

Memo to the CFO: Get in front of digital finance—or get left back

Companies are still in the early stages of applying digital technologies to finance processes in ways that will create more efficiencies, insights, and value over the long term. Here is how the CFO can lead the way.

Kapil Chandra, Frank Plaschke, and Ishaan Seth



The digital finance organization remains an emerging concept in many organizations, and CFOs are still at one remove from the center of digital-transformation efforts, even though they own and manage much of the relevant business information that feeds such initiatives. There is a clear mandate for them to take the lead: today's CEOs and boards say they want CFOs and the finance function to provide real-time, data-enabled decision support. And, in our most recent survey of finance executives, CFOs themselves say they want to spend more time on digital initiatives and the application of digital technologies to finance tasks.¹

But our research also shows that CFOs still spend less time on digital trends than they do on traditional finance activities. Why? There are few proven business cases of digitization in finance and few best practices to draw from, so CFOs are often content to let colleagues in IT, marketing, or other functions press the issue.

Many CFOs tell us they are unsure where to start; the rapid arrival of innovative technologies plus a general shortage of top technology talent won't make it any easier. CFOs must begin to experiment, however, or risk falling behind other functional groups in the organization and other companies in the industry whose digital transformations are already under way. They might lose a golden opportunity to help drive the business agenda.

A good start would be for CFOs to work with the CEO, the board, and others on the senior-leadership team to proactively and systematically identify tasks and processes within the finance function that would most benefit from digitization. They can then locate and invest in the technologies and capabilities required to improve these areas.

The digital future: Emerging use cases

Digitization is now a realistic goal for the finance function because of a range of technological advances. These include the widespread availability of business data; teams' ability to process large sets of data using now-accessible algorithms and analytic methods; and improvements in connectivity tools and platforms, such as sensors and cloud computing.

CFOs and their teams are the gatekeepers for the critical data required to generate forecasts and support senior leaders' strategic plans and decisions—among them, data relating to sales, order fulfillment, supply chains, customer demand, and business performance as well as real-time industry and market statistics.

There are four areas of technology that, right now, we believe show the most promise for use in finance (Exhibit 1):

- automation and robotics to improve processes in finance

Digitization is now a realistic goal for the finance function because of a range of technological advances.

Exhibit 1 Four digital technologies will reshape the finance function.

Automation and robotics



To improve processes

- Enable planning and budgeting platforms in cloud-based solutions
- Automate data reconciliation for single source of truth
- Apply robotics to standardize report generation and allow for narrative commentary

Data visualization



To give end users real-time financial information

- Generate user-friendly, dynamic dashboards and graphics tailored to internal customer needs
- Deliver ubiquitous reports that can provide information at very detailed levels
- Seamlessly combine information from multiple data sources¹

Advanced analytics for finance



To accelerate decision support

- Conduct top-down scenario analysis
- Develop self-optimizing algorithms for preliminary sales forecasts
- Develop demand models to improve working capital and inventory management

Advanced analytics for business



To uncover hidden shareholder value and growth opportunities

- Support optimization of pricing and SKU lineup
- Track resource utilization at detailed levels² and mirror against value creation and resource effectiveness
- Create predictive models for early warning³

¹ Such as finance enterprise resource planning, customer relationship management, order volume, and market development.

² Such as sales force and marketing.

³ On customer churn or credit risk, for instance.

Source: McKinsey analysis

- data visualization to give end users access to real-time financial information and improve organizational performance
- advanced analytics for finance operations to accelerate decision support
- advanced analytics for overall business operations to uncover hidden growth opportunities

CFOs may decide to champion and pursue investments in one or all of these areas. Much will depend on the company's starting point—its current strategies, needs, and capabilities and its existing technologies and skill sets. It is important to note that digital transformation will not happen all

at once, and companies should not use their legacy enterprise resource planning and other back-bone systems as excuses not to start the change. By working in small pilot projects and successfully digitizing the most critical tasks within finance, the CFO can establish proof points and ease the eventual rollout of digital technologies across the entire function and across other parts of the company.

