

Automation for Banking and Financial Services

Future-Proof Operating Model



Automation as a Value Driver for Sector Outperformance



Attain industry
leading NPS
scores

Become a “front
to back” digital
bank

Be an employer
of choice within
Banking and
beyond

Explore the art of the possible

AI and Automation for Financial Services: Industry Viewpoint

McKinsey
& Company

BAIN 
& COMPANY

BCG

44% of work is automatable in Financial Services

93% FS firms accelerated automation efforts during Pandemic

Almost 90% of executives agree that AI represents an opportunity, but a mere 18% have tried to use the technology to generate revenue

The Four Pillars of the Fully Automated Enterprise™ for Banking and Financial Services



Assign automatable work to robots

Robots do the mundane and repeatable work



Provide a robot for every person in the company

Robot assistants augment and empower human workers



Democratize development

Workers can automate simple tasks with low-code apps

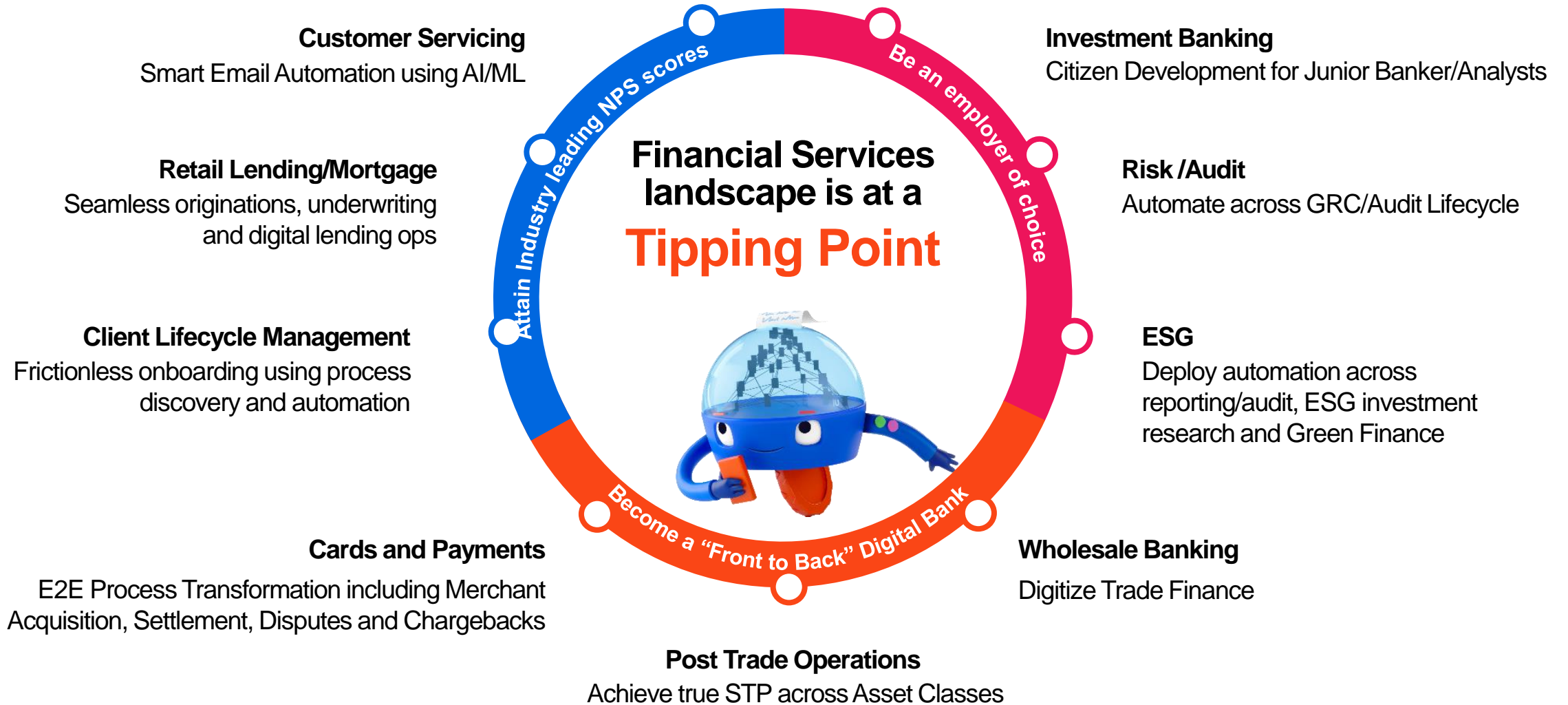


Unleash AI across every facet of work

Deploy AI to build smarter robots and spot every automation opportunity

The UiPath Platform delivers the fully automated enterprise

Opportunities



Attain industry leading NPS scores



Smart Email Automation

Business Need

- Banks perform high amounts of manual effort to process **several million** inbound customer emails across **100s+ inboxes** annually
- Significant time is spent on triaging and administering email inboxes
- Missed emails and delay in response to urgent emails cause reputational issues

UiPath AI Center Solution



> **3-5 Million**

Estimated annual savings depending on size of the bank



1-2 Minutes

saved per email



Improved
Customer Experience



Already proven
at multiple large
global banks

Customer Highlight – Smart Email Automation

Top US Bank leverages AI and Automation to save time and money

Top US bank

Industry: Banking and Financial Services

Region: US

Department: Customer Servicing

Products: AI Center, Document Understanding

Challenge

- Top US bank performs high amounts of manual effort to process over 700 million inbound customer emails across 10,000+ inboxes annually
- The bank was in search of an end-to-end solution that leveraged AI to classify and extract data from emails to streamline processing and provide analytics

Solution

- Organize and route emails to different departments
- Prioritize urgent high value emails based on sentiment and business needs
