Employing advanced technologies to transform finance

The role of "extreme automation" in enabling next-generation finance target operating models

1Q 2018 KPMG Global Insights Pulse Survey Report

July 2018

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First quarter 2018 top two trends:

Intelligent automation goes from hype to business transformation

KPMG Global Insights Pulse surveys are a quarterly review of Global Business Services (GBS), Intelligent Automation (IA), and related service delivery market trends. Input and individual observations are gathered from KPMG's global network of professionals in Sourcing Advisory, Financial Management, Technology, Human Resources, Customer & Operations, and other practice areas, backed by KPMG market research.

"Market rhetoric is on transforming the finance into a more strategic asset, and the CFO as a leading, trusted executive advisor. But digging into tactics versus purported strategies, the reality is that most finance organizations focus primarily on cutting costs and reducing headcount, prioritizing efficiency over effectiveness gains, and investing in intelligent automation to drive improved top line results and strategic value-add."

David Brown
Principal and Global Lead,
Shared Services & Outsourcing Advisory
KPMG in the US

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Survey highlights

Finance's top goals and initiatives in 2018–2019 continue to be cutting costs, reducing headcount, and contributing to and enabling cost reduction across the entire enterprise, according to the KPMG first-quarter 2018 Global Insights Pulse survey. While important and most likely required, companies focused only on these reoccurring efficiency-oriented goals are just keeping up. By fixating on cost cutting, at the expense of innovation and transformation, finance will not secure its place as a strategic asset to the business.

The good news is that some 1Q18 survey participants see more companies reducing labor costs, driving efficiencies, and enabling staff to do more strategic work through their investments in intelligent automation (IA). Some companies are also reducing costs through increased use of data and analytics (D&A). Leveraging such key components of "extreme automation" (EA) will enable finance to avoid being, and being perceived as, a functional back-office cost center.

The goals driving finance's use of machine learning (ML) and artificial intelligence (AI) include improving its insightfulness and shifting work activities to more value-add and strategic activities, ultimately delivering value that extends far beyond decreased costs and increased efficiency.

While uptake is in its infancy and business use cases are limited, now is the time for finance to:

- Gain an understanding of the different technologies — ML, AI, robotic process automation (RPA), D&A, and cognitive computing (CC)
- Learn the nuances
- Seek appropriate applications against which to deploy
- Plan for implementation and ongoing governance and management.

EXTREME AUTOMATION
is a collective set of technologies that include machine learning, artificial intelligence, cognitive computing, robotic process automation, data and analytics, cloud, master data management, enterprise resource planning, and enterprise performance management.

INTELLIGENT AUTOMATION
transforms and automates business processes by leveraging any combination of extreme automation technologies and services. At its most basic level, robots — or bots — automate the steps in a process. At its most complex level, cognitive systems handle exception processing, make judgments to resolve customer issues, and complement knowledge workers to provide new insights.

Top 2018–2019 finance goals and initiatives

1. Reduce costs and optimize the finance service delivery model
2. Invest in IA to reduce labor and drive efficiencies
3. Contribute to and enable reducing costs across the enterprise as a whole
4. Apply financial D&A to identify opportunities to improve profitable growth
5. Improve planning integration and forecasting accuracy
6. Address and comply with regulatory and accounting changes (e.g., IFRS)
7. Implement or upgrade ERP systems
8. Move to the cloud for applications and processes
9. Invest and enhance finance talent and skills of staff
10. Invest in D&A technologies and capabilities to provide actionable insights

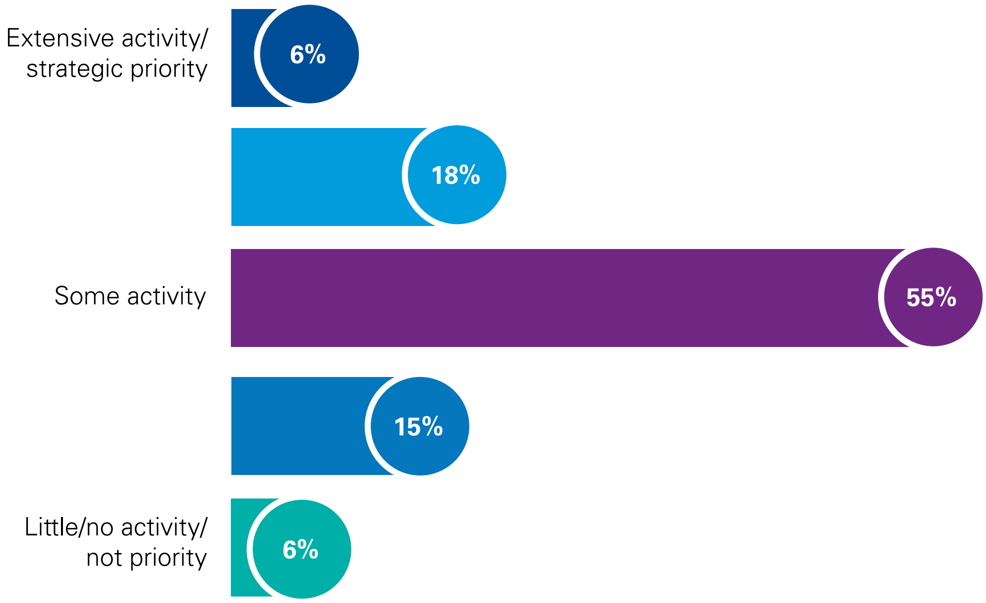
Source: Employing advanced technologies to transform finance, KPMG International, 2018

