TRANSFORMING BANKING WITH SMART AUTOMATION

The convergence of humans and intelligent robots will transform banking, enhancing the customer experience while revolutionizing operations.
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Executive summary

Retail banks are confronting an unprecedented wave of change, and the pace will only intensify. Accustomed to the fast, easy and virtually seamless interactions provided by online retailers and streaming entertainment services, customers now expect the same from banks: a few quick clicks to open and close accounts, pay bills, move money and address a long list of other tasks.

Fortunately, technology is rapidly redefining what banks can do. What seemed fanciful as recently as five years ago is now not only achievable, but quickly becoming standard. Robotic process automation (RPA), artificial intelligence (AI), employee virtual attendants and other forms of smart automation have advanced at a furious clip.

These capabilities have a broad set of potential benefits. For example, data mining and digital analysis tools can reveal trends and behaviors that enable banks to improve customer loyalty, proactively spot upselling and cross-selling opportunities, and identify process inefficiencies. New desktop automation technologies can connect human and robotic workforces, automating repetitive and tedious tasks so that employees can focus on higher-level customer services and more efficiently manage back-office operations. Virtual attendant robots, a more advanced form of desktop automation technology, can enhance employee performance by offering real-time process guidance, helping the employee spot opportunities to offer an additional product or service—or perhaps prevent the employee from taking an action that may result in a compliance breach.

The challenge for banks is how to embrace and integrate smart automation in a way that produces real value. Nearly all banks have automation pilots of some sort; however, precious few have cracked the code on how to drive value at scale.

Bain and NICE RPA have worked with retail banks of all sizes to embed smart automation capabilities, supporting the banking workforce with new digital technologies that boost productivity and improve service delivery. Our approach produces strong results in the near term while positioning our clients to thrive in the digital future.

Key considerations: Building a successful smart automation program

Because banks operate in an increasingly complex competitive, regulatory and technological environment, with vast amounts of sensitive personal information at the heart of their operations, they face many critical considerations in deploying new digital technologies.
Determining the best way to integrate smart automation technologies such as RPA and AI in a way that effectively promotes customer loyalty, operational success and employee satisfaction is a balancing act. A mature solution will address the distribution and combination of attended (i.e., bots that aid staff, often in front-office activities, by tackling routine chores such as data retrieval) and unattended (i.e., bots that perform batch processing tasks and typically don’t require human intervention) processes, as well as RPA systems augmented by AI tools.

When properly executed, successful banking automation should result in humans doing little else but delivering the right information and services at the right times; this frees up precious bandwidth for pursuing innovative growth strategies and finding new ways to improve the customer experience.

As banks assess the burgeoning list of technologies that support a digital process redesign, they should focus on the following priorities and actions:

- **Develop a baseline understanding of core processes.** The first step in this journey involves understanding your most important and critical processes. This exercise will yield a focused approach (i.e., a roadmap) that will guide your improvement efforts.

- **Improve and stabilize core processes before you automate.** Processes deemed critical should undergo a process-improvement and -stabilization period before being considered prime candidates for automation. Companies that skip this step often have to redo the work, consuming capital (both human and financial) that could have been spent on initiatives that produce real value for the business.

- **Identify which processes to automate.** AI-driven tools are available to accurately pinpoint business processes that are not only best suited to automation but also yield the highest return on investment. But first, banks need to ensure they have systems that can capture and analyze data to feed the AI process audit. By combining the capabilities of experienced business analysts with smart AI diagnostics, banks can identify the business processes that will benefit most from automation, and increase the likelihood of success.

- **Design with the goal of employee empowerment.** The collaboration of attended and unattended automation should aim primarily at enhancing service and employee performance. Giving staff a real-time, on-demand portal into any automated process can promote upselling and cross-selling, and support a host of operational challenges for the front office, back office and shared services.

- **Foster a companywide embrace of the transformation.** The transition to robotic automation and AI is far more than an IT project: It is a business transformation. Therefore, a comprehensive communications campaign to all stakeholders is crucial, not only to earn buy-in and trust, but also to harvest employee insights on all affected processes.
• **Build a Center of Excellence (CoE).** To automate banking processes at scale, it is essential to have a single, specialist business unit focused on managing, regulating, sustaining and growing all process automation and optimization activities. CoE units should include RPA business analysis experts and automation developers who can navigate the bank’s entire automation journey.

• **Integrate cognitive tools to support the most complex scenarios.** Smart self-service channels can enable customers to interact with text- or voice-activated chatbots, which then communicate with back-end robots to execute tasks (which can include not just repetitive tasks associated with processing documents, but “reading” them as well). Real-time voice identification can seamlessly authenticate existing customers during chatbot interactions. This technology can also help detect and prevent fraud. Robots powered by machine learning engines can extract, organize and interpret data to execute the more advanced tasks now required in an increasingly data-fueled industry—and learn from human inputs.

**Making it real: How banks use smart automation to create value**

In this rapidly evolving space, there is plenty of optimism for how next-generation smart automation tools can transform bank processes in the future. However, existing RPA technologies have already been deployed to great effect—particularly in managing credit and customer accounts.

For example, virtual attendants can help employees accelerate the process of **increasing a customer’s credit card limit**, responding to the customer’s request in real time (see diagram). Thanks to the rapid advance and availability of collaborative virtual attendant technology, customer-service staff can now actively manage credit-limit requests over the phone, aided by technology that helps them provide the right information more quickly, solicit additional information from the customer more efficiently and provide more accurate answers to customer queries.