- Extract entities & execute business rules for escalations and data entry
- Realize impact of AI, business processes & automation using insights dashboard

\$20 Million

Estimated annual savings

1-2 Minutes

Saved per email



Bank receives millions of email and documents, each communication that we receive has a certain SLA. Automation is helping us with sorting, classification and prefill to meet these SLAs.

CIO Advanced Technology,
Top 3 US Bank

Processes Automated

UiPath ML models used: text classification, sentiment analysis & named entity recognition (NER) Target top 10% of email types types (complaints, address changes, etc.)

Lending/Mortgage: Automation Value Drivers

Increase Revenue Opportunities

Improve customer experience and increase loan volume through reduced time to close

30-45 Days

to close a loan

Improve Operating Margins

Increase efficiencies across loan life cycle, including originations, servicing and defaults management

\$9,000*

to manufacture a loan

\$2,400*

to process a loan

Reduce Regulatory Risk

Increase capacity and accuracy in quality control and audit functions

243B Fines

Paid by Banks since Mortgage Crisis

Customer Highlight – PRMG

Mortgage company automates loan estimating and approval process



Industry: Banking and Financial Services

Region: US

Department: Loan Underwriting

Products: Attended Automation

Challenge

- With demand for loans skyrocketing, Paramount Residential Mortgage Group (PRMG) was taking weeks or even months to process loan requests, and manual data entry was creating delays due to errors.
- With a record volume of loans, it was clear they needed to automate the loan estimating and approval process if they were to keep pace with demand.

Solution

- UiPath automated retrieving disclosure packages, sending disclosure packages to the broker, sending closing packages to the broker, creating a system notification that there is intent to finalize a loan, entering payment data into the system, and downloading, organizing, and transferring data between systems.
- The result was a highly efficient approach to accumulating data and entering it into the system as quickly as possible, ensuring that brokers had access to the latest data in near real-time.

550

Automations

2 M

Direct Costs Saved

50%

Increase in loans



PRMG has carved out a path of its own. They have created a 'Path to Pivot' to more consumer facing activities, modern lending technology, and an ever-improving path for Originators to evolve with the market and continue to deliver best in class service!

