



A top 10 US bank's journey to solve unstructured data ends with Indico

Several starts and stops with basic OCR and templating tools led this top 10 US bank to the Indico Unstructured Data Platform™ to automate, analyze, and apply unstructured data across dozens of departments.



85%
reduction in
processing time

After a four-year journey, one of the top ten largest US banks found success selecting Indico Data to address the wide range of processes dependent on unstructured data across the bank. After an exhaustive examination of other intelligent automation tools, the bank found Indico was the only solution to meet the bank's stringent requirements.

When evaluating a dozen possible vendors (including the incumbent vendor deployed at the bank), the ability to create custom analysis and workflows relating to the millions of documents, emails, and other text-based content was critical. In addition, the solution wouldn't rely on the typical template or rule-based approaches that were the basis of virtually every solution they encountered. The high cost of development and deployment of these approaches ruled them out of contention.

The senior decision-maker observed, "Most importantly, we've got to make sure the cost to develop [automation models] is low enough for us to make business cases," with no incremental costs for different document types or exorbitant maintenance fees. Indico fits the bill on all fronts.

The paradox the bank had encountered was that any solution that had actual artificial intelligence as part of the solution required high specialized data science skills to develop and deploy, which didn't meet the bank's requirement of low cost, scalable deployments.

"We needed to have our people's hands on the keyboards and to use the technology," stated the bank's Vice President of Artificial Intelligence and Automation. "It's one thing for the vendor or their service partner to be using the technology; it's



The Indico advantage

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Empowering your process owners

Intuitive point and click interface for unstructured content classification, extraction, and workflows

another thing for the customer to be able to use it when you're thinking about deploying at scale."

Given the intense security requirements of the banking industry, on-premise deployment, robust APIs for integration with existing bank systems, and enterprise scalability to support tens of millions of annual items processed were also on the must-have list that Indico was able to fulfill.

Lastly, the introduction of artificial intelligence to the banking industry created a new set of requirements around AI Explainability and transparency. The banking regulatory environment mandates that any AI-based decisioning be accompanied by a robust audit trail and complete details as to the algorithms and training data that contribute to any outcome. Indico's award-winning Explain module is the industry's only point and click dashboard that provides a complete interactive model explainability and remediation.

The unstructured data challenge

In 2017 the bank formed a centralized team to lead AI and automation efforts across the company, pulling primarily from the business side of the house, signifying that business requirements, not technology, would drive the process. It quickly became apparent that no single technology would address all of the bank's automation requirements. Instead, the company experimented with technologies including robotic process automation (RPA), machine learning for data analytics, virtual assistants, intelligent document processing, "and everything in between," according to the bank's key

decision makers.

The bank ran into challenges when it came to automating unstructured data processing, the millions of documents and emails that flow through critical front-office and back-office bank processes and transactions.

Early on, the bank selected a "document automation" vendor but found that over time, the tools were not up to the task of dealing with the full spectrum of documents at the bank. Specifically, the more variable and unstructured documents such as contracts and invoices were especially problematic, as the vendor's template and rule-based approach was brittle and expensive to maintain. Further, it required a very high level of skill to deploy, which created a bottleneck within the bank's AI & Analytics team, limiting the speed of adoption across the various business units.

"We cut bait fairly quickly on the legacy document automation approach and spent several years looking at a variety of technologies as the technical capability continued to mature," according to the bank's VP of AI & Automation.

The Indico advantage

That search led the bank to the Indico Unstructured Data Platform™, which is now the bank's de facto "standard" for automating, analyzing, and applying unstructured data across a wide range of use cases.

Indico's breakthrough solution includes the development of a proprietary "Composite AI" technology. Comprised of a multimodal approach



The Indico advantage

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Beyond templates and rules

Quickly build custom machine learning models with just 200 examples

that leverages several billion words and images to create a general “context cloud,” Indico leverages Transfer Learning to enable highly accurate output from minimal amounts of training data.

