

The Transformative Power of Automation In Banking



Global Banking Practice

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Automation is the focus of intense interest in the global banking industry. Many banks are rushing to deploy the latest automation technologies in the hope of delivering the next wave of productivity, cost savings, and improvement in customer experiences. While the results have been mixed thus far, McKinsey expects that early growing pains will ultimately give way to a transformation of banking, with outsized gains for the institutions that master the new capabilities.

There are clear success stories (see “Automation in financial services,” page 2), but many banks face sobering challenges. Some have installed hundreds of bots—software programs that automate repeated tasks—with very little to show in terms of efficiency and effectiveness. Some have launched numerous tactical pilots without a long-range plan, resulting in confusion and challenges in scaling. Other banks have trained developers but have been unable to move solutions into production. Still more have begun the automation process only to find they lack the capabilities required to move the work forward, much less transform the bank in any comprehensive fashion.

Despite some early setbacks in the application of robotics and artificial intelligence (AI) to bank processes, the future is bright. The technology is rapidly maturing, and domain expertise is developing among both banks and vendors—many of which

are moving away from the one-solution-fits-all “hammer and nail” approach toward more specialized solutions. Banks are also learning critical lessons about workflow in this new world—for example, how to more effectively manage handoffs between man and machine, and where typical process redesign/re-engineering can be put off or even skipped in favor of automation—particularly where systems are likely to be replaced.

McKinsey sees a second wave of automation and AI emerging in the next few years, in which machines will do up to 10 to 25 percent of work across bank functions, increasing capacity and freeing employees to focus on higher-value tasks and projects. To capture this opportunity, banks must take a strategic, rather than tactical, approach. In some cases, they will need to design new processes that are optimized for automated/AI work, rather than for people, and couple spe-

cialized domain expertise from vendors with in-house capabilities to automate and bolt in a new way of working.

A strategic transformation that delivers the full benefits of automation should be based on six building blocks:

1. Develop the end state vision and strategy. Successful banks develop a bank-wide vision for the future, reimagining how they will be organized and how work will get done—both with the automation capabilities that exist today and those on the horizon. They focus on automating the processes that are essential to their long-term competitiveness, and turn to vendors for the processes they expect to become commodities (e.g., routine finance functions, basic reporting). Banks should begin with a rapid diagnostic to assess the full value at stake, define organizational aspirations, and develop a high-level implementation sequencing, or roadmap, to achieving those aspirations. Banks should not hesitate to set ambitious targets, aiming to lower costs by more

than a third and turn their restructured cost base into a competitive advantage.

2. Set up a small central team. Putting a well-run center of excellence (COE) in place early is critical to the long-term automation effort. A COE administers the enterprise-wide approach to transformation, and plays a number of critical roles, from managing vendor relationships to building capabilities and interfacing with the business and critical support functions—in particular IT and human resources.

There are many potential designs for a COE. A key consideration is the center's capabilities, which should include not only technical capabilities, but those needed to reimagine groups and organizations, redefine how people will work with technology, work with multiple stakeholders across the bank, and translate new ways of working into measurable efficiencies. These capabilities will enable the bank to adopt—and adapt to—future technologies.

Automation in financial services

A number of financial services institutions are already generating value from automation. JPMorgan, for example, is using bots to respond to internal IT requests, including resetting employee passwords. The bots are expected to handle 1.7 million IT access requests at the bank this year, doing the work of 40 full-time employees. And at Fukoku Mutual Life Insurance, a Japanese insurance company, IBM's Watson Explorer will reportedly do the work of 34 insurance claim workers beginning January 2017.

In another example, the Australia and New Zealand Banking Group deployed robotic process automation (RPA) at scale and is now seeing annual cost savings of over 30 percent in certain functions. In addition, over 40 processes have been automated, enabling staff to focus on higher-value and more rewarding tasks. Leading applications include full automation of the mortgage payments process and of the semi-annual audit report, with data pulled from over a dozen systems. Barclays introduced RPA across a range of processes, such as accounts receivable and fraudulent account closure, reducing its bad-debt provisions by approximately \$225 million per annum and saving over 120 FTEs.

3. Ensure IT is a partner. In most cases, automation at scale needs to be sponsored by each individual business and function, but a close partnership with IT is particularly important. IT designs the overall systems lifecycle, manages the rollout against IT priorities, supports development, and performs ongoing maintenance. A successful partnership thus requires early and ongoing engagement with IT through a program steering committee and governance structures.

