



National Bank of Canada

AGENTIC PRIMER & APPLICATION



The Case for expanding to Agentic Automation

Operational efficiency is no longer an advantage, it is a competitive imperative

Robotic Process Automation (RPA) has helped institutions streamline repetitive tasks, reduce costs, and improve compliance for more than a decade, but RPA used alone has reached a ceiling:

Unlike traditional bots, Agentic AI agents are trained to understand context, interpret unstructured data, and explain their reasoning. They're not just automating workflows—they're replacing entire roles, particularly in high-volume, low-complexity domains like financial crime compliance, KYC onboarding, and transaction monitoring.

Organizations will generate value in the following ways. Close interaction with finance for extraction is essential for making this “real” on the balance sheet



Revenue Creation

Generating new revenue sources, speeding up collections and eliminating and reducing PCLs



FTE Reduction

Eliminating in part or whole the need for FTE involvement in a process



Capacity Creation

Giving back time to teams to focus on ancillary or value-added tasks



Time Saved/Created

Demonstrable time removed or eliminated from a process



Risk Reduction

Reducing identified risks, or managing audit findings



Cost Avoidance

Removing the need for either duplicate costlier solutions and moving budget items



Customer Experience

Enhancing direct customer experience on any channel (branch, CC, online, mobile, etc.)



Fine Avoidance

Enhancing processes to directly mitigate or eliminate regulatory gaps and associated fines (i.e.: NCO)

**NB: not an exhaustive list of savings/revenue opportunities (i.e.: additional areas may include labour arbitrage or ancillary treasury benefits)*



What do these models/approaches do well?

Three generations of AI show a clear evolution in task handling approaches and outcomes:



TRADITIONAL AI

Typically used to solve analytical tasks faster and more efficiently than human operators (classify, evaluate, predict, or optimize the use of data and data sets)

- *Forecasting sales*
- *Customer Segmentation*
- *Sentiment analysis*



GEN AI

Used to create new content (audio, code, images, text and video) and can use unstructured data more readily

- *Designing Concepts*
- *Creating copy*
- *Generating code*



AGENTIC AI

Has the ability to plan and execute against defined objectives, and can use tools like the web, systems, as well as other AI models and agents

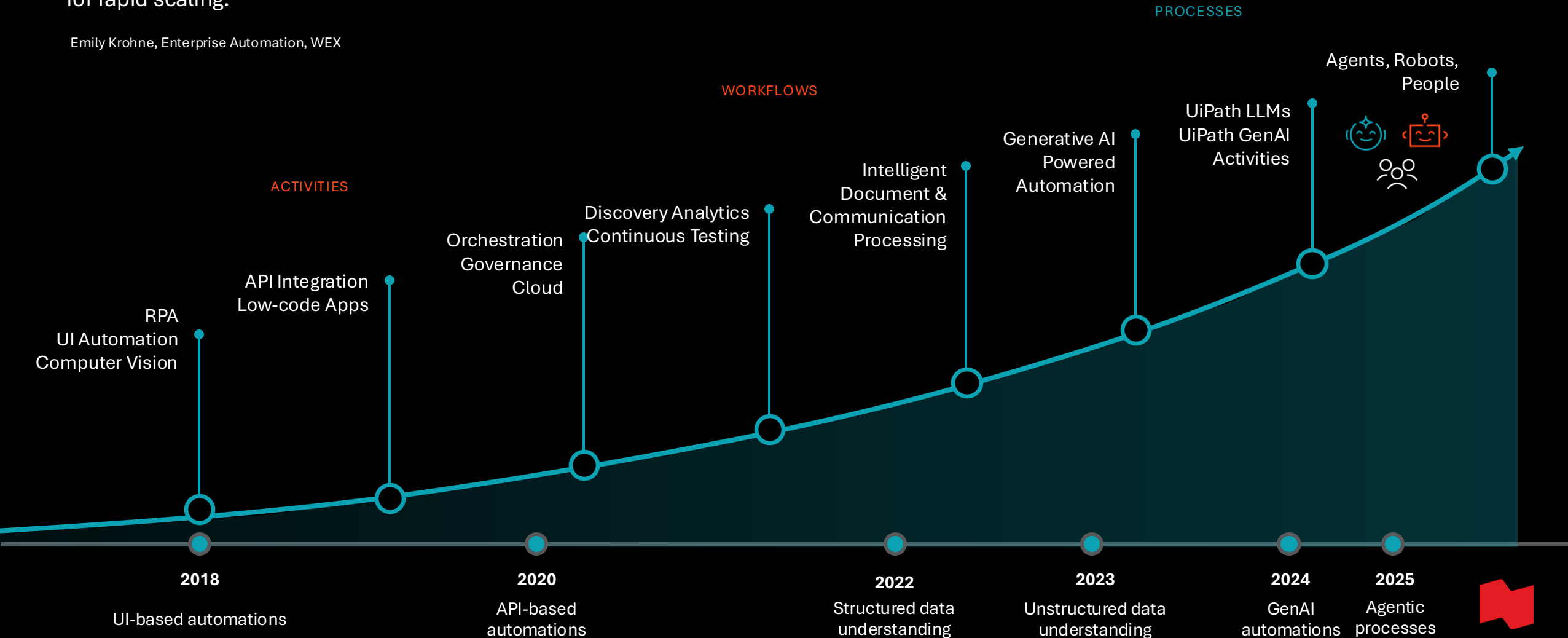
- *Context awareness and memory*
- *Language and communication*
- *Collaboration and coordination*
- *Extensive tool usage*
- *Learning, and error correction*
- *Reasoning and problem solving*
- *Creativity and innovation*



UiPath journey to Agentic Automation

“Agentic automation enables us to make informed decisions and quickly adapt to business changes for rapid scaling.”