Indico’s Machine Teaching interface allows business users to easily upload sample documents, define attributes, and label sample data to create custom machine learning models quickly and easily tailored precisely to their desired use cases. Indico’s Human AI output validation enables configurable rules for the human review and validation of any model’s output, ensuring customers can capture the desired accuracy and acceleration from any unstructured use case.

Mission critical use cases

Lockbox processing

One use case is lockbox processing, which is a service the bank provides to institutional customers. The process involves accepting payment checks on behalf of clients and applying them to the correct account, based on the remittance slips that come with the check. Historically, a representative has to read the slips and manually enter appropriate data into a bank processing system; given that the bank processes close to 200 million checks per year, it’s time-consuming. One of the models automates reading the slips and entering data into the IPA platform, which the customer estimates shaves about 85% off processing time.

Invoice processing

Like any large enterprise, the bank deals with thousands of invoices from various suppliers, contractors, and the like. Some may consider an

invoice to be a structured document. But when you consider a large enterprise like a bank receives invoices from hundreds of companies, each putting its spin on the document, the number of permutations quickly adds up. That puts invoices squarely into the unstructured document category. By labeling some of the actual invoices it deals with, the bank used the Indico platform to create a model that effectively processes any invoice, saving untold numbers of employee hours.

Mortgage servicing

Mortgage servicing is another document-intensive offering that the bank automated. Even when banks sell mortgages to investors, they typically retain servicing rights. Here again, that means dealing with thousands of mortgage payments that still come in by check. Like the lockbox use case, the bank could use Indico to automate much of the process.

Lease agreements

Lease agreements are another type of document that is typically time-consuming to process. Various elements from these contracts must be extracted from the document and input into a downstream enterprise resource planning system (ERP), such as names, dates, addresses, lease terms, interest rates, and more. Here again, leases from different companies vary, making templated approaches to automation unworkable. The bank found that Indico was up to the task and is now automating much of the process.

Commercial lending & debt servicing

This bank operates a very large commercial banking business. The spectrum of lending use



The Indico advantage

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No black boxes

Award-winning AI Explainability and intuitive document validation UI deliver unmatched output accuracy

cases involves lengthy and complex documents that require accurate processing to make lending decisions and service loans. Historically done by traditional “see it and key it” functions, the bank dramatically accelerated the processing time of these documents creating a competitive advantage versus competitors while reducing the expense ratios associated with these tasks.

Return-on-investment

Banks are under enormous pressure to improve operating expenses to remain competitive into the future. To determine which use cases to go after, the bank’s AI & Automation team works with the business units to identify priorities and determine where automation can help. Given that most bank processes have very high accuracy requirements, the group spends much time educating lines of business on how to think about the ROI of AI-based approaches to unstructured.

“Core operational processes have a binary outcome. You get 100% accurate data every single time, or you get an audit issue or regulatory issue,” he says. “So, we always approach this from the perspective of there is going to be a human assist.” ”

That means there will be a human-in-the-loop to review the outcome of the automated routine, at least initially. “It doesn’t have to be 100% review if you get to probable accuracy thresholds that your operations team and your risk teams are comfortable with,” he notes. The bank decides how much of a process can be automated and then calculates potential savings to determine ROI.

“The numbers don’t lie,” as the decision makers like to say when considering new use cases.

About Indico Data

Indico Data transforms unstructured data into actionable insights. With the Indico Unstructured Data Platform™, enterprises of all sizes can automate, analyze, and apply unstructured data -- documents, emails, images, videos and more -- to a wide range of enterprise workflows. This enables them to gain rich insight and maximize the value of their existing software investments, including RPA, CRM, ERP, BI, by enabling these systems to work with unstructured data. Visit www.indicodata.ai to learn more.

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The Indico advantage



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Cloud native, enterprise scale

Your Cloud or ours, with support for 100,000 documents to 100 Million to deliver true enterprise scalability