



THE AUTO-PILOT AUDIT: ENSURING SMOOTH OPERATIONS, POST-CLOSURE AND BEYOND

Abstract

Ryan Davis, VP of Mortgage Operations at one of the largest American banks, was struggling to fix the delays and inaccuracies in his mortgage post-closing audit (PCA) operations. When a merger increased the work volumes expected for the already overworked PCA staff, he turned to Infosys BPM for a process automation solution. This case details how Infosys BPM's solution brought about a 50% increase in loan processing speed while maintaining a 95% accuracy score.



Drowning in post-closing audits

Ryan Davis is the VP of Mortgage Operations at one of the largest American banks, with a legacy that dates back to almost 200 years. In this high-value role, Ryan is primarily responsible for overseeing the bank's entire mortgage operations, from processing of loans to post-funding operations. This involved a direct supervision of each process to ensure compliance and high levels of efficiency and profitability throughout. However, Ryan could tell from his weekly process reviews, there were problems waiting to be addressed.

During the reviews, Ryan would often come across inefficiencies in the mortgage post-closing audit (PCA) process – a crucial quality control measure designed to ensure loan processing accuracy, regulatory compliance, adherence to internal policies, and alignment with investor guidelines. Consequently, the

department was frequently reporting procedural delays and operational mishaps. After detailed discussions with his PCA staff, he realised that the team would often struggle to manage the volume of documentation and mortgage examination on-time due to the manually intensive nature of the process. Even as he thought of ways to address the situation, the company announced a merger with another mortgage business — with an expected 2x jump in loan volumes.

Ryan immediately began a linear expansion of the PCA staff to handle the rising work volume and pre-empt further delays in the process. However, with the workflows already riddled with speed and accuracy challenges, the staff expansion merely amplified the issues even while increasing the operational costs.

This lack of accuracy then began to erode

the insights derived from the PCA process, ultimately undermining the bank's quality of both its conventional loans and its government-backed loans; this jeopardised the bank's overall operational health.

To salvage the situation, Ryan began looking out for a comprehensive process automation solution. Fortunately, he didn't have to go far out, with Infosys BPM, the company's long-standing business partner, close at hand. Confident of their digital transformation and business process abilities, Ryan immediately enlisted the team's support for the project. He set up a meeting with Manish Ghokare, the Infosys BPM Project Lead, where he explained the situation, underlined the key challenges around speed and accuracy, and requested a powerful process automation solution for enhancing his PCA operations.

