Intelligent Automation: The essential new co-worker in digital banking
Under the theme “People First: The Primacy of People in a Digital Age,” the 2016 Accenture Technology Vision highlights five emerging technology trends shaping the new business landscape: Platform Economy, Digital Trust, Liquid Workforce, Intelligent Automation and Predictable Disruption.

This report offers a banking industry perspective on Intelligent Automation. Banks will need to address each trend first from a strategic business and then a digital enablement lens as they begin to transform themselves Beyond the Everyday Bank, interacting daily with customers to meet their financial and non-financial needs every day.
Intelligence for more wow, less cost

Customers who walk into Mizuho Bank’s flagship branch in Tokyo may be greeted by Pepper, a robotic concierge that recognizes facial expressions, emotions and behavior to offer appropriate responses in various languages to assist branch visitors.1 Charles Schwab’s “robo-advisor” automated investing service allocates cash among exchange-traded funds according to formulas based on client questionnaires; it grew some 29 percent to $5.3 billion, per Reuters.2 Credit Suisse Group AG is using automated writing to provide clients with corporate summaries on thousands of companies.3 These are only a few examples of the many ways that banks are starting to embrace intelligent automation to stay relevant and drive higher bank performance.

Banks have long used automation to lower costs and increase efficiency in their operations, particularly in IT. In our Technology Vision survey, nearly half of banks have achieved 15 percent or more in cost savings from automating systems and processes in the past two years. In some financial services areas, cost were reduced by 80 percent and time to perform tasks was reduced by up to 90 percent.4

2015–2018 Robot Sales Forecast

Professional Service Robots: 152,400 units $19.6 billion
Personal Service Robots: 35 million units $12.2 billion
The new-found awareness of AI—cognitive information systems that sense, comprehend, act and learn—to power change, growth and innovation points to even more opportunities. Eighty-six percent of bank executives agree that the widespread use of AI provides for a competitive advantage beyond cost; 30 percent are making significantly more investments in AI-related technologies than they did two years ago; and 77 percent expect AI will be a significant change or complete transformation for banking over the next three years.

Banks that capture competitive value from intelligent automation in their digital transformation must master its secret sauce: pairing intelligent automation with people to fundamentally change not only the way bank employees work, but also the type of work they do.
People + digital machines = new banking possibilities

Machines and AI are emerging as the newest recruits to the banking workforce, bringing the relevant interaction and interpreting data and insight in real time to both help people do their jobs and reinvent what is possible across the bank enterprise.

In fact, bank executives said they plan on using machine learning (79 percent) and embedded AI solutions (80 percent) extensively. When asked in which areas they plan to increase their use of automation, their top three responses were customer interaction/experience (90 percent), IT tasks (90 percent) and knowledge worker tasks (91 percent).

As they drive more of their processes to intelligent machines, banks can create a new and much more productive relationship between people and machines for a more empowered workforce and improved business outcomes. For example:

- **Even faster insight-based decisions**, as machines analyze billions of banks’ disparate pieces of unstructured, volatile and high-volume data simultaneously in seconds that is then used by retirement, wealth management or investment counselors, for example, to offer more personalized advice.

- **Greater efficiency** through two key ways: automating, speeding up and off-loading some of the more routine and repetitive tasks (such as determining whether someone qualifies for a loan or optimizing clearing and settlement processes by learning reconciliation tasks, recognizing errors and handling funds transfer); and freeing executives to focus on higher-value functions, such as developing new product offerings (including mobile wallet, robo-advice and others), and creating customer value through cross-selling complementary services. Banks can use the Accenture myWizard intelligent automation platform, for example, to become up to approximately 60 percent more productive by automating task-related work and enabling people to conduct more strategic work.

- **Highly-tailored customer service** where machines quickly access and analyze Big Data to verify customer identity, understand the problem, find a solution in one conversation and recommend services. There are opportunities to build customer relationships through leveraging machines with emotional intelligence to recognize emotions, tones and expressions to empathize with customers and ultimately resolve complex issues.

- **New ways of working**. For example, machines can now analyze the characteristics of job applicants, predict which ones will leave, and recommend strategies to get them to stay. Managers can use such insights to deliver on the promise of customization—developing personalized coaching programs and targeted interventions in a scalable way.

- **Capture of new revenue**, serving customers who have mid- to low-range net worth (such as financial inclusion segments) with personal touch which banks were unable to do profitably in the past, and creating new products and services on a scale that was previously unrealistic.

While some fear the loss of jobs due to machines, AI will replace only portions of jobs or processes as it also reshapes work into new jobs. Consider that, in the US, as the number of ATMs quadrupled between 1980 and 2010, the number of bank employees increased. New job titles and categories will emerge, such as chief data officer, data scientists, AI researchers, robot builders and repairers, and so forth. Humans in branches, for example, will still be needed to interpret the analyses and recommendations that machines provide, judging answers to the right questions to improve decision making.
Adapt the organization, culture and skills

Banks that intend to exploit the benefits of AI will need to make important and significant adjustments to the organization, culture and skillsets to bring people along with confidence.

For example, managers aren’t convinced they’re ready to thrive in a workplace with more intelligent machines. In a recent Accenture Strategy poll of first-line, middle-level and executive-level managers, 57 percent of said that their current skills are lacking. More troubling is the fact that managers have an incomplete understanding of what they will need to thrive in a partnership with intelligent machines.

There are four aims bank executives can focus on to prepare their workforce:

- **Rally the troops.** Leaders must present themselves as advocates of what could be difficult change across the bank to do things differently as improvements in intelligent automation enables teams of humans and machines to collaborate more easily and effectively than ever before.

- **Sharpen the human edge.** Revise the organization’s talent development and coaching programs, and individual performance criteria to elevate people toward stronger creativity, contextual understanding and complex communications while machines perform more rote work with greater precision, scale and consistency.

- **Close the trust gap.** On the one hand, managers at all levels (84 percent) believe machines will make them more effective and their work more interesting. Yet only 14 percent of first-line managers and 24 percent of middle managers would readily trust the advice of intelligent systems in making business decisions in the future. By contrast, nearly half of senior executives (46 percent) would readily trust the advice of intelligent systems. According to the managers, leaders can close the trust gap by choosing AI-based systems with proven track records; providing a solid understanding of how the system works and provides advice; and ensuring that the system explains its logic.

- **Chart a course of discovery.** Create a union of managers and machines that does more than automate tasks and cut costs, but multiplies the value that human or machines are able to deliver on their own.

The successful digital banks of tomorrow will be those who systematically embrace the new wave of automation—intelligent automation—across their organizations, using it to drive the changes to their products, services, and even business models as they continue to transform themselves and their industry.
Intelligent Automation: 100-Day Plan

Over the next three months, develop a comprehensive understanding of the current state of intelligent automation and artificial intelligence.

1. Identify the artificial intelligence and analytics capabilities your company uses today to provide a capabilities and gap analysis.

2. Take an inventory of labor-intensive business processes and identify appropriate opportunities to invest in automation and machine-learning capabilities.

3. Identify specific applications that require frequent and manual updates, rapid scaling, data extracts, and/or a high degree of personalization.

4. Map these examples/use cases against your current business processes and corporate strategy to prioritize specific opportunities.

5. Cultivate your data talent: develop a plan to build, buy, and/or partner to support your data and your automation know-how.

6. Map the implications of tasks being automated—the changes to roles, organization, processes and skills.

7. Create a ‘People First’ strategy for transitioning the organization, training on new skills and implementing the changes.
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References

5 Accenture internal analysis

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