



# Digital labor and the future of finance

The evolving partnership between  
humans and machines—and a new  
opportunity for CFOs



[kpmg.com](http://kpmg.com)

# The answer is digital labor

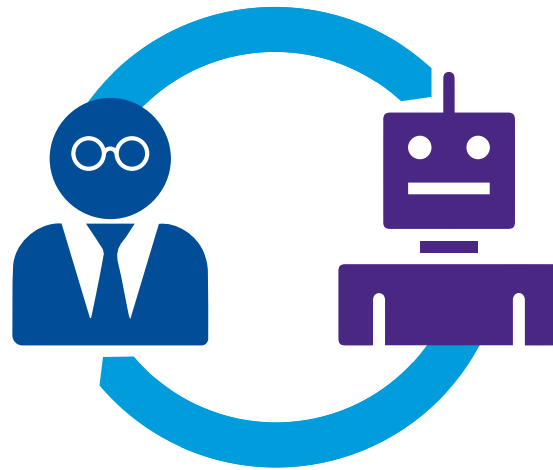
As multinational companies strive to compete in an ever-changing environment, chief financial officers (CFOs) are playing an increasingly important role. They are expected to reduce costs, provide more insights to the business, and drive profitable growth—all while continuing to manage risk.

But many CFOs have maxed out their savings from labor arbitrage due to overseas wage inflation, and they are wondering what is next in cost management. They also need to continue optimizing processes to find savings. So where do they go from here?

**From software robots to sophisticated cognitive systems, advances in automation are changing the game, reducing costs by up to 75 percent in some financial processes, while improving speed, accuracy, and control.<sup>1</sup>**

Even more, robots reduce the risk of manual error. When an incorrect entry in account reconciliation could have a material impact on reporting, automation naturally takes risk out of the system.

And by out-tasking some activities to robots, CFOs can free up employees for higher-value work that makes finance a better business partner. For instance, a professional who previously spent half his workday processing transactions might now have time to improve forecasts, evaluate customer profitability, or identify opportunities for cost savings. Additionally, the analytical horsepower of cognitive software robots can assist in analysis and decision making.

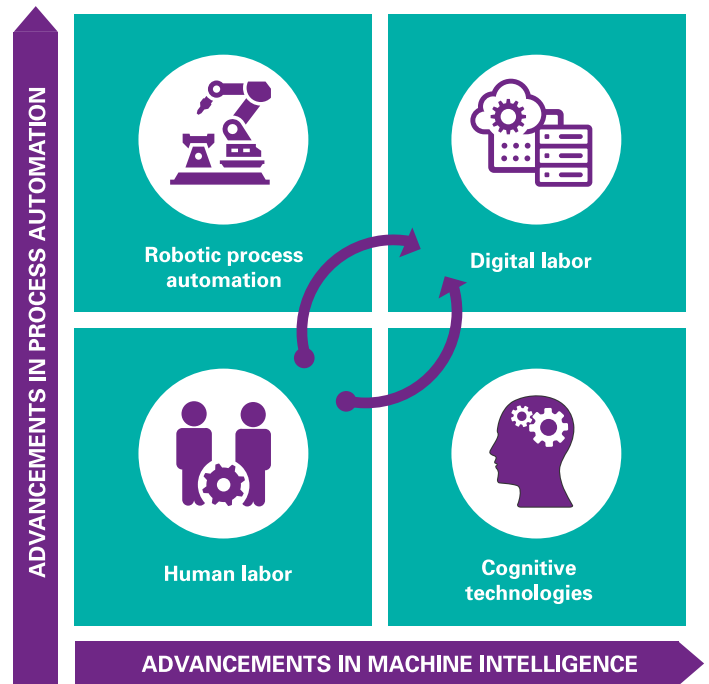


<sup>1</sup>Source: The Outsourcing Institute, Three Secrets Your Traditional Service Providers Are Not Telling You, June 2014 KPMG analysis

# The move toward digital labor

“Robots have been part of business for many years, driving tremendous benefits in such areas as manufacturing, medicine, and warehouse operations. And now robotics is morphing into digital labor, which is proving to be the most disruptive force to the back office since outsourcing and offshoring. In addition to significantly reducing cost and risk, digital labor brings an often-overlooked benefit: analytical horsepower to drive better insights and business partnering.”