Simplifying processes through automation and robotics

Research from the McKinsey Global Institute concludes that 40 percent of finance activities (for instance, cash disbursement, revenue management, and general accounting and operations) can be fully automated, and another 17 percent can be

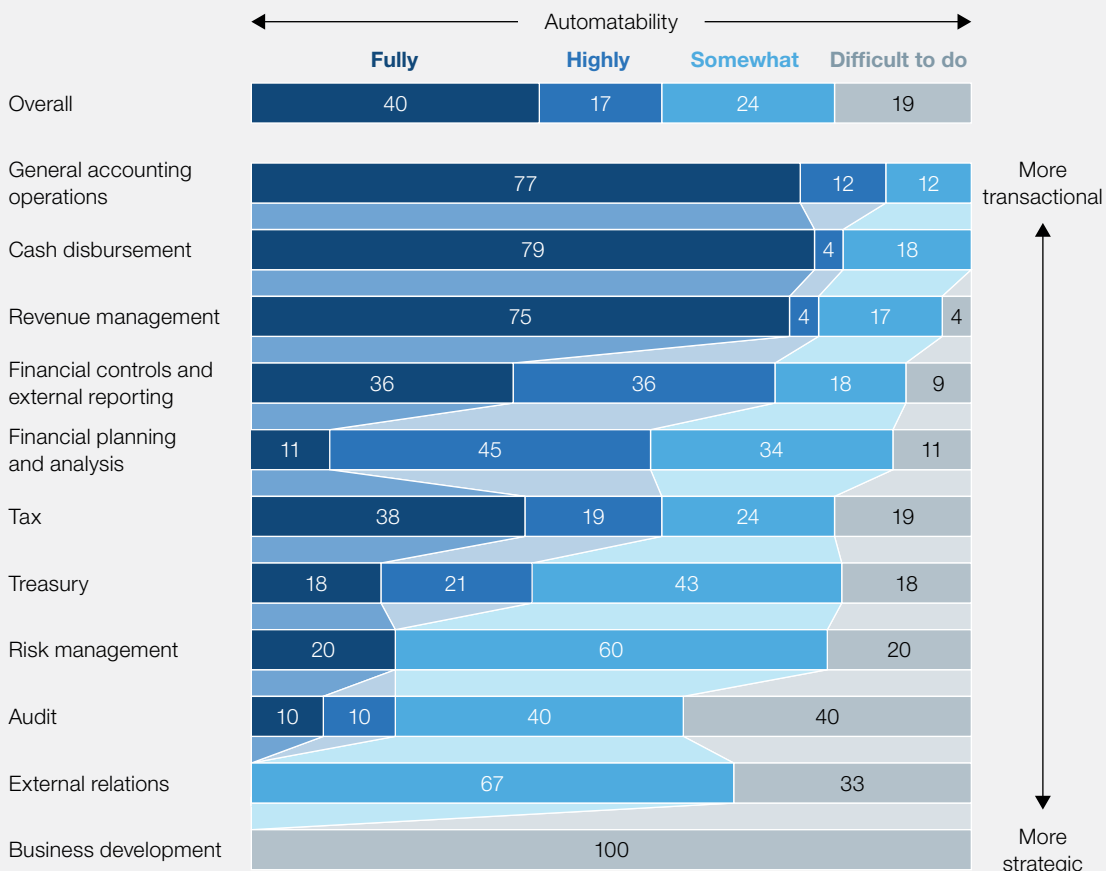
mostly automated (Exhibit 2). Those figures demonstrate the degree to which CFOs and other business leaders can simplify core internal transactions through automation, establish standardized reporting mechanisms, and work more efficiently.

A critical tool that leading-edge finance groups are already exploring is robotic process automation (RPA), a category of automation software that

performs redundant tasks on a timed basis and ensures that they are completed quickly, efficiently, and without error.² Task-automation tools such as RPA have advanced to the point they are no longer applied only in discrete business activities but across multiple areas of the business. The companies successfully implementing RPA at scale have done so by altering their operating models and redesigning their processes. Finance staffers are receiving

Exhibit 2 Many finance tasks and processes are at least somewhat automatable.

Potential for finance-function automation using demonstrated technologies, % share¹



¹ Figures may not sum to 100, because of rounding.
Source: McKinsey Global Institute analysis; McKinsey analysis

training on RPA technology, so they no longer need to throw work flow requests to an already overworked IT organization. That improvement has made it easier for some companies to move beyond RPA pilot tests and realize tangible outcomes.

After analyzing automation opportunities as a follow-up to a two-year lean-transformation process, a large European utility deployed RPA technology in several pilot areas, including “master data management.” Its process for creating system profiles for new vendors (or updating information on existing vendors), for instance, involved a series of manual tasks that could often take employees several hours a day to complete. But the end-to-end process steps were mainly rule-based, and all the data were in digital form, which made the “vendor creation task” a key candidate for RPA. Ultimately, the utility increased overall productivity within the finance function in its shared service group by about 20 percent, given time- and cost-savings associated with the deployment of RPA in this pilot area as well as several others.