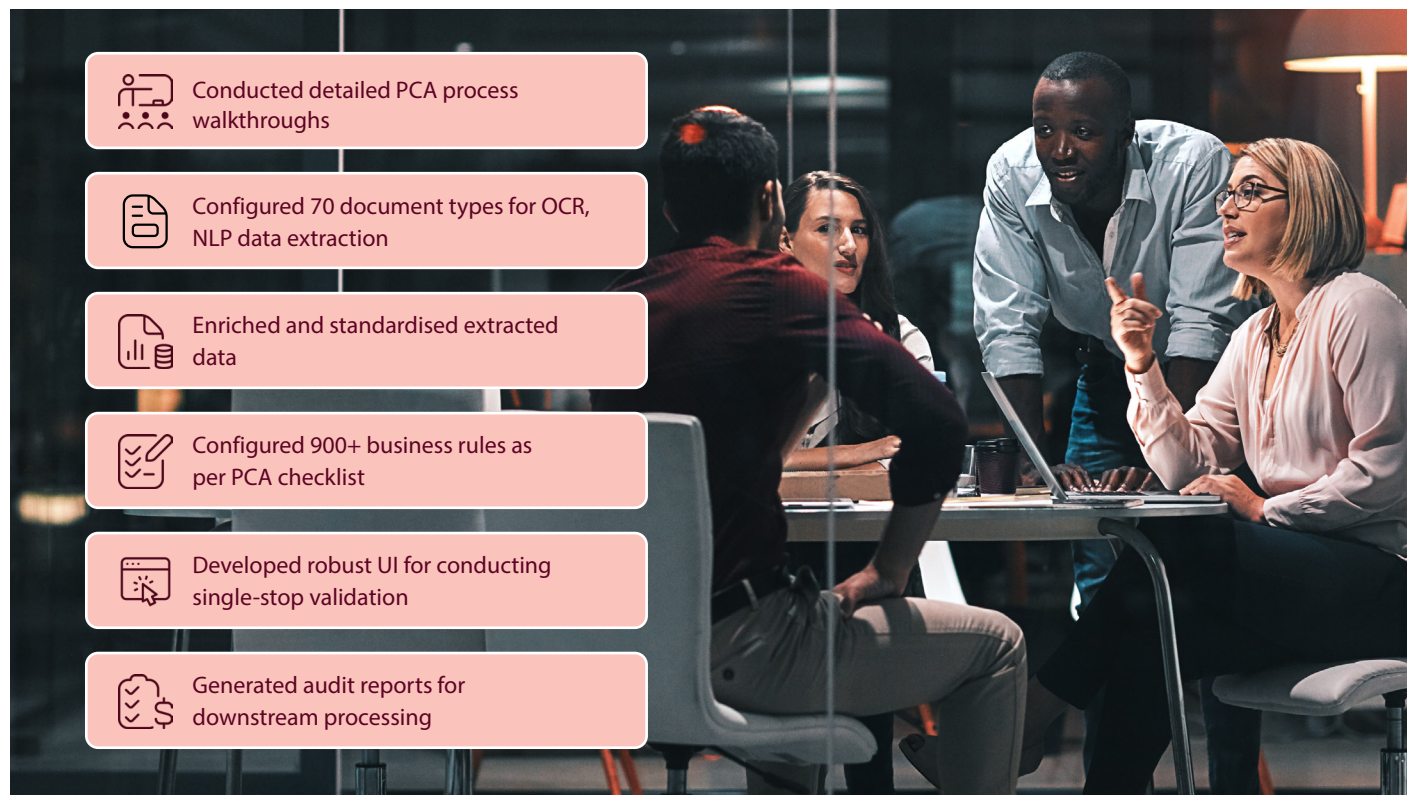
Catching the automation buoy

With the agenda clear, Manish rounded up his team of experts and immediately got to work. The team first collaborated closely with Ryan's PCA subject matter experts to conduct in-depth walkthroughs

of the process. Together, they discussed the audit checkpoints, identified the key documents, and examined the business rules involved in the process. Then after a careful evaluation, Manish proposed

an advanced Document AI solution for automating the banking corporation's PCA workflow and drafted a detailed roadmap for the same.

Approach summary



Upon receiving the nod from Ryan, Manish and the team began implementing the solution. To start off, the team collated, classified, and indexed the required documents to prepare them for processing. They used a machine-learning-based approach to automatically identify document types and their versions from the massive sets of documents they received as inputs. Then, the team configured the identified document types (around 70) and prepared them for data extraction. They integrated optical character recognition (OCR) and natural language processing (NLP) techniques to extract the relevant data points from the varied set of document types.

After extraction, the team enriched

and standardised the extracted data according to generic and domain-specific requirements, while applying mortgage-specific business rules for auditing. Following Ryan's PCA checklist, they configured over 900 business rules during the process. Finally, the team also developed a comprehensive UI for the PCA agents to conduct single-stop validation. The UI presented all relevant data and document images side-by-side, and offered colour coding and data element highlighting tools that could improve audit productivity. Manish also set up a system to generate detailed reports of the audit findings and export them to Excel for downstream processing by other business units across the company.

However, this journey of automation wasn't without its challenges. Manish's team had to utilise three different systems simply to ingest and collate the loan documents and data. They were also required to align the arrival times of data packets across systems and arrange them for processing before the start of each work shift. Ultimately however, Manish accomplished setting up the sophisticated system to pre-process the bank's loan data and loan documents via the PCA solution, streamlining the movement of daily loans.