Note: Ranking for top two goals and initiatives are similar across all geographies, though Europe ranks them higher than other regions.

Most organizations have some or extensive efforts underway to overhaul their finance target operating model (TOM) to streamline processes, increase efficiency, cut costs, and increase accuracy. This is nothing new, and TOM overhauls are a recurring and often ongoing ritual for many finance functions. But by incorporating EA technologies and techniques into their TOM, finance can move into a more strategic role, focusing less on transactions and more on forward thinking. This means enhanced or next generation TOMs must include a different mix of talent — individuals who understand and know how to use this collective suite of advanced technologies.

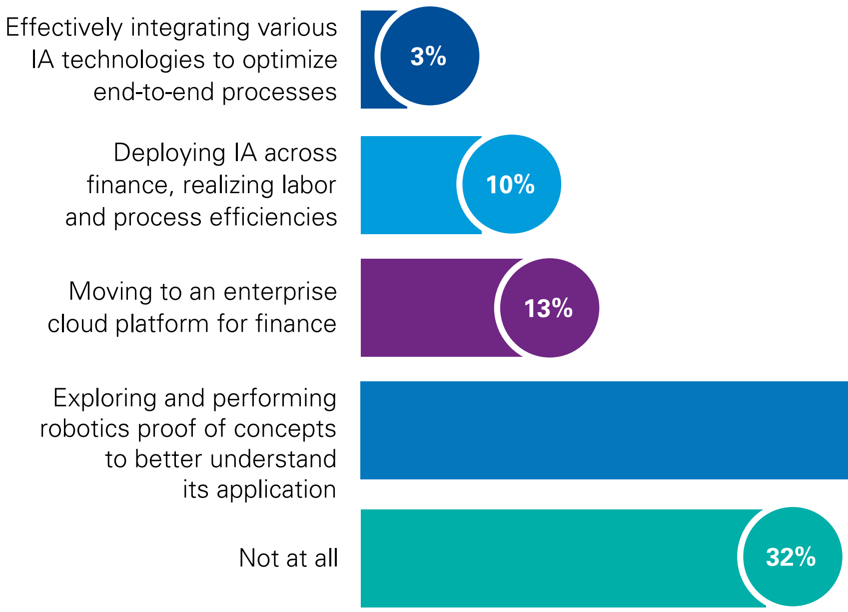
An enhanced TOM can also help finance better plug into and offer more strategic services and support to other parts of the organization. As more transactional work is automated, EA experts can apply the technologies across all company functions, blurring the boundaries between divisions. So, when overhauling finance, it is important to keep in mind — is the new TOM moving finance forward or just helping it keep up?

Overhauling the finance TOM



Source: Employing advanced technologies to transform finance, KPMG International, 2018

Leveraging extreme automation to enable overhaul of finance TOM



Source: Employing advanced technologies to transform finance, KPMG International, 2018

Additional findings

"A growing number of finance organizations are using emerging technologies, as shown by these survey findings. Are you moving forward to take advantage of them? Or are you just keeping up?"

Morris Treadway
Principal and Global Lead, Financial Management
KPMG in the US

Finance organizations foresee greater use of more advanced D&A. For example, moving beyond descriptive and diagnostic analytics toward predictive and prescriptive analytics is a high priority. However, only about one-third are mature in their use, which shows an imbalance between priorities versus uptake. While taking a thoughtful, well-planned, and thorough approach to D&A adoption is laudable, lagging in adoption is ill-advised.

Eighty-five percent of those surveyed see the shift to focusing on more value-add over transactional work as critical. Yet, only 20 percent use ML and AI to offload transactional work to enable this shift. While most finance organizations' use of ML and AI is still limited, they must keep in mind the importance of incorporating it so staff can focus on improving analysis and forecasting efforts and acting on gathered information.

