructures to deploy these SaaS applications," Bloomberg Intelligence reports.

As the cloud matures, "it's moving toward industry-specific products to drive greater penetration. Increased regulatory and compliance burdens in various industries such as health care and financial services are further spurring this demand," according to Bloomberg Intelligence. The four biggest SaaS companies already have financial services products, which could be of use to CFOs.

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Corporate Finance Checklist

Colombo and Mulhall recommend that CFOs take the following steps to prepare for the coming disruptions in their roles:

- ☑ **Be Data-Driven**

  Use data to understand the fundamental economics impacting disruption and the changing demands of innovative solutions.

- ☑ **Help the Business Make Smarter Bets**

  Balance riskier investments in disruption with ongoing investments that sustain the core of the CFO function.

- ☑ **Establish a Strategic Framework**

  A structured and rigorous decision-making process that aligns investments with strategic, operational and financial plans will ensure that the company is nimble and competitive.

- ☑ **Use the Proper Metrics**

  Financial metrics need to blend the risks and opportunities of a changing world.

- ☑ **Adopt Strong Governance**

  Capital and skilled employees are scarce, and the CFO's decisions need to drive alignment from the C-Suite all the way through to the customer.

- ☑ **Upskill Your Talent**

  Focus on analytical skills and data scientists to best leverage emerging technologies and people.

For more information on how KPMG is enabling consumer and retail organizations to achieve enterprise wide digital transformation, https://advisory.kpmg.us/digital-transformation/consumer-and-retail.html

Contact us

John Mulhall
Lead Partner,
Financial Management Consulting Practice, KPMG
T: +1 212-954-2542
E: jmulhall@kpmg.com

Matteo Colombo
Principal,
Innovation and Enterprise Solution Group, KPMG
T: +1 206 913 4460
E: matteocolombo@kpmg.com

The Practical Guide to Disruption series examines the future of five key business processes. Combining the insights of KPMG's industry specialists with Bloomberg data, we provide practical steps executives can take to prepare for the changes to come.

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