Automation helps bank cut manual fraud processing by 90%

An automation initiative builds in the capacity to process 30+ million transactions a year, saving a leading bank $20M annually.

The challenge

Our client is one of the largest banks in the world, offering services such wealth management, mortgage banking and card services. It is one of the top credit card issuers in the US and processes a large number of US-based e-commerce transactions.

After trying to scale its automation initiative with two previous vendors, our banking client turned to Cognizant. Despite initial setbacks, the company was committed to automating its time-sensitive processes so the firm could offer a high added value to clients, while performing the important work of detecting fraudulent charges, among other processes. The bank was monitoring over tens of thousands credit and debit card posting transactions a day, and all the transactions needed to be screened for incidents of fraud.

Fine-tuning fraud detection processes is important to any financial institution. If the process is too sensitive, issues can arise when payments are rejected on non-fraudulent postings and a customer's access to their card is paused unnecessarily as the incident is investigated. Or, if detection is not sensitive enough, the bank is at risk of paying fraudulent charges to protect its customer, which hurts the bottom line.

At a glance

A major bank engaged Cognizant to automate processes that accessed a very high volume of sensitive data across 25+ applications including web, Windows, mainframe, Pega BPM software and other third-party products. The firm needed, an enterprise automation strategy, a more detailed roadmap for automation projects, as well as skilled resources to help execute. Cognizant worked collaboratively with client teams to deliver several impactful business outcomes:

- Reduced current Average Handling Time (AHT) by 20%
- Reduced exceptions from 100% to 8-10%
- Repurposed 425+ FTEs across the US, India and Manila saving $20M annually in staff/direct costs and infrastructure/indirect costs
- Improved ROI for fraud and dispute-related processes, delivering $8.10 per every dollar spent
- Enabled capacity to process 30 million transactions annually

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There were also issues managing critical compliance data for regulations such as Automated Clearing House, the primary system that regulatory agencies use for electronic funds transfer (EFT); and the US Service Members Civil Relief Act, which protects the financial and legal affairs of individuals on active duty military service. Our client wanted to ensure its regulatory data was managed properly to prevent incurring costs and penalties if processes were not executed on time and according to mandates.

Additional automation requirements were outlined:

- Automate the fraud and dispute management process, which monitors over tens of thousands daily credit and debit card posting transactions
- Automate adjustments to merchant credits, stop payments and write-offs to avoid manual verifications and ensure timely processing to improve the user experience
- Manage sensitive PII data related to card details according to data storage compliance requirements
- Integrate data needed to validate end-to-end business flow, to ensure that automated processes can accurately pass values and data between multiple systems for environmental stability
- Bring real-time data access processes in house, to cut dependency on products and services outside the bank's network
- Improve tools that have hindered the scaling of automations across the organization
- Repurpose up to 425+ full time employees over a 15-month period

More IT resources needed for the automation

The bank was dealing with limited IT resources to handle the automation, preventing them from scaling to the enterprise level or addressing specific challenges. The automation plan was not a simple one and required accessing a very high volume of sensitive data across 25+ applications including web, Windows, mainframe, Pega BPM software and other third-party products. The lack of staff, plus the need for an enterprise automation strategy and roadmap, created the need to bring in an automation partner.

Adhering to critical performance standards was another goal, and the firm had to stay within each process's limited operating window and aggressive average handling time (AHT) of less than 10 minutes per transaction. There were also target product metrics such as the percentage of records a bot should process; generally, between 80% to 95% with the remainder left to a specialist to resolve. Meeting these performance metrics was key to ensuring that the bank could successfully process its tens of thousands daily transactions.

The approach

We began with an assessment of the business across three areas: fraud and dispute management, claims and alerts, and regulation and compliance.

Following our initial discovery and creation of a scalable automation strategy that included an enterprise-wide level architecture, we moved forward to automate key business processes. These included fraud recovery processes, payment refund and electronic money management for several business units: cards and payments, reconciliation, onboarding, customer service, and regulatory and compliance.

We set up a centralized operational model with a dedicated early engagement team, scalable development pods and a flexible support team.

We used a Tableau dashboard to report input, output and outcome-based metrics, which resulted in a self-service capability that gives the business a real-time view of process performance during automation, and this also reduced dependency on the support team.