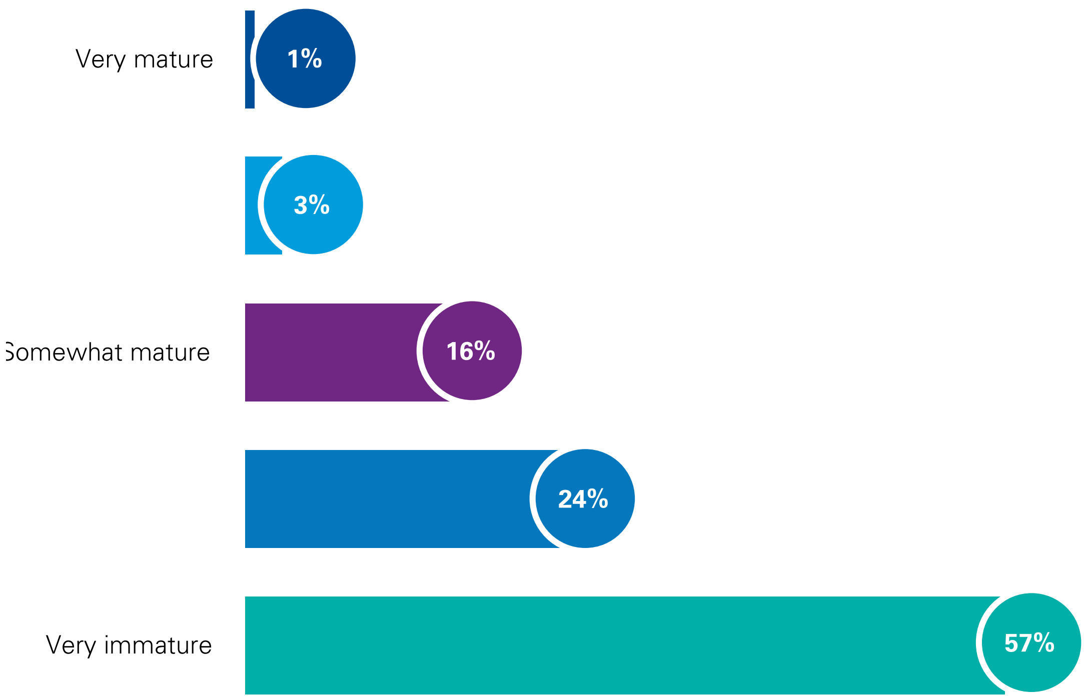
Top business issues addressed by D&A efforts

1. Cost reduction
2. Profitable growth
3. Top-line revenue growth
4. Customer experience
5. Dynamic pricing strategies
6. Regulatory and accounting changes
7. Supply chain optimization

Source: Employing advanced technologies to transform finance, KPMG International, 2018

While both ML and AI are complex technologies to implement, and require more specialized skills to use, they offer great potential to dramatically change work activities and workers' roles. They are also key enablers of moving the finance organization to a more strategic position.

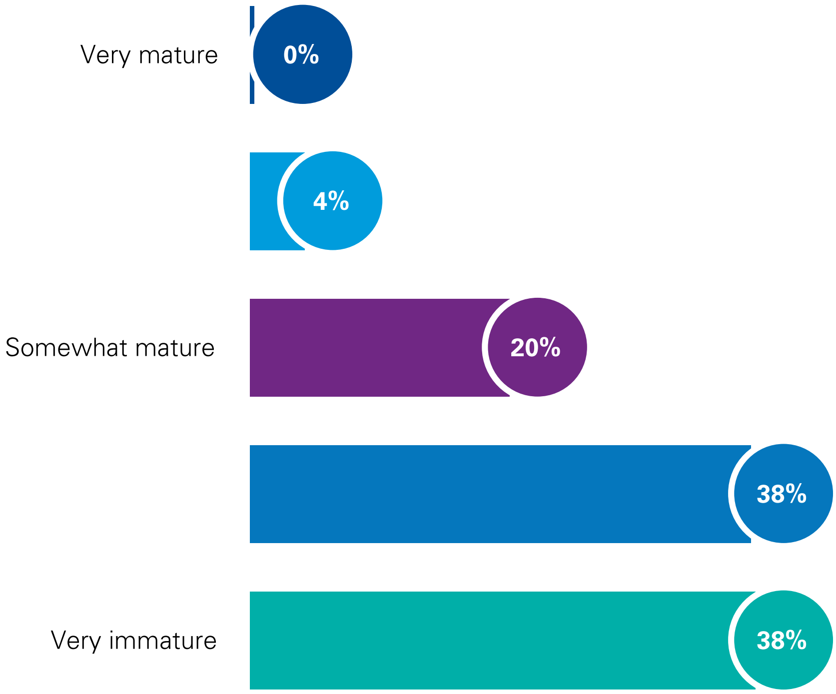
ML and AI maturity in finance



Source: Employing advanced technologies to transform finance, KPMG International, 2018