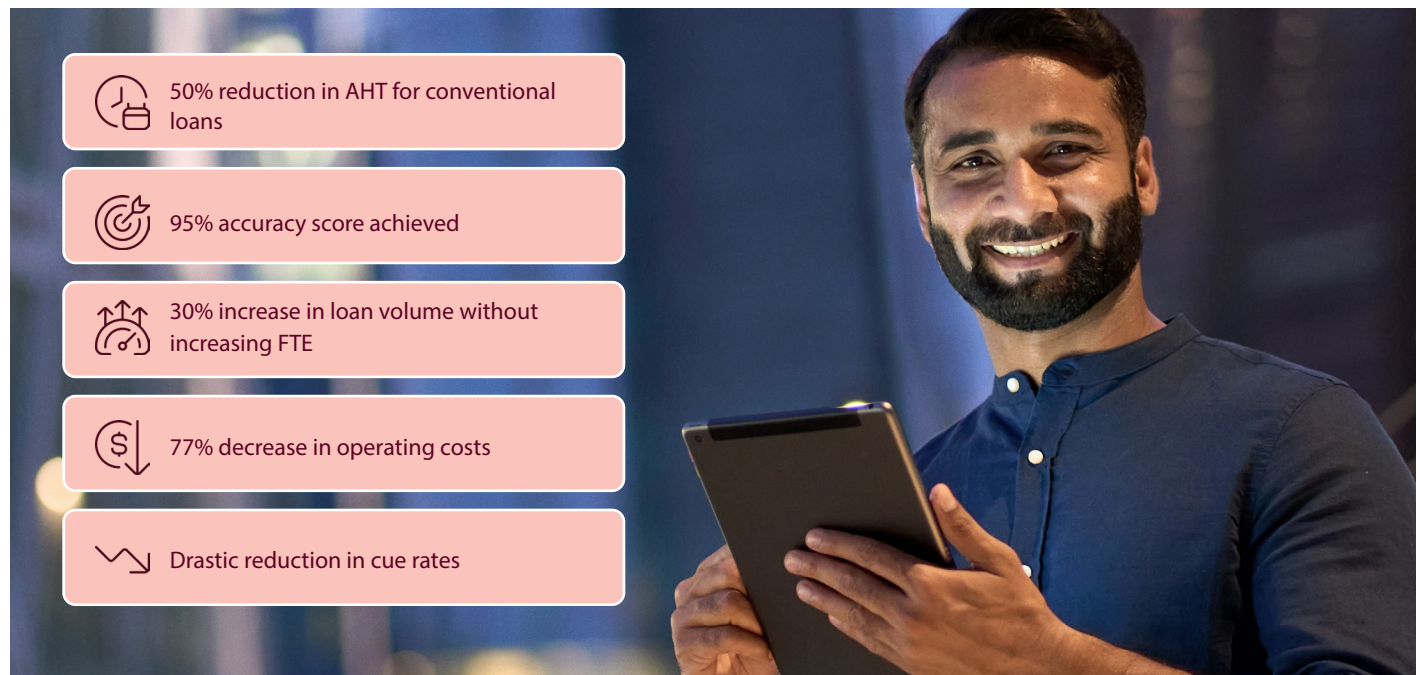
On the high seas of process efficiency

Within just a few days after the automation solution was deployed, the results of Manish and his team's efforts were clearly evident. The once cumbersome mortgage post-closing audit process was now streamlined, enabling Ryan and his team

to comfortably handle the surge in loan volumes brought on by the merger. With a massive 50% efficiency gain in handling conventional loans, the processing that took 30 minutes earlier could now be carried out in just 15

minutes, leading to greater day-to-day productivity. To Ryan's delight, Manish expressed that he expects the time to go down even further as the solution matures overtime.

Key benefits



With the speed and productivity gains from the automation, the bank's PCA team managed to take in and process 30% more loans, without requiring Ryan to hire even a single additional FTE. What's more, the solution also helped him bring down his cost of operations by 77%, all while enhancing operating quality. As a result, this increase in loan processing volumes and significant decrease in costs has

positioned the bank for a substantial uplift in its revenue.

Over and above the monetary benefits, the solution helped the bank achieve a drastic reduction in cue rates (a measure for non-performing loans) and the need for vintage analysis. Further, it allowed Ryan and his PCA team to consistently hit accuracy rates of 95% accuracy, consequently resulting in better loan

documentation, better loan quality, and enhanced client experience.

Impressed with the project's success, the company's leadership is now inspired to democratise the automation solution and explore further digital transformation initiatives for enhancing their enterprise-wide operational efficiency.

**Names have been altered to preserve the identities of the people involved.*

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