*Citation from 2021 ICE Mortgage
Technology Innovation Award*

Processes Automated

End to end loan origination documents processing

Customer Lifecycle Management: Automation Value Drivers



**Reduce the operational
spend for CLM/KYC by at
least 15-20%**

*60 M USD Spent by an average bank on
KYC/AML Compliance*



**Accelerate the onboarding
by 10% (Each day
corresponds to several
'000s of revenue leakage)**

*28 Days AHT for onboarding corporate
clients with direct impact on customer
experience*



**Reduced risk of exams
and penalties**

*36 B AML Fines across all financial
services segments since 2008 crisis*

Customer Highlight – Global Bank

Top global bank leverages process mining to eliminate bottlenecks

Top Global Bank

Industry: Banking and Finance

Region: Americas

Department: UiPath Process Mining

Products: UiPath Process Mining

Challenge

- The Investment Bank is executing on a Digital Transformation program with an objective to improve operational efficiency, improve customer & employee experience, increase revenue, and reduce risk.
- The KYC/client onboarding team was looking to understand the Client & Product onboarding process and SLAs, where approval activities are taking longer than 72 hours to complete, and identify backwards referral flows, where cases enter the same activity multiple times throughout

Solution

UiPath Process Mining was applied to the Client Onboarding process in Fenergo to identify:

1. Reasons for delays in onboarding clients
2. Bottlenecks that exist within the process, from both system or users
3. Opportunities for process improvement or automation

11 days

Average from Request Tax Ops to Generate KYC Doc Request

21 days

Average from Credit Initiate Trading Docs to Desk Head Approval

968 days

Worth of productivity lost due to re-work across 6,000+ docs

Processes Analyzed and Automated:

Customer Due Diligence

AML /Sanctions Check

Customer Document Data Validation

Become a “front to back” digital bank

Unlock new business value



Cards and Payments: Automation Value Drivers



Merchant Onboarding/ Settlement

Opportunity to automate siloed/manual processes across acquisition and transaction processing

5 days to onboard for traditional players as compared to 3-5 minutes for FinTech



Fraud Management

Notifications and alerts management & actioning or blocking accounts

28B USD Global Card Losses due to Financial Crime



Dispute Management

Classification and management of chargebacks and disputes resolution

33M Dispute Events in US

Customer Highlight – EMEA Bank

EMEA bank slashes dispute resolution time

Leading EMEA Bank

Industry: Banking and Financial Services

Region: UK

Department: Payments Processing

Products: Unattended Automation

Challenge

- Due to the complex nature of banking systems (6 different system platforms within and outside the bank), ATM and POS disputes for VISA and BETA cards customers for local transactions took on average 3 – 5 days to resolve.
- Such negative experiences broke down the level of trust customers had in electronic channels and the attendant benefits.
- For a critical channel in the transaction value chain, dispute resolution enabled through automation was imperative AHT of a single dispute resolution: 6-10 min

Solution

- The UiPath RPA platform robot logged into (CRM) platform, read all the cases, identified root cause of the cases, accessed the switching dispute platforms and investigated in Core-Banking for duplications.
- Once the investigation proved a dispute was a valid case, the bot proceeded to the respective switch and logged a charge back.
- Finally, the bot went back to the case on CRM and closed the case with a resolution message communicated to the customer. AHT of a single dispute was reduced 1-2 mins which is ~ 5x faster than a human

60%

increase of productivity

80%

Reduction in AHT

Improved

SLAs from 3-5 days to 1 day

Increase

In team capacity to handle more

0%

Error Rate

Increase

In customer satisfaction

Processes Automated

Payments and Disputes Reconciliation

Automation across Trade Lifecycle



An Investment in Talent

“**Human capital, is our only resource** and how we allocate that from one place to another, UiPath is going to be a critical component of that.”