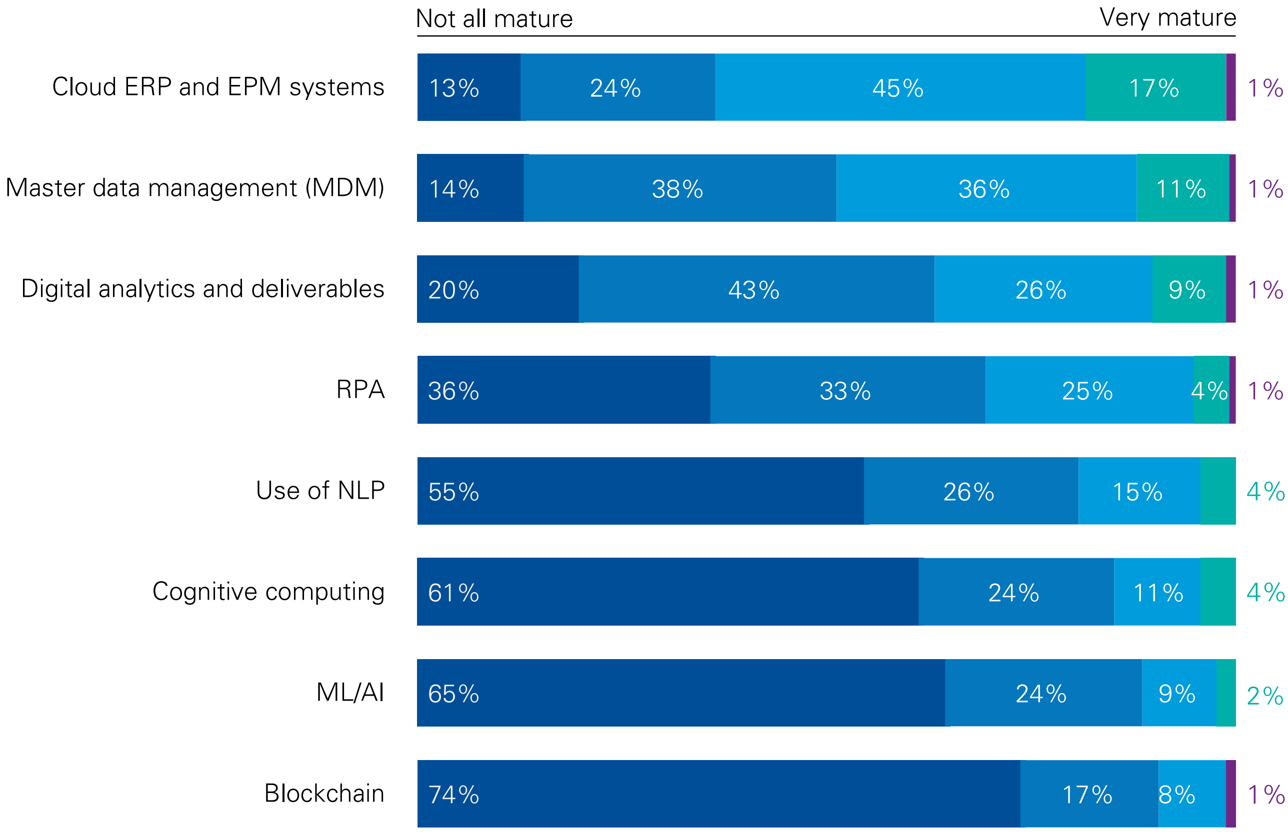
RPA's — or software bots' — greatest tactical benefits are that it can enable headcount and cost reduction, and increase process accuracy and efficiency. Yet, only 25 percent of surveyed KPMG advisors cited use of RPA today in their client accounts. While RPA is relatively new, somewhat immature, and harder to implement than advertised, organizations should still aggressively educate themselves on its challenges and potential benefits. Finance teams can look to the many use cases in the marketplace as a starting point for their own. But they need to carefully examine any ROI estimations, as many implementations to date are not returning the headcount, and therefore, cost reductions projected and advertised.