— Donald Mailliard  
Principal  
Service Line Leader – Corporate Services  
North America Leader - Financial Management



## Wave 1: Labor arbitrage



**15 – 30 percent**

Cost take out



Model is scalable to the extent that you can scale labor



Custom/complex, **legacy**:  
“Your Mess for Less”



Access to **low cost labor** necessary to provide continuous value



Revenue/profit correlated to people



## Wave 2: Labor automation



**40 – 75 percent**

Cost take out for relevant functions



Model is scalable, and is **largely independent of labor growth**



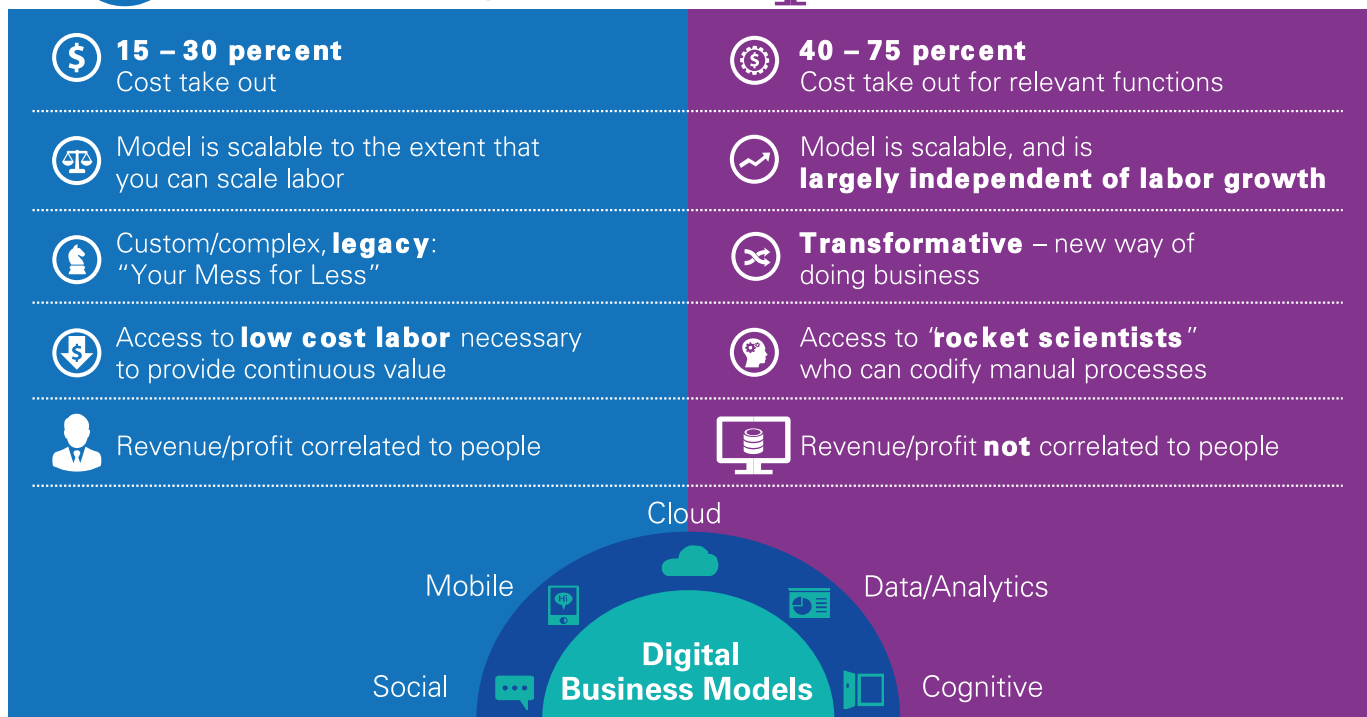
**Transformative** – new way of doing business