Huw Richards
Head of Digital Investment Banking
J.P. Morgan

UiPath Automation Maximizes Productivity Across Sales & Trading

Sales	Trading	Research
Trade Bookings P/L Reporting News Aggregation	Client Distribution Lists Corp Action Monitoring Trading Recaps	Market Commentary Position Monitoring Trade Flows Tracking Securities Analysis Data Extraction Request for Quotes



Multi-Leg Trade Bookings for a Global Brokerage

Sales traders at a Global Brokerage use UiPath Automation to book multi-leg swaps trades across multiple systems; ensuring accuracy and speed



Securities Analysis for a Leading Investment Bank

Fixed income traders at a Leading Investment Bank use UiPath Robots to extract agency mortgage offerings from MBS source website & trigger models to analyze daily offerings

Customer Highlight – US Bank

Top US bank reduces handling time and error rate

Top 3 US Bank

Industry: Banking and Finance

Region: Americas

Department: Trade Booking/Confirmation

Products: AI Center

Challenge

- The bank receives a high volume of securities trade transactions as unstructured emails
- Trade processing agent required to carefully read through the email and extract required details. 16 different fields/entity types related to transaction, extracted from unstructured text/tables
- Validation of extracted entities and reconciliation prior to entry into the trade platform
- Single transaction can take multiple minutes of agent and high-cost of errors

Solution

- Re-training of UiPath Entity Recognition ML model for fields/entities required to be extracted
- Robots along with ML unstructured entity extraction model was deployed
- This scenario can be easily applied to other unstructured forms of data in banks like contracts, policy documents, customer queries, complaints among others

95%

Reduction in Average Handling Times

Reduced

Error rates for trade transactions

92%

Accuracy in extraction of unstructured fields/entities

Processes Automated

Securities transaction extraction & processing

Automation Themes in Wholesale Banking



Front to Back Alignment

For Lending, Trade Finance and Treasury positions

Interoperability

Seamless integration between legacy and new age tech

Digitization

Of manual paper-based processes especially in Trade Finance (LCs/BGs)

Controls & Compliance

Monitoring breaches and strengthening controls and assessments

Customer Highlight – US Bank

Top US bank leverages automation to improve SBA loan processing time

Top 3 US Bank

Industry: Banking and Financial Services

Region: Americas

Department: Lending Originations

Products: Attended, Document Understanding

Challenge

- Automation of CARES Act and Paycheck Protection Program (PPP) SBA Loan Processing
- As part of the CARES Act, the Paycheck Protection Program (PPP) provides \$349 billion of loan funds to support SMB during COVID crisis. It is applicable to all the employers with less than 500 employees.
- Lenders started accepting applications on April 3rd and are facing operational challenges in processing these applications resulting in huge backlog.

Solution

- UiPath end to end platform has been leveraged by several banks and credit unions across small business lending lifecycle, starting from
 - Extracting borrower information from forms such as PP/941/940/944/1099 Misc,
 - performing detailed loan verification checks
 - submitting data into SBA portal
- This has provided much needed relief in terms of increasing the throughput of the process, e.g. one of the banks saw 90% reduction in time taken to upload loan data into SBA.

24B

Loans processed!