RPA maturity in finance



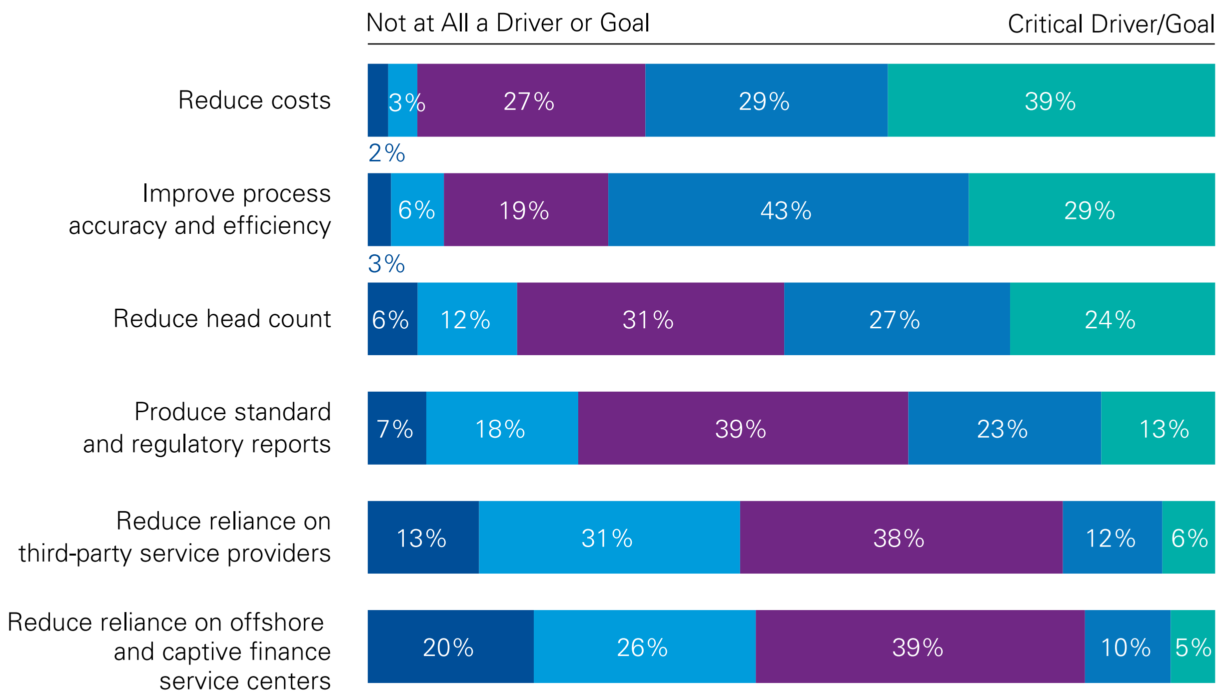
Source: Employing advanced technologies to transform finance, KPMG International, 2018

Finance capabilities with key components of extreme automation



Source: Employing advanced technologies to transform finance, KPMG International, 2018

RPA goals and drivers for finance



— Findings are generally similar across geographies.
— North America rates cost and headcount reduction goals and drivers the highest.
— Europe rates improve finance process accuracy and efficiency the highest.

Source: Employing advanced technologies to transform finance, KPMG International, 2018

Extreme automation in action

While EA is the way to the future, the technologies involved are complex to implement, require specialized skills to exploit and manage, and often necessitate new ways of thinking about the work and the value-add to finance.

Before adopting any components, organizations must take a structured yet aggressive approach to learning each one's nuances and potential, exploring where best to deploy them, and understanding how deployment will change the work of the finance function. This should be coupled with an overhaul of the finance TOM to ensure it adequately accounts for and addresses issues such as process optimization and management, change management, governance, and security.

Processes should be optimized and streamlined before they are automated. Bad processes should not be automated at all. Going forward, processes must be monitored. So, as business needs change, the processes that support them may need to change, resulting in modified, enhanced, or overhauled automation.