Access to “**rocket scientists**” who can codify manual processes



Revenue/profit **not** correlated to people



Source: The Outsourcing Institute, Three Secrets Your Traditional Service Providers Are Not Telling You, June 2014 KPMG analysis

# Opportunities in RPA

**On one end of the automation spectrum is robotic process automation (RPA), which is software that can perform stable, predictable, rules-based activities in such areas as accounts payable, transaction processing, and order entry. Some companies have begun using RPA to take considerable costs out of their financial processes. Consider these examples:**

- **Invoice processing.** If an organization has employees processing thousands of invoices a day, it can instead use software robots to extract information from invoices, enter the data into the enterprise resource planning (ERP) system, progress it through a workflow, and assign it to appropriate approvers. This kind of application can improve accuracy, speed, and efficiency, while freeing up employees to do other things.

Indeed, a prominent bank in Australia is using RPA in this way for invoicing, as well as payroll administration, complaint management, and other areas that have monotonous, time-consuming activities. In one area of payments, the bank said it used RPA to reduce the number of required human staff from 40 to 2.<sup>2</sup>

- **Business case analysis.** An American multinational telecommunications corporation is using process automation to help finance employees evaluate the business case for technology projects. Instead of manually pulling information from different systems, the company is using software bots to perform that time-consuming task, freeing up employees to focus on analysis—and do so much faster than usual. The company said its employees are excited about the increased use of software robots, which relieve them from the unappealing parts of their jobs.<sup>3</sup>

In addition to these examples, KPMG LLP (KPMG) sees opportunity for RPA in core finance process areas such as vendor setup and maintenance, cash application and bank reconciliation, bad debt provisioning, and the tracking of fixed assets.

## A higher bar for the CFO

Chief executive officers (CEOs) are challenging CFOs to think differently and succeed as strategic partners—by using new technology, reducing costs, achieving profitable growth, and driving competitive advantage.

However, according to KPMG's recent "The View from the Top" study of more than 500 executives from six continents, many organizations question whether their CFOs are up to the challenge:

70%

of CEOs from top performing organizations say technology will have the greatest effect on the CFO's future, but only over half think the CFO is effectively exploring new technology.

63%

of these CEOs said the CFO will become more important in the next three years, but 1 in 3 worries that CFOs are unprepared.

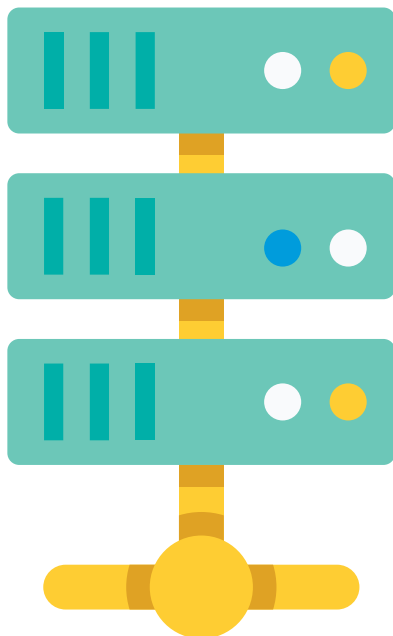
As the bar gets higher, digital labor will likely play a critical role in CFOs' future.

<sup>2</sup> <http://www.afr.com/technology/rise-of-the-machines-as-anz-brings-in-robot-workers-to-do-the-boring-jobs-20150820-gj3fp6>

<sup>3</sup> <http://blogs.wsj.com/cio/2016/05/15/att-employees-automate-repetitive-tasks-with-software-bots/>

# From RPA to cognitive

**At the higher end of the automation spectrum, RPA can be combined with more advanced, cognitive technologies—including natural language processing, machine learning, the analysis of structured and unstructured data, and probabilistic reasoning—to perform complex tasks that have historically required human intelligence and situational analysis. These kinds of cognitive systems can support employees by responding to customer inquiries, conducting research, or providing quick and accurate answers to business questions.**



Cognitive automation is where the market is headed in the longer term, and a good portion of CFOs' future workforce may well be a digital workforce. In addition to significantly reducing costs, digital labor can continue to expand employee capacity for improved business partnering.