The right combination of RPA, supporting technologies and human interaction can also play an important role in **blocking lost or stolen credit cards**. End-to-end robotic automation allows customers to directly block their own cards using interactive voice response (IVR). The system authenticates the customer by unique voiceprint and can further identify all billing applications associated with the card and alert a human to intervene when there is an issue to address. The customer will ultimately enjoy and benefit from the swift and highly personalized service experience, since the bank employee is fully supported by the virtual attendant robot.

**Fraud alert investigations** are another promising area. By integrating RPA with a case management system, human fraud investigators can focus on the context of alerts, while the virtual attendant completes the time-intensive task of populating relevant data fields in the system.
Banking Automation at Work: Credit-Limit Increase

1. Incoming customer call to request a credit-limit increase.

2. The virtual attendant robot appears on the employee’s desktop and immediately identifies the request and offers the employee real-time assistance.

3. All relevant customer data is pulled from various applications and summarized in a single screen view.

4. The virtual attendant triggers a series of back-end automations to check the customer’s eligibility for a credit increase.

5. The employee is prompted to read a disclaimer to the customer, for compliance purposes.

6. The virtual attendant offers to prepare and send a summary to the customer, and updates all relevant applications with the call summary notes.

NEVA (NICE Employee Virtual Attendant) brings more intelligence, speed and accuracy to the real-time handling of a customer’s request for a credit-limit increase. Currently optimizing front-office operations at hundreds of enterprises across the globe, NEVA evolved from NICE’s proprietary desktop automation technology.
Determining the best way to integrate smart automation technologies such as RPA and AI in a way that effectively promotes customer loyalty, operational success, and employee satisfaction is a balancing act. A mature solution will address the distribution and combination of attended and unattended processes, as well as RPA systems augmented by AI tools.
Banking Automation at Work: Holistic Intelligent Robotics in the Back Office

Virtual Attendant Robot
The virtual attendant (an evolution of Desktop Automation technology) acts as the central automation hub, initiating and managing different types of process automations. This virtual attendant can communicate conversationally with the employee and issue instructions to the reading and unattended robots.

Reading Robots
Back-end reading robots use content intelligence technology to digitize unstructured data from scanned documentation.

Employee
Employees are able to focus on high-value tasks involving human judgement. For example, the virtual attendant may detect a process error or exception and prompt the employee in real-time to validate the relevant data.

Unattended Robots
The unattended back-office robots update the enterprise applications with data from the scanned document. They also automatically draft and send e-mail communication to the end customer.

Banking automation now supports a holistic and intelligent approach to back-office operations, enabling a virtual attendant to seamlessly manage different types of robots while also communicating with an employee in real time. In this example, the virtual attendant locates a customer application form and instructs both the reading and unattended robots to process the form and update relevant back-office systems.
RPA systems can not only reduce the significant administrative burden of onboarding new customers, but also turn those moments into loyalty and upselling opportunities. Advanced RPA robots, with built-in optical character recognition (OCR) and data analytics capabilities, can extract unstructured data from scanned or email documentation, analyze it and present it in a structured and fully digitized format to a virtual attendant. The virtual attendant can then alert a human employee about the new customer and inform the employee’s decisions on how best to communicate with that customer going forward (see diagram). The system also alerts employees to any discrepancies between data on the forms and the customer’s ID documentation—enhancing compliance.

**Smart automation: A win for shareholders, customers and staff**

The rapid evolution of RPA, AI and virtual attendant robots creates a tremendous opportunity for banks to apply state-of-the-art automation to a wide range of their top priorities: improved customer satisfaction and loyalty, more responsive and efficient operations, better management and use of an expanding array of data, tighter compliance and fraud detection, and maximization of employees’ talents and contributions.

Yet it is imperative that banks also optimize the human element. The future of banking will be shaped by employees who are intelligently and intuitively supported by smart automation technology. A powerfully enabled workforce, coupled with the operational efficiencies provided by RPA, will give banks a sustainable, long-term competitive advantage.

Achieving this requires vision, confidence and careful planning. Banks that methodically assess the available technologies, prepare internally, and develop a smart implementation plan can reap the benefits of RPA and other cognitive technologies faster than they ever imagined. In fact, as these new forms of automation move into the mainstream, banks that delay implementation risk seeing their competitors open a sizable gap. Working with Bain and NICE RPA, banks can develop a clear plan to realize numerous benefits now as they progress rapidly toward a digital future in which their ambitions are fully realized.
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What sets us apart

We believe a consulting firm should be more than an adviser. So we put ourselves in our clients’ shoes, selling outcomes, not projects. We align our incentives with our clients’ by linking our fees to their results and collaborate to unlock the full potential of their business. Our Results Delivery® process builds our clients’ capabilities, and our True North values mean we do the right thing for our clients, people and communities—always.

NICE RPA—Automation for the People

NICE is the worldwide leader in Robotic Desktop Automation, bringing a new Automation for the People standard. The NICE Robotic Automation solutions boost your customer experience and unleash employees’ potential.

- Leading Robotic Process Automation, with an embedded OCR engine
- Desktop Automation, via NEVA the Employee Virtual Attendant
- Automation Finder, an AI-infused process discovery tool

Everything is developed and managed from a single platform, including the flexibility to scale and drive digital transformation across the enterprise. For more information visit www.nice.com/rpa
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