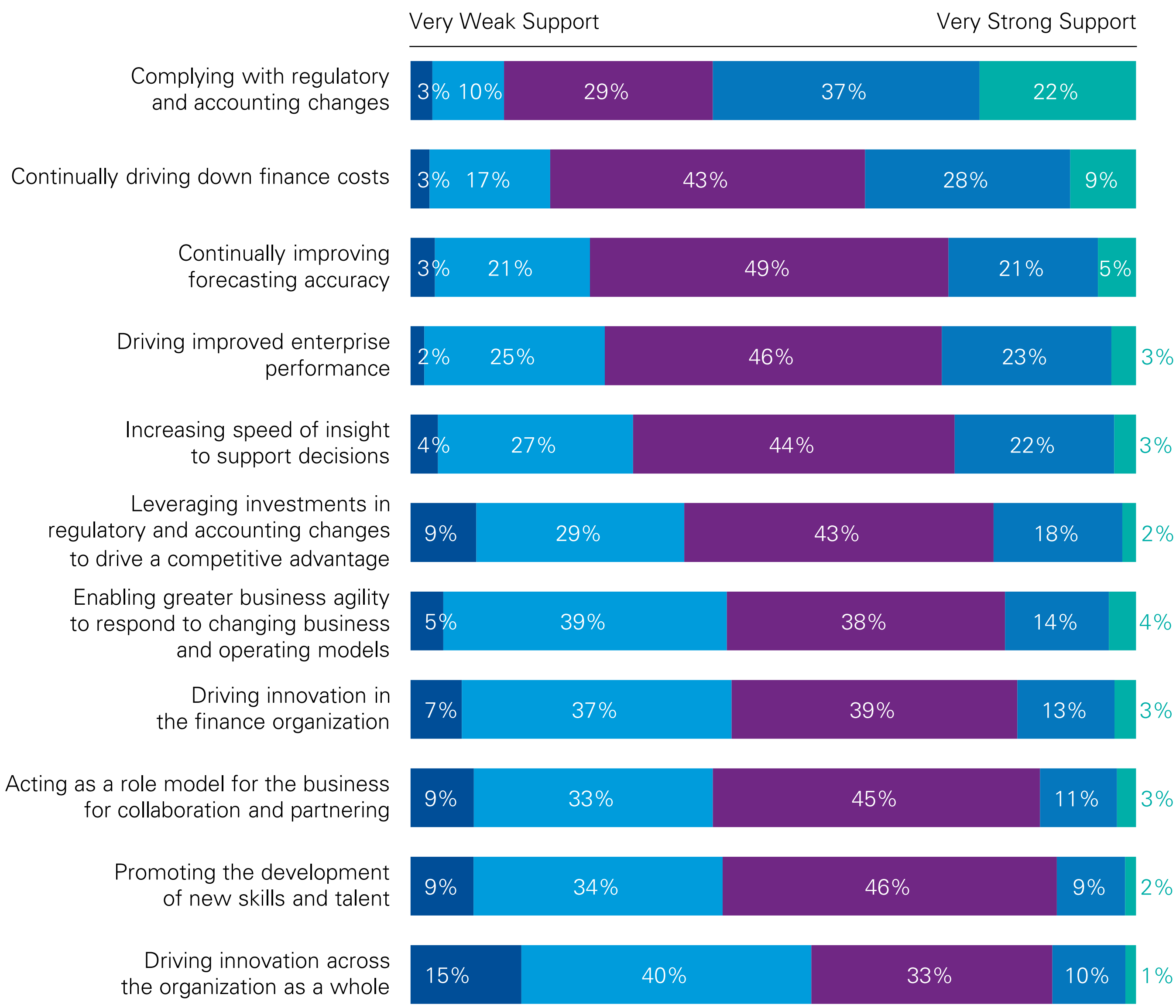
Different tasks, activities, and issues require a different mix of core technologies. When implementing change, these technologies should be reviewed and incorporated concurrently, as progressing from one to another affects each one.

With automation, there will be changes in headcount, work roles, requirements, and staffing needs. Some jobs will be eliminated; some will have parts or specific activities discontinued. Some staff can be retrained; some cannot. Others will have to shift their responsibilities. Organizations need to recognize this upfront and have a clear plan to define needs, assess workers' capabilities to evolve, and provide support for them to do so. As more automation takes place, change management will become increasingly crucial.

As finance focuses on EA, other parts of the corporation will also be looking at it as well. And this is a big red flag to finance. There is an assumption that whichever functional area within the organization is most skilled in EA will be the owner of it.

So, if finance lacks EA skills and knowledge, it will continue to be relegated to back-office transactional work, and EA ownership will go elsewhere in the organization, even to a shared services center or a third-party outsourcing partner. While that group may know EA generically, will it know how to apply it to finance? Without hands in the technology, finance could be interpreted as limited in its capabilities. The key is doing a good job at fulfilling yesterday's and today's existing needs, with an eye focused on fulfilling future needs.

Finance capabilities to support achieving various goals and initiatives



Source: Employing advanced technologies to transform finance, KPMG International, 2018

Extreme technology in use today

Technologies such as RPA take control of repetitive, process-driven tasks. In finance, it is typically focused on automating transaction activities such as accounts payable and receivable, and supporting period-end closing processes. It is expected to eventually move into higher-skilled roles within finance and across the organization.

AI and ML, while less prevalent than RPA, are currently used to assess credit quality, price and market insurance contracts, automate client interactions, optimize capital, identify trading opportunities, and optimize trading execution by analyzing the market impact of trading large positions.