For example, why is a product successful in one country and not in another? Instead of using employees to spend most of their time gathering sales and margin data from multiple sources, CFOs can use digital labor to quickly perform this research and form initial hypotheses on profitability, while freeing employees to focus on the analysis and provide quicker support to the business.

## **KPMG sees opportunities for cognitive automation in:**

- **Revenue recognition.** Companies often think this process cannot be robotized because it is so complex, requiring employees to analyze different revenue streams, compare and manipulate data, enter the data into spreadsheets, get approvals, and ultimately record the data in the general ledger. However, revenue recognition is necessarily very rules-based, so cognitive systems can be "trained" to look at those rules, determine what revenue should be recognized, contact a human for clarification if necessary, and then record the revenue.

At a time when many companies are taking deferred revenue because they simply do not have enough hours at the end of the quarter to process revenue data, digital labor can help them recognize revenue faster—while also improving accuracy by preventing human error.

Finance departments can also use digital labor to analyze large amounts of data very quickly. At KPMG, for example, our auditors have used IBM Watson to test the controls on a bank's loan rating system. Traditionally, we would analyze a sample of loans from a bank's portfolio, but now we are using this cognitive software to analyze a client's entire loan portfolio, assign a grade for credit risk, and identify any outliers. In this way, we are using machine intelligence to improve the quality of the audit, better assessing the strength and validity of banks' controls around credit risk.

Similarly, internal audit departments can use cognitive software to analyze all transactions—not just a sampling—to identify anomalies, evaluate risk, and monitor regulatory compliance.

# Getting into action

## How can CFOs get these kinds of benefits from robotic automation? Some considerations for getting started:

- **Analyze** processes to identify the prime areas of opportunity. Look within the finance function for processes with high operational costs and lots of people doing manual tasks—and then analyze those processes for complexity. What are the different tasks and activities that make up the process? How many employees are involved? How much knowledge is required?

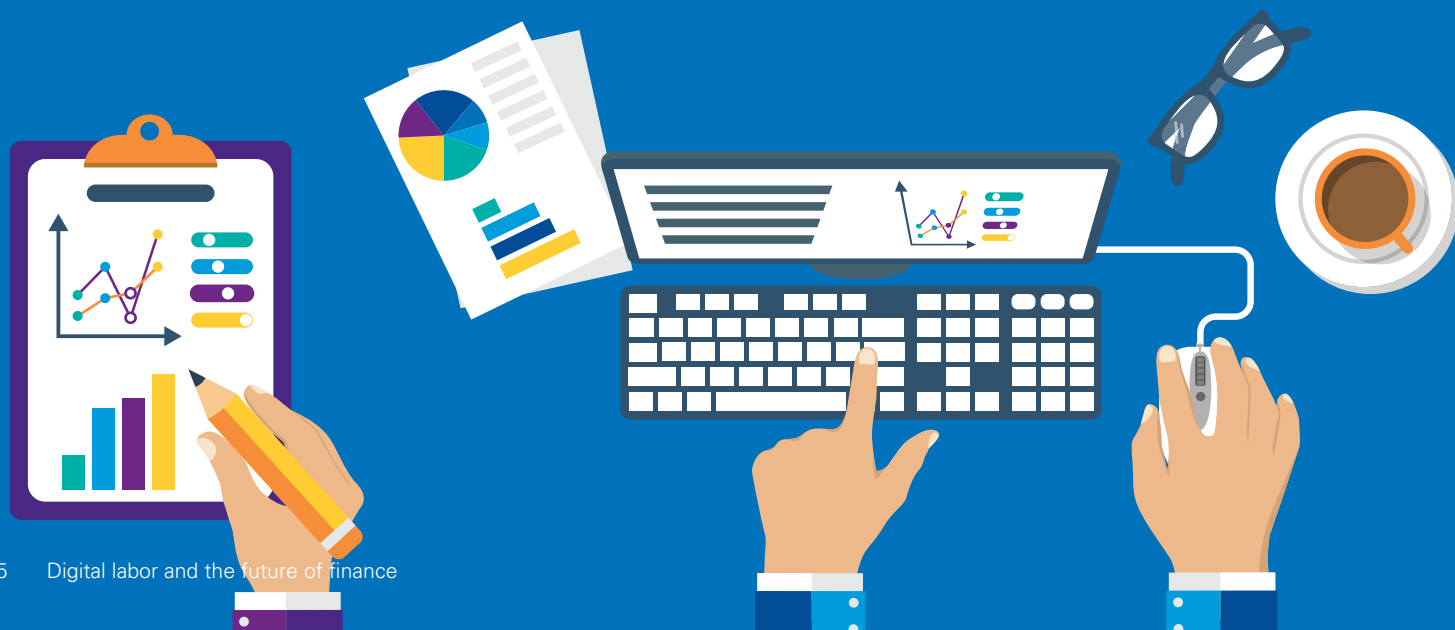
If an organization is already using business process outsourcing (BPO) in finance and accounting, then finance leaders will probably be familiar with this kind of process decomposition. These organizations should also ask their service providers whether they are adopting robotic automation—and ensure they get the savings from any changes in a provider's delivery model.