48-72

Hours Build Time

93%

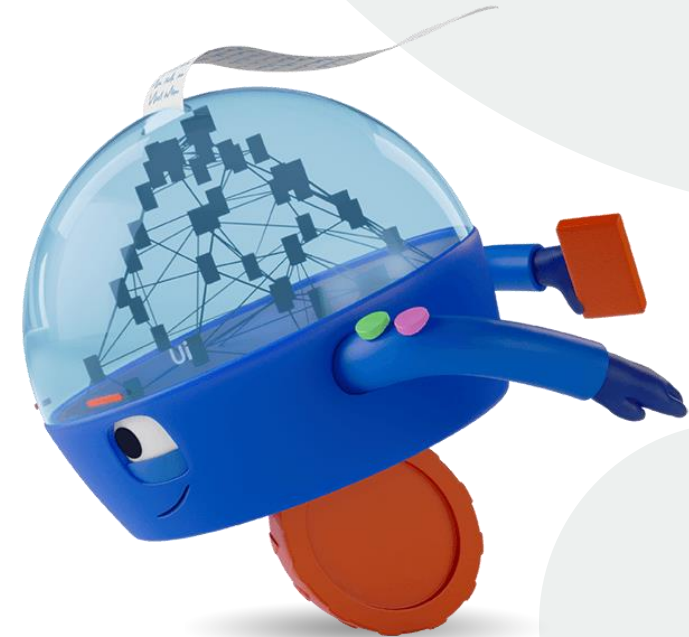
Reduction in loan processing time

Processes Automated

Lending Origination Process
Underwriting
Loan Guarantees

Become an employer of choice

Unlock employee potential



ESG & Sustainability

Business reputation

- Customers increasingly expect banks & insurers to take a stand on ESG issues
- Younger generation prefer to work for companies that has a positive impact on the world

Regulatory pressure

- Regulatory initiatives such as EU Taxonomy and Corporate Sustainability Reporting Directive (CSRD)
- Greater disclosure of climate-related risks, incorporating climate change into stress testing scenarios, risk modelling

Pressure from external stakeholders

- Stakeholder capitalism is on the rise
- External stakeholders (activist groups, investors, regulators, customers, suppliers, rating entities) are calling upon companies to act in a socially responsible manner

Executive accountability

- Companies have started incorporating ESG measures in their executive compensation/ incentive plans and KPIs
- Growing pressure to hold executives accountable for ESG results

Industry Specific Drivers



Banking

New/ differentiated products

- Banks are seeking competitive edge with innovative green products such as social bonds, sustainable mortgages and sustainability-linked loans



Insurance

Investment practices are subject to scrutiny

- Insurers face damage to their reputations for investing in companies whose ESG considerations are questionable
- (Re)Insurers must demonstrate a key role as Risk managers in supporting the transition to a net-zero economy



ESG

ESG has a major impact on losses

- ESG risks have a major impact on insured and uninsured losses
- With **natural catastrophe** losses on the rise, insurers are looking for ways to manage their environmental exposures appropriately

UiPath Automation Platform for ESG and Sustainability in BFS

“Currently, the variegated quality and quantity of data companies collect for ESG reporting is uneven. This poses significant challenges to understanding ESG impact overall.”

– Forbes

Area of focus for Automation

Recurring Reporting of ESG & Sustainability Metrics

Data Monitoring, Measuring, Governance & Controls

Sustainable Financing Journeys Automation

Carbon Emissions Calculator & Impact Analysis

Metrics from existing implementations of UiPath Platform

80%

AHT reduced for regulatory reports generation¹

70%

Productivity Improvement across Financing Journeys²

65%

Reduction in Carbon Emissions from Cloud Computing Infrastructure³

30X

Covid related Moratorium requests processed improving customer experience⁴

Leveraging UiPath Full Automation Platform for enabling ESG & Sustainability efforts in Banking and Financial Services



Environment

- Monitoring and measuring Carbon Emissions targets across Portfolios & commitments
- Assessing impact from CRE, Human resource, financing operations, IT & Infrastructure



Social

- Human capital development through digital upskilling, safety and health
- Improvement across Customer Experience and Supply chain, vendor journeys



Governance

- Governance, Audit and Controls Assessment across ESG & Sustainability Journeys
- Data and Cyber security management across the Banking and Financial Services Enterprise

Audit/Risk/Controls

Automation is relevant across all facets of GRC Lifecycle

Automation of Risk Assessment framework and Controls Testing enable pivot to continuous assessment and testing of risks and controls. This is key to raising the effectiveness of Business and Compliance assurance.