These technologies can also help improve a firm's regulatory compliance by undertaking know your customer (KYC) checks, increasing supervisory effectiveness including money laundering and fraud detection, and identifying suspicious trading patterns.

How is extreme automation being applied?

Replacing EDI with blockchain to automate and authenticate counterparty transactions.

Integrating digital labor with cloud ERPs and other technology solutions to automate remaining manual activities

Leveraging the cloud and AI capabilities for dynamic forecasting and analytical processes.

Enabling on-demand value delivery through mobile and digital technologies.

How are companies leveraging leading edge D&A?

Industrial manufacturing

Question: How can we better manage our assets to optimize performance and costs?

D&A solution: Collecting wear-and-tear data in real time to determine component failure rates and develop predictive servicing and maintenance schedules

Business Value: Insight to develop engineering enhancements, improved asset life, and reduced costs

Applicability to finance:

— Predictive maintenance, which improves finance's ability to structure and evaluate more profitable long-term contractual service agreements

— More robust capital and financial plans through greater understanding and control of servicing and maintenance costs

— Enhanced assessment of risk associated with planning and executing large-scale projects

— Optimized project accounting

Tech, media, and telecommunications

Question: How can we improve sales forecasting accuracy and better predict financial outcomes?

D&A solution: ML applied to five years of historical data to analyze algorithms and predict sales; digital and interactive financial insights solution producing pro forma financials with instant, voice-activated analysis and insights

Business value: Significantly improved sales/revenue forecasting accuracy, insight into financial performance (P&L and balance sheet) prior to period closings, integrated sales and financial planning.

Applicability to finance:

— Improved forecasting accuracy (sales and financial)

— Better integrated planning with sales and operations

— Integrated self-service analysis drilling into financial statements (balance sheet, income statement, and cash flow)

— Integrated narrative analysis and story creation

In the long term

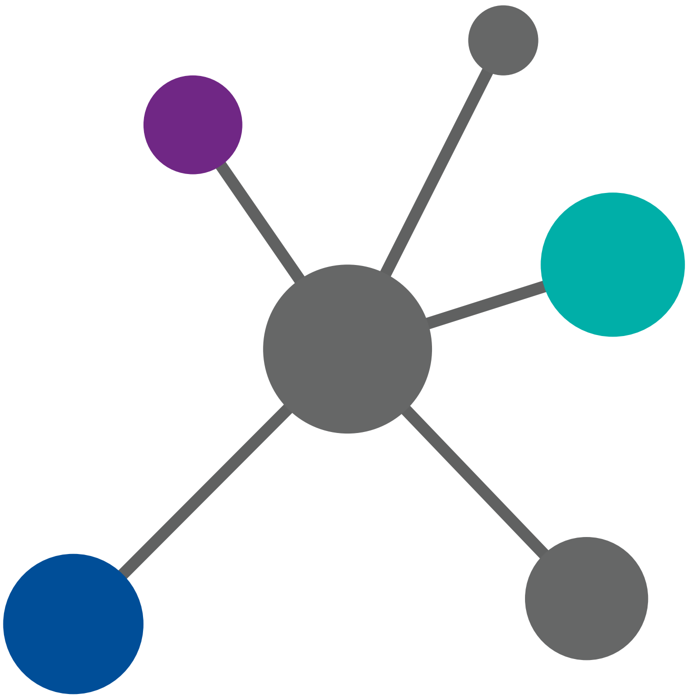
In the longer term, with EA in place, finance has the potential to move into a position of greater strategic importance in the organization. As additional budget is made available from cost savings and automation, it can be used to fund more strategic efforts. It is critical to coordinate these technology investments across all components of the finance function, manifested in next-generation finance TOMs, and in conjunction and coordination, where relevant, with similar efforts in other functional areas of the organization.

When headcount becomes redundant due to automation and process optimization, the savings can be reinvested in upskilling staff and bringing in new staff that are more strategic thinkers who can use advanced data analytics to deliver competitive and business operations insights, and provide better information to management. But as these skills are in short supply and high demand, finance must develop an appealing value proposition to attract and retain workers with these skills and, where possible, retrain and retool existing staff to gain the necessary knowledge and capabilities.