4. Focus on human resources. The people changes associated with implementing automation at scale—and realizing its full value—are substantial. New automation technologies will touch on many different roles within the bank, and employees will need to learn new ways of working. While automation can have significant benefits

in terms of risk, revenues, and client experience, many efforts will also automate work that is currently being done by people. HR therefore plays an essential role, creating new workforce-management practices, proactively managing changes, and using analytics to plan and coordinate the redeployment and reskilling of employees. Working closely with HR from the beginning is thus essential. Many organizations are taking advantage of shifting workforce demographics to minimize forced exits, seeing automation as an opportunity to fill holes in the workforce that are emerging naturally.

5. Create detailed roadmaps and anoint change champions. Though some of the implementation of new automation capabilities will take place relatively quickly, banks will spend several

What does it mean to automate at scale?

Automation at scale refers to the employment of an emerging set of technologies that combines fundamental process redesign with robotic process automation (RPA) and machine learning. Automation at scale encompasses the following five core technologies.

1. RPA allows companies to configure computer software to automate routine tasks such as data extraction and cleaning through existing user interfaces, mimicking human actions.
2. Smart workflow is a process-management software tool that merges tasks performed by groups of humans and machines to integrate robots into the daily flow of work.
3. Machine learning and advanced analytics software use algorithms to identify patterns in structured and unstructured data. These technologies mimic human judgment.
4. Natural-language generation is accomplished by software engines that create seamless interactions between humans and technology, translating observations from data into prose. These technologies mimic human speech.
5. Cognitive agents are created by combining machine learning and natural-language generation to build virtual workers (or “agents”) capable of executing tasks, communicating, learning from data sets and making decisions based on logic, experiential learning and, in some cases, the detection of customer emotions.

Exhibit 1

Technology-enabled process transformations are driving efficiency, consistency, speed and better outcomes

	Product development and marketing	Sales and distribution	Service operations	IT	Finance and MIS	Risk management	HR and organization
Robotic process automation			Automated account closure Process payments (e.g., CHAPS payments) Enter non-EDI invoices; perform 2/3-way invoice matches Handle rules-based disputes and automated research and processing	Migrate and aggregate data (e.g., from legacy to new systems) Close basic tickets (e.g., password resets)	Automate finance processes (e.g., accounts payable/receivable, reconciliations) Automate valuation processes (e.g., data preparation, template filling, consolidation)	Perform CCAR stress-testing for multiple risks and businesses Monitor and assess credit risk and counterparties Analyze customer credit worthiness based on multiple factors	Manage employee master data Flag time sheet errors and omissions Audit reported hours against scheduled hours Identify most promising job candidates (eliminating bias)
Machine learning	Create tailored products mixes and services		↑ Streamline and digitize check processing and flagging	Analyze and defend against cyber attacks		Improve fraud detection and recovery/refund processing	Identify most promising job candidates (eliminating bias)
Natural language processing			↓		Generate reports (e.g., audit and compliance reporting)	Assess contracts automatically	Screen resumes and perform background checks
Cognitive agents		Enable high self-service/automation for products and services		Automate IT helpdesk			

Source: McKinsey & Company

years rolling out the transformation across all businesses and support functions. To succeed in the long term, they need a clear plan for each business and function, as well as for the entire enterprise. Without it, they can continue to experiment without developing a view of the overall opportunity.

By focusing on one area and creating a detailed roadmap, banks can avoid

paralysis, get all stakeholders involved, and make the initial area a “change champion” that will build excitement and rally the enterprise with an inspiring narrative. Such early deployments can also be used to train the businesses and functions that implement later. Additional ways to achieve follow-up success include secondments, go-and-see events and the sharing of learnings through the COE.

6. Carefully choose the first pilot area.

The first business or function chosen for an automation pilot will be crucial, as it—and its leaders—will ideally become the initial change champion for the entire automation effort. While the size of the opportunity and the ease of implementation are important, having the right leaders as sponsors for the initiative is critical to success. When selecting the first pilot area banks should consider the energy level and commitment of the business's leader, the level of respect she commands in the organization, and other initiatives the business has in progress that may help or hinder the work. Most banks also choose to start in a middle- or back-office area to avoid customer-facing processes and riskier areas during trials. Initial areas of focus in finance would include accounts payable, reconciliations, template

processes, and reporting (Exhibit 1, page 4).

With these six building blocks in place, banks can evaluate the potential value in each business and function, from capital markets and retail banking to finance, HR and operations. When large enough, these opportunities can quickly become beacons for the full automation program, helping persuade multiple stakeholders and senior management of the value at stake. Instead of seeing the results of numerous disparate experiments across the enterprise, these leaders will now see clear transformation opportunities—and be justifiably excited to build the capabilities, systems, and approaches necessary to reach automation at scale.

For more, see “Intelligent process automation: the engine at the core of the next-generation operating model” at [McKinsey.com](https://www.mckinsey.com).

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