The use of RPA at one European bank has created other advantages. The bank has combined RPA with natural-language-generation software to create monthly spending reports. A back-office system collects and analyzes the data and automatically builds the “spending story”—for instance, listing key performance indicators and adding red flags in those instances with statistically meaningful changes in countries or product groups. Rather than having to take the time to generate such reports by hand, financial controllers can use the automated information to engage in higher-level tasks, such as considering how to address red flags.

Improving organizational performance through data visualization

If finance functions’ experiments with automation are largely about optimizing processes, their

experiments with data visualization are about improving broader organizational performance. Indeed, to make good resource-allocation decisions, teams need real-time financial information. They often lack access to such data because stores of data are in different parts of a company, data formats are not comparable, or data are not available at all.

Some finance groups are pairing automation capabilities with data-visualization technologies, however, to create clear, timely, actionable business reports. These reports quickly push data to end users and present data in intuitive formats that encourage focused business discussions.

The finance organization at a large consumer-goods company, for instance, has deployed a self-service approach. Rather than wait for reports, sales staff can use visual dashboards (accessible from a laptop or mobile device) to get the data they need when they need it—by region, business unit, function, or other parameters as required. Sales managers and other executives pull the data from a central repository that is continually refreshed, so they can quickly get an accurate read on how demand is changing. This self-serve approach has decreased the need for the finance group to generate reports by more than 50 percent and has cut the cost of reporting by 40 percent.

Similarly, the executive board at a European technology company no longer uses PowerPoint. Business leaders instead use large touch screens to access real-time data about finances and operations. The information is presented in easy-to-read graphs that highlight deviations from plan. The graphs are dynamic, redrawing themselves as users swap variables in and out.

The CFO and other business leaders will need to collaborate with the CEO, chief information officer, and IT organization to integrate data-visualization

tools with a company's established systems. They will need to draw on expertise from data scientists and data analysts who might work in IT or directly with the finance function. Such experts can help the CFO rethink end-to-end finance processes (such as data-to-report, purchase-to-pay, and order-to-cash processes) and rebuild them using a visual, user-focused approach.

The CFO will also need to learn how to manage processes and communication within a “data democracy”—where business information is available anytime, anywhere, for everybody. It is inevitable in such an environment that the business units will request more and more data, not less. The CFO will need to work with the CEO and other business leaders to establish rules around data usage that reflect the specific information requirements of decision makers across the organization. They will also need to ensure that they are using the highest-quality data. Otherwise there will be analytical anarchy.

Finding value through advanced analytics

Companies in all industries are now experimenting with advanced analytics—mining troves of business data (on people, profits, processes, and so on) to find relevant insights that can improve business leaders' tactical decision making. Similarly, the CFO and the finance function can use advanced analytics to manage standard financial transactions and core processes more efficiently and shape (and accelerate) tactical discussions.

Once CFOs understand the role advanced analytics can play in improving financial processes, they can work with the CEO, the board, and other senior leaders to identify broader ways of applying advanced analytics to uncover new sources of business value. Indeed, every CFO should explicitly define the leadership role he or she wants to play in translating burning business questions into use cases for advanced analytics—whether

to optimize pricing, identify customer churn, prevent fraud, manage talent, or explore a host of other applications.

Standard transactions

A truck manufacturer uses advanced analytics to monitor general sales of forklifts because it views this metric as an early indicator of its own sales. Finance teams at other companies are using advanced analytics to identify duplicate expenses and invoices or to connect the terms of procurement and payment schedules for a good or service with actual invoices so they can spot early or missed payments or opportunities to apply discounts.

Core finance processes

A chemicals company uses advanced analytics to improve its demand forecasting. Traditionally, its forecasting models relied on basic, internal customer data and used historic trends to predict future demand. Furthermore, the forecasts were at an aggregate level—that is, for entire classes of chemicals rather than individual ones. The company cross-referenced internal customer data with external data sets, such as stock prices, revenues, weather, exchange rates, and business-cycle indices, to generate forecasts for specific regions and SKUs. In this way, the company could examine whether existing forecasts were accurate or not and react accordingly.