During the implementation, we built and developed several automation capabilities such as:

- Automated health check bots to monitor application availability, generate business alerts/notifications and perform regression tests periodically, unsolicited
- Code review and coverage bots to ensure code quality, efficiency and effectiveness, resulting in a very low defect density (4.3 out of 100 story points)
- A diamond architecture model following the principles of separation of concerns and single responsibility with horizontal auto-scaling of process bots based on seasonal volume fluctuations
- Frameworks like Spring Boot & .NET to build reusable assets and components to overcome WinAutomation tool limitations
- Enabler bots to augment functional bots, covering cross-cutting between different parts of the engineering project such as generate/run logs, exception handling and alerts management
- Custom bots to simulate/mimic the potential test data for maximum test coverage to mitigate the challenge of test data availability
- Definition-of-ready scorecard factoring in technical and environmental factors to estimate automation feasibility, and to validate the readiness of business processes for development

Business outcomes

Our managed services engagement delivered the automation transformation our client wanted, from feasibility through all necessary automations. Because the engagement structure allowed us to understand and predict what it would take to support the various bots, we were able to commit to a fixed capacity support team—something no other competitor was able to offer. This gave our customer the predictability and risk transfer needed to realize its automation vision.

Our banking client achieved several business benefits:

- Reduced current Average Handling Time (AHT) by 20%
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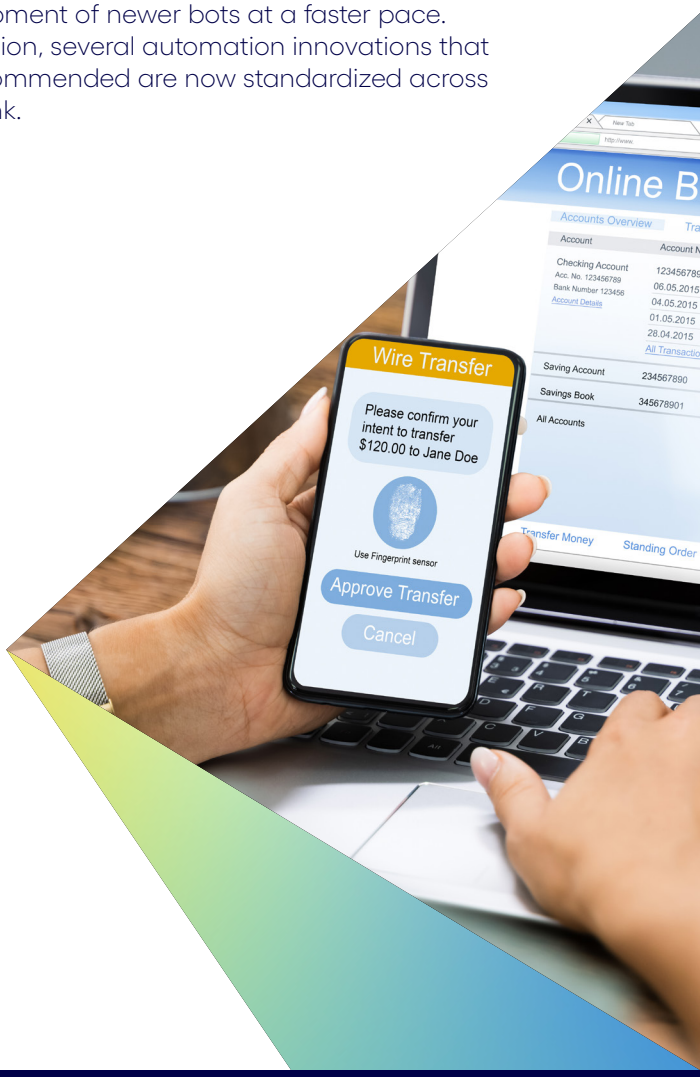
The engagement also defined the line of business (LoB) level architecture framework for automation, which paves the way for new automations to use the established best practices, reusable components and standards for coding, naming conventions and more. These guidelines help inform and improve the development of newer bots at a faster pace. In addition, several automation innovations that we recommended are now standardized across the bank.



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