Current State Pain points

Data for risk assessments is not available and is gathered manually from various sources

Periodic Controls testing covers small data samples, is costly and not so effective in evaluating controls

Manual risk assessment and controls testing prevents the pivot from Annual Testing to Continuous Assessment / On Demand Testing

Automation Value Proposition

Automated data gathering for risk assessments and controls testing

Data-driven process & deviation insights / analysis

Automated assessment or risk and derivation of Risk Rating

Automated execution of scripts to evaluate controls effectiveness

Automated drafting of results for the Risk Manager/Controls Tester

Customer Highlight – Investment Bank

Investment bank automation to comply with SOX

Leading Investment Bank

Industry: Banking and Financial Services

Region: Americas

Department: Audit

Products: Attended

Challenge

- 100+ applications and 1000+ Controls instances to test
- As part of regulatory requirements included SOX Broker/Dealer rules among others
- Initial testing was limited sample based with large effort going into testing/documentation
- Most of the process was manual intensive with 10+ resources engaged in the activity

Solution

- Identified controls for automation, designed, developed and tested the controls workflow
- UiPath Bots were leveraged to extract control data, perform dynamic sampling, take evidence screenshots, document required workpapers
- Automation resulted in increasing the coverage of assessment
- Resulted in significant improvement in consistency of controls testing and quality of documentation as per requirements.

43 sec

for Controls Testing vs
25 Mins manually

Improvement

in reporting & preparing
evidence logs

1000+ Samples

Vs 60 Samples earlier

Processes Automated
Controls Testing for SOX

Citizen Developed Automation



Unlock the COE's Production Capacity

Front & back-office teams have many processes involving reconciliation, reporting and data extraction that don't meet requirements of scale



Leverage rapid and flexible automation

Analysts require the ability to quickly change workflows on the fly to deal with different data or client sources



Enable workforce of the future

Digitally native employees have an expectation to be provided with productivity tools

Customer Highlight – Investment Bank

Leading Investment Bank

Industry: Banking and Financial Services

Region: Americas

Department: Investment Banking

Products: Attended

Challenge

- Junior Bankers struggled with creating deal related and proactive presentations across multiple IB desks and teams leading to long hours, lower productivity and poor employee experience.
- Some of the examples included preparing pitch decks, trading comps, public information books, formatting earning models

Solution

- Analyst selects slides to be created from pitchbook template database (e.g., title slide, cap table, peer trading, ownership summary, etc.)
- Analyst inputs required fields (e.g., company to be profiled, peers, date ranges) based on templates selected from database
- Robot navigates to different data sources (FactSet, Cap IQ, websites, etc.), extracts data and formats into PowerPoint templates
- Robot compiles all completed templates into single file, adjusts formatting and saves to desktop for analyst review

65%

Reduction in manual effort

1.5 hours

Time reduction per
pitchbook to under 30
minutes

Processes Automated
Pitchbook creation

UiPath and Banking



Large Banking and Financial Services Success Stories

Top 3 US Bank	Top UK Bank	Top Japanese Bank	Top 3 US Bank
Adapt to Evolving Consumer Behavior and Expectations	Towards Fully Automated Enterprise	An Enterprise Automation Program with citizen development	Focused on amplifying key personas in the bank
Savings: \$70 MM	Gained 1+ M hours	Savings: \$450M	Savings: \$50+M
In place:3+ Years	26 business units, 700 unattended	Hours gained: 3M Hours	Hours gained: 1+ M
Current – 20K Robots	In place:2.5 Years	Target Medium Term: \$1B Savings	Increase FCR and NPS
Target – 60K Robots	Operating Model: Centralized and moving to Federated to drive scale	Trained 1500+ Citizen Developers	Operating Model: Centralized and moving to Federated to drive scale
Operating Model - Federated		Areas under scope: Retail Banking, Cards and Payments, Securities Operations, Corporate Functions	Areas under scope: Commercial Lending, Loan Booking, Contact Center, Help Desk, Mortgages
Attended/Unattended/AI/ML			
Areas under scope: Contact Center, Customer Servicing, Mortgage Originations, Servicing and Treasury Operations			