Tactical discussions

A US consumer-goods company is exploring the use of advanced analytics in better predicting sales-volume changes associated with pricing moves for certain SKUs. The company is building a forecasting tool that will gather and analyze data on the SKUs in pilot testing; the data include macroeconomic factors, geographic factors, demographics, and other variables. Armed with this information, business leaders hope to be able to alter pricing decisions on the fly, as needed.

Exhibit 3 Executives typically face six obstacles to digitizing their finance functions.



- **Obstacle:** Overall digital vision not clearly defined
- **Solution:** Hold integrative discussions within your organization—bringing together representatives from all parts of organization—to come up with joint digital vision



- **Obstacle:** Digital initiatives not linked to overarching business strategy
- **Solution:** Link specific initiatives to elements of broader corporate strategy, identify linkages in strategy discussions, and monitor outcomes



- **Obstacle:** Lack of clear, strong mandate to digitize processes across organization
- **Solution:** Identify sponsor from top management who will openly promote the digital agenda,² and give owners of digital initiatives clear responsibility and authority over their projects



- **Obstacle:** Backlash within finance function over changes resulting from digitization initiative¹
- **Solution:** Establish or redefine employee incentives so they align with digital agenda



- **Obstacle:** Lack of understanding between digital-finance teams and business units
- **Solution:** Work in cross-functional squads, integrating various business-unit perspectives as well as customer view



- **Obstacle:** Gap between current capabilities and those required in digital-finance function
- **Solution:** Set up a dedicated capability-building program in finance, and invest in top talent

¹ Such as process changes and role changes.

² Such as communicating successes.

The digital agenda: getting started

CFOs and their teams can kick-start the digitization process by taking inventory of core use cases and determining where they stand with each of the digital technologies cited here. They should ask themselves questions regarding the potential value gained from digitization of a finance process as well as the level of feasibility of doing so—a process that we call performing a value scan. They should engage business-unit leaders in discussions about the pain points in various financial processes, such as slow reporting and incomplete data. They should undergo a systematic review of technology

capabilities with members of the IT function to define system requirements and investments.

But to truly succeed in building a digital finance function, CFOs will need to address critical organizational and talent-related issues (Exhibit 3). It is important, for instance, to develop a clear vision of the desired target state for a digital finance function and how that links to the company's overall business and digital strategy. The CFO and other senior leaders will need to promote the digital agenda openly—for instance, by sharing success stories at town halls and team meetings and

advocating for cross-functional collaboration between technology and business-operations teams.

The CFO should engage with other senior leaders to refine competency models, particularly those associated with the finance function, to recruit and retain the employees needed to carry out a digital agenda. Requirements might include a willingness to learn about new technologies or process-design expertise—skills that go above and beyond traditional finance tasks. CFOs and senior leaders might need to significantly redo incentives and compensation schemes to combat resistance to change and reward those who support the creation of a digital finance function. Such incentives can also help the company attract top digital talent.

Perhaps most important, CFOs will need to collaborate with other business leaders to ensure that any digitization and transformation efforts adhere to the company's cybersecurity standards. They might even invite members of the cybersecurity team to sit with members of the IT and finance functions to share objectives and discuss mutual concerns.³ The CFOs who lead the charge toward digitization will not only help the finance function work more efficiently—potentially bolstering their candidacies for leadership positions inside or outside their organizations—but also become stronger partners of CEOs and business units.



For all the benefits of digitizing the finance function we have outlined, there are many issues a bot or an algorithm still cannot address, such as when you have collected scant data or when you are assessing strategies over a longer time horizon and more human judgement is necessary. But the possibilities far outweigh the obstacles at this point, and the mandate is clear: CFOs must develop and share with other senior leaders a vision for a digital finance function. They have a clear opportunity to shape

the evolution of their companies and gain valuable insights and experiences along the way. But those insights and experiences will not come at all if CFOs don't take the first steps. ■

¹ "Are today's CFOs ready for tomorrow's demands on finance?," December 2016, McKinsey.com.

² Frank Plaschke, Ishaan Seth, and Rob Whiteman, "Bots, algorithms, and the future of the finance function," January 2018, McKinsey.com.

³ Jason Choi, James Kaplan, and Harrison Lung, "A framework for improving cybersecurity discussions within organizations," November 2017, McKinsey.com.

Kapil Chandra (Kapil_Chandra@McKinsey.com) is a senior partner in McKinsey's London office, **Frank Plaschke** (Frank_Plaschke@McKinsey.com) is a partner in the Munich office, and **Ishaan Seth** (Ishaan_Seth@McKinsey.com) is a senior partner in the New York office.

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