



Financial
Services
Use Case

AI Use Cases for Financial Services

When software robots can reason over data and use artificial intelligence (AI) to make decisions, you unlock new possibilities that transform RPA—and entire industries. You can reach new levels of productivity, bring in a new era of work that is more fulfilling, and expand automation into all sorts of new areas.

Instead of extracting structured data, AI-enhanced robots can now process semi-structured and unstructured data. They can mine processes and tasks, turn speech to text, classify emails, and assist humans with use cases that are probabilistic and have a lot of variables.

Financial Services organizations are front-runners of digital transformation initiatives. They are leveraging RPA and AI to speed up compliance, increase operational efficiency, and deliver enhanced customer experiences. This eBook reveals some of the most popular AI use cases in Financial Services.

Adverse News Screening

The challenge

As an integral part of risk management and customer due diligence assessment process, financial institutions gather and analyze adverse media mentions of their customers. In case of any credible mention of criminal or suspicious activities, they need to perform detailed analysis. The process is lengthy, error-prone, and requires manual searches and validation.

The traditional solution

Traditional negative news screening solutions, a lot of which are rule-based, only offer “string matching” and hence often leads to high incidence of false positives. And these solutions are not intelligent enough to prioritize or rank the alerts. Financial organizations end up expending lot of manual effort to sift through all the alerts.

The UiPath solution

UiPath Document Understanding extracts results from internal and third-party news sources, classifies (and ranks) news items into potential criminal (e.g. terrorism, money laundering, arrests, lawsuits etc.) categories with confidence scores. Additionally, it extracts relevant passages from the articles for easy reference.

Research shows the total cost of anti-money laundering (AML) compliance to US financial institutions is \$25.3 billion per year. Using AI, machine learning and other technologies, firms take less time on due diligence and achieve greater compliance efficiency.

Living Expense Assessment

The challenge

Banks assess customers’ living expenses among a set of categories such as groceries, subscriptions, and gas in order to make a decision on loan applications.

The traditional solution

For each given account, they need to map a database of transactions pulled from multiple resources to an application, and then assess how much that account spends on each of the different categories. With that, they can evaluate an account’s spending compared to his or her income. The old way involves pulling data manually and the process was very time consuming.

The UiPath solution

To do that in a large scale (a bank might deal with thousands of applications), they need to **use machine learning (ML) to predict what category each transaction belongs to**. With UiPath AI Fabric, banks can quickly categorize transactions, generate a report and email it to relevant employees. **Heritage Bank**, Australia’s largest mutual bank, for example, categorized 90% of these transactions, with 98% accuracy. The old solution could only pick up 40-50% transactions and it requires lots of backend work. AI Fabric helped reduce backend work while improving customer and employee experience.

Customer Email Classification

The challenge

Banks receive a lot of customer emails everyday related to queries on their accounts, account servicing requests, complaints, issues with payments etc. Usually their customer servicing and fulfillment support teams process these emails manually— create a service request record and resolve the request in a banking system, reply back to the client over email, and finally close the request in the system.

The process takes huge amount of time and results in great customer dissatisfaction due to long service cycle. It is also very resource intensive. A typical large bank has hundreds of operations team members dedicated for classifying, raising tickets and routing tickets to appropriate teams.

The UiPath solution

UiPath Document Understanding and AI Fabric extract text from customer emails, auto-classifies customer emails into different categories and folders, and auto-creates new cases for each email in Salesforce Case Management Application and other applications. A leading provider of loyalty and payment solutions, for example, receives 300,000 emails from its customers each month. **Using AI Fabric, the company automated the intake of 60% of customer service queries** and classified them into more than 15 different categories. Watch this [video](#) to learn more about UiPath email classification use case.

Next Best Offer

The challenge

In banks' call centers, **75%** of customer service representatives' time has been spent on manual research. Tailoring responses and product offers to each individual caller in real time, banks can improve customer experience and increase revenue tremendously.

The UiPath solution

Here is how UiPath can help. When a customer calls, robots search the customer's account and sends data to a machine learning model, developed by UiPath customers or partners. The model makes predictions based on existing data and the new data gathered on the call. The robots send the prediction results and scripts to the agent. **The agent promotes products to the customer based on the model prediction.** Relevancy, timeliness, and personalization increase high rate of conversions and cut average call handle time.

AI is a must-have



85%

of financial services organizations are currently using AI.

77%

of senior executives anticipate AI to have high or very high business importance in the next two years.

Source: [Transforming Paradigms: Global AI in Financial Services Survey](#)

More Use Cases



Other popular AI use cases in the Financial Services sector include indexing mortgage documents, extracting data from financial statements, processing bank statements, and classifying card disputes.

Not only Financial Services, AI can be applied by many other business sectors—Healthcare, Retail, Professional Services and others. Please visit [UiPath AI webpage](#) to find more use cases.

Consumer Banking	Commercial Banking			Capital Markets
Mortgage Document Indexing	Negative News Screening	Trade Finance Document Extraction	Fraud Detection	Cards Dispute Classification
Mortgage Document Extraction	Financial Statement Extraction	Personal Loan Approval	Expense Classification	Customer Management
Customer Churn Prediction	Financial Spreading	Sanctions Filtering	KYC – Entity Identification	Loan Default Prediction
Customer Email Classification	Risk-based Pricing for Lending	Bank Statement Extraction	AML Alert Classification	Pricing Optimization

“When you start to use AI in the various ways that UiPath offers, it really broadens the type of process that you can go after from an automation perspective.”

David Johnston, Intelligent Automation and Process Excellence Manager at Heritage Bank

Starter Models



UiPath AI Fabric supports machine learning models developed by our customers and partners. It also supports out-of-the-box models including Document Understanding proprietary models and open source models so our customers can benefit from AI without deep data science expertise. Some models extract text and tables (and classify them) from financial statements and mortgage documents. Some models read and group input text into different classes from very negative to very positive to quickly process customer reviews or emails. Other models summarize email body and use natural language to form cohesive sentences.

UiPath Document Understanding	Open Source Language Analysis	Open Source Language Comprehend	Open Source Others
Invoice Extraction	Language Translation	Question Answering	Tabular Data Classification
Receipt Extraction	Language Detection	Text Classification	Image Moderation
Generic Semi-Structured Extraction	Sentiment Analysis	Text Summarization	Object Detection
Purchase Order Extraction	Named Entity Recognition		Image Segmentation
Utility Bills			Semantic Similarity

To learn more about these models, please visit UiPath AI Fabric [documentation](#) and [Document Understanding documentation](#).

Automate more by bringing AI to RPA:
[Contact Sales](#)

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