UiPath Footprint: Banking and Financial Services

1400+ Clients

Large /Universal Banks

Capital Markets /Investment Banks

Asset & Wealth Management

Super Regional & Regional Banks

Data & Platform Providers

Financial Exchanges

FinTech

JPMorganChase



BANK OF AMERICA



WELLS FARGO



SMBC



BARCLAYS



NatWest



Santander



TD Bank



Goldman Sachs

Morgan Stanley



E*TRADE



BNY MELLON



CRÉDIT AGRICOLE
CORPORATE & INVESTMENT BANK

NOMURA



NORTHERN TRUST

RAYMOND JAMES®

Julius Bär



Fidelity



STATE STREET



CREDIT SUISSE

TRUIST



REGIONS



FIFTH THIRD BANK



Comerica



Citizens Bank



KeyBank

fiserv.



FIS



Broadridge



MORNINGSTAR



MSCI

S&P Global



THOMSON REUTERS



FINASTRA



SET
The Stock Exchange of Thailand



NYSE



London Stock Exchange



Grupo BMV



bvc



TMX



JPX
JAPAN EXCHANGE GROUP



TEL AVIV STOCK EXCHANGE

EQUIFAX

intuit.



C6 BANK



Square

DMM FinTech

Klarna.

Automation across Banking and Financial Services

The four pillars of the fully automated enterprise™



Assign automatable work to robots

Robots do the mundane and repeatable work



Provide a robot for every person in the company

Robot assistants augment and empower human workers



Democratize development and consumption

Workers can automate simple tasks with low-code apps



Unleash AI across every facet of work

Deploy AI to build smarter robots and spot every automation opportunity

The UiPath Platform delivers the fully automated enterprise

Automation Opportunity in Financial Services is Large

44%¹

of work is automatable in financial services, representing 24.4 million employees worldwide



The UiPath Automation Platform enables Financial Services to automate operations, customer facing processes and other business functions.

Appendix – additional use case slides removed for recording only



Customer Highlight – Middle East Bank

Middle East bank achieves 95% reduction in error rates

Middle East Bank

Industry: Banking and Finance

Region: Middle East

Department: Merchant Onboarding

Products: Unattended Automation

Challenge

Create or add terminals based on vendor requests in Banking application and update their information in core system application, followed by closing the tickets.

Solution

- The solution is based on unattended automation and involves waiting for human approval, four mapping files and two coordinated robots that perform different tasks.
- In the case of any unapproved requests by human, for adding new terminals, this information will be found in the daily report file the robot generates.
- At runtime, the RPA bot application will check ticket applications for new POS Creation tickets, saves and opens them.
Further, manual intervention is required. The user checks the agreement form and copies the account number. When done, the bot takes over. It will log a new POS in Banking system.

80%

Percentage of effort automated

75%

Reduction in AHT

95%

Reduction in error rates

Increase

Merchant satisfaction

Processes Automated

Merchant Acquisition

Account/Infrastructure set up

Customer Highlight – Asian Bank

Leading Asian bank automates all of their remittance process

Leading Asian Bank

Industry: Banking and Financial Services

Region: APJ

Department: Trade Finance

Products: Unattended

Challenge

- Fed E Biz – Trade Finance module is a digitized Trade platform which facilitates consolidated view of Letter of Credits, Bank Guarantee and Documentary Collections with various Inquiries and Transaction forms.
- Outward Remittance (OR) requests submitted in Fed eBiz application is validated by the staff in operations department and the corrected & approved OR applications are then filled into Finacle manually.

Solution

- UiPath Robots fetch the outward remittance data from an Oracle DB and store to RPA SQL database.
- Robots post the transactions in Finacle by login as maker. BOT login to Finacle as checker and approves the transactions, reference number from Finacle is captured and updated in RPA SQL DB and application Oracle database.
- Summary of the transactions are emailed to the user at the end of processing

100%

Automation of remittance processing

0%

Operational errors

7

Bot runs throughout the week

Processes Automated

Outward remittance processing