- **Determine** the right class of automation, and consider the return on investment. To get the biggest bang for the buck, consider starting in the back office by using RPA for high-volume, repeatable, rules-based activities. Since this software sits on top of existing systems, with no major requirements for integrating technology, RPA projects can be launched in

a matter of months with a relatively low investment—while generating substantial return in the form of lower required headcount, increased speed, and reduced manual error.

For any kind of automation, keep in mind that a finance organization needs to be big enough to benefit from a robot. For example, if there are only two employees performing a process, automation will not be cost-effective. But if there are 15 people doing manual activities, then the process could be a good candidate for automation.

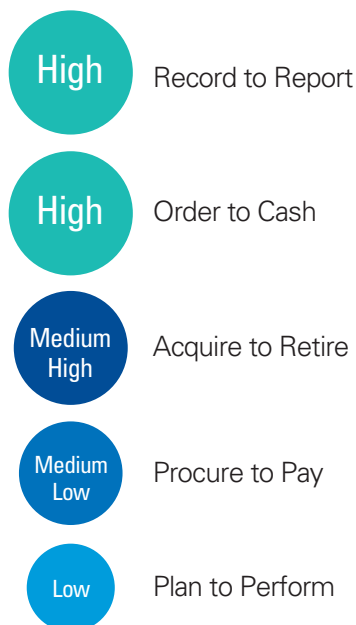
- **Select** the right vendors for implementation. After determining the best automation opportunities, choose a vendor for a pilot to carefully evaluate the benefits of the technology and any operational considerations—before pursuing implementation at scale. The way to deploy and the type of automation that makes sense may depend on the size and structure of the finance organization.



# Improving cost, risk, and business partnering

Instead of focusing on low-cost labor and geography to manage costs, savvy CFOs are focusing on next-generation automation as a way to take significant costs out of finance—while also reducing risk and helping the business make better decisions. That is a compelling combination of benefits, especially when CFOs are trying to reach new heights. Robots can vault them into position.

## Relative strength of RPA opportunities in Finance based on cost



## How KPMG can help

### The robotic revolution has started. Are you ready?

The convergence of process automation, machine learning, cognitive computing, and advanced analytics is driving unparalleled transformation in finance. In this uncharted territory, enterprises need a partner that can help them seamlessly integrate people and machines to manage costs, reduce risk, and drive competitive advantage.

### KPMG's holistic approach—from strategy through execution—can assist you on each step of your automation journey by:

- Identifying priority areas for advanced automation
- Developing a multifaceted strategy and road map for your workforce of the future
- Selecting the right providers and partners for your unique needs
- Establishing a governance program to help you realize the expected value from advanced automation
- Implementing the preferred automation solution through a pilot or multiple process areas.



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