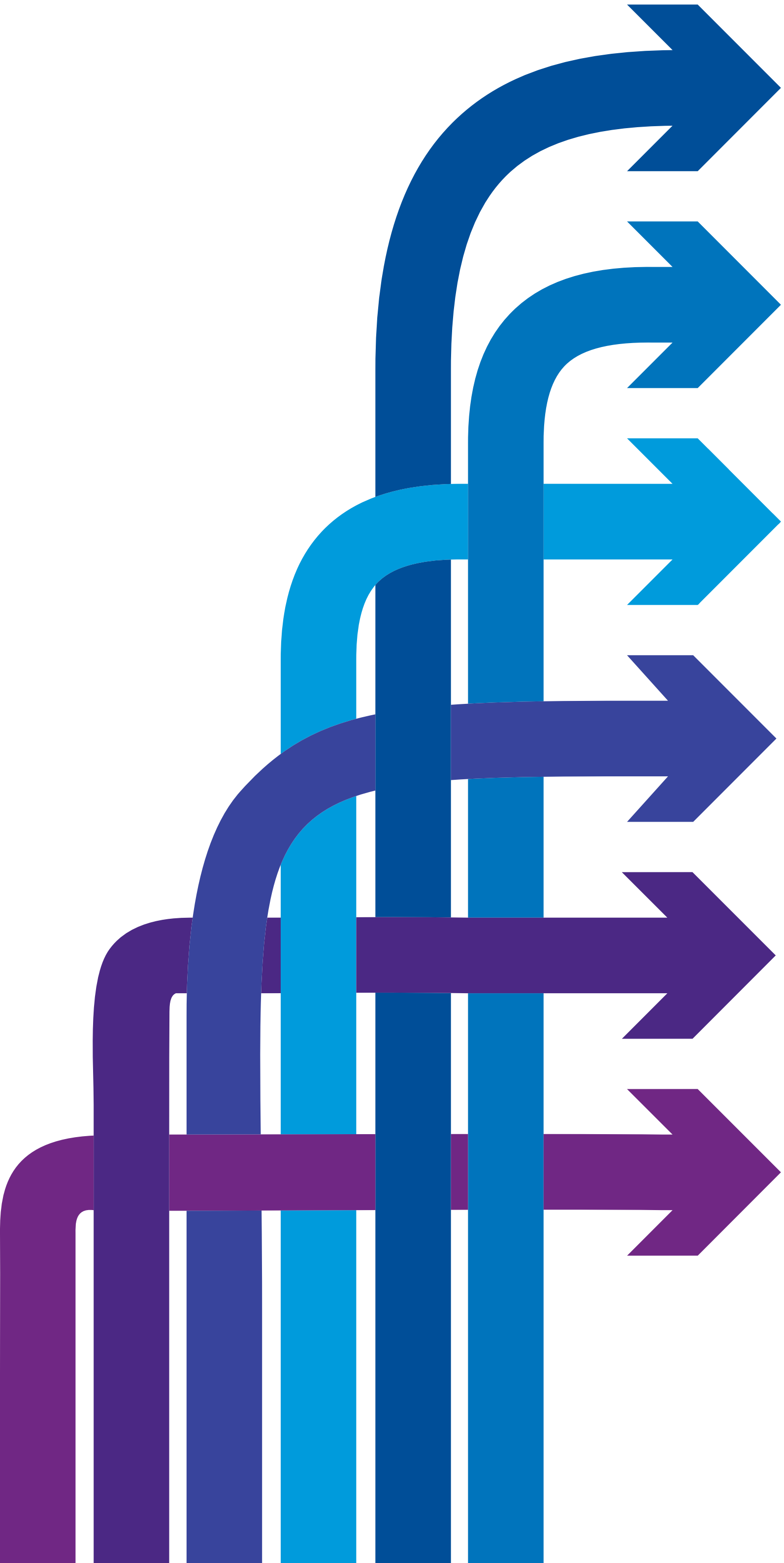
Finance in the future

Finance is expected to	The art of the possible…
Increase support of innovation	New capital allocation approaches
Proactively lead enterprise performance	Cornerstone of strategy, finance, and analytics
Employ 70 percent less labor	Emerging technologies change the nature of share services
Enable business agility	Cloud everywhere is a dominant platform
Increase speed of insight	Amazon's "Alexa" provides instant information
Act as role model of collaboration	Process leadership is a profession
Improve forecasting accuracy	AI processes big data
Develop new skills and talent	Finance professional as a strategist

Actions to consider



With EA rapidly changing the very nature of how businesses operate and compete, finance organizations cannot sit on their laurels with a wait and see attitude. In order to harness its power and capabilities to become a more strategic asset and empower the enterprise to achieve its business objectives, finance should proactively consider the following questions:



What business disruptors are your organization and your enterprise as a whole facing, and what impact will they have on your strategy?

To what extent have you already leveraged EA to address the disruptors?

Can you make a business case to address your EA inadequacies?

What measurable goals will you establish?

What impact will increased use of EA have on your current delivery, staffing, talent management, locations, and target operating models?

How much appetite, funding, and tangible executive support exist in your enterprise to accelerate investments in data and analytics and intelligent automation?

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