Emily Krohne, Enterprise Automation, WEX



You can deploy this controlled platform today:



Agents



People



Robots

PROCESSES

Agentic orchestration | BPM | Process intelligence

WORKFLOWS

Agentic & robotic workflows | Human-in-the-loop | Agent evaluation

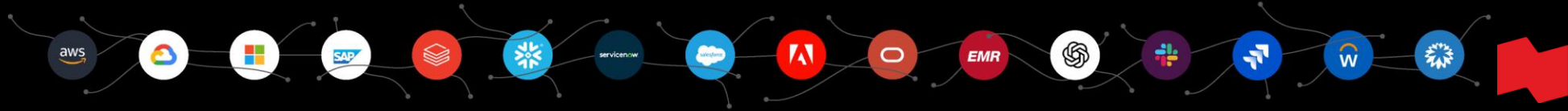
ACTIVITIES

Agentic activities | RPA & API | Forms & apps | IDP

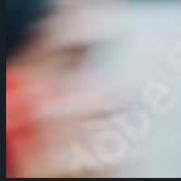
FOUNDATION

Security & governance | Data & API integration | AI trust, context, models | Low-code & pro-code

Systems, Applications, & Data



APPENDIX





LOAN ORIGINATION PROCESS

AGENTIC USE CASE

The challenges

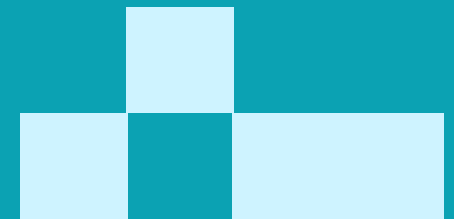
Traditional loan origination processes are manual, time-consuming, and error-prone “with an average processing time of 11 days and a 27% error rate*.”



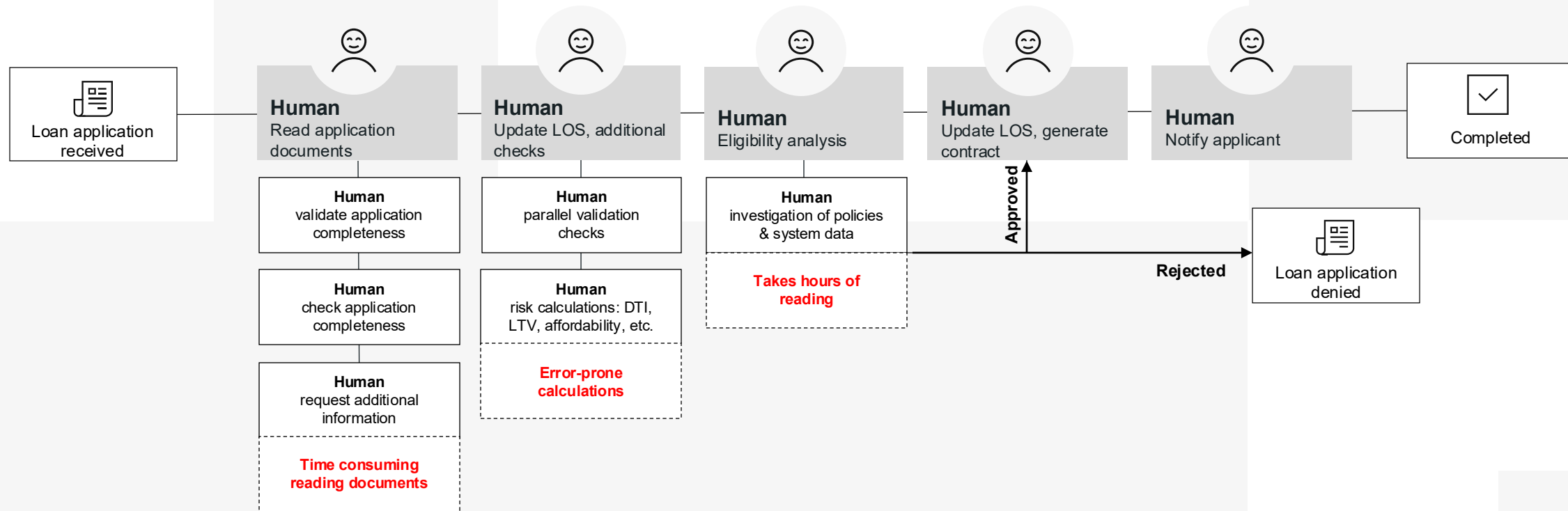
Manual document processing creates bottlenecks.



Inconsistent decision-making leads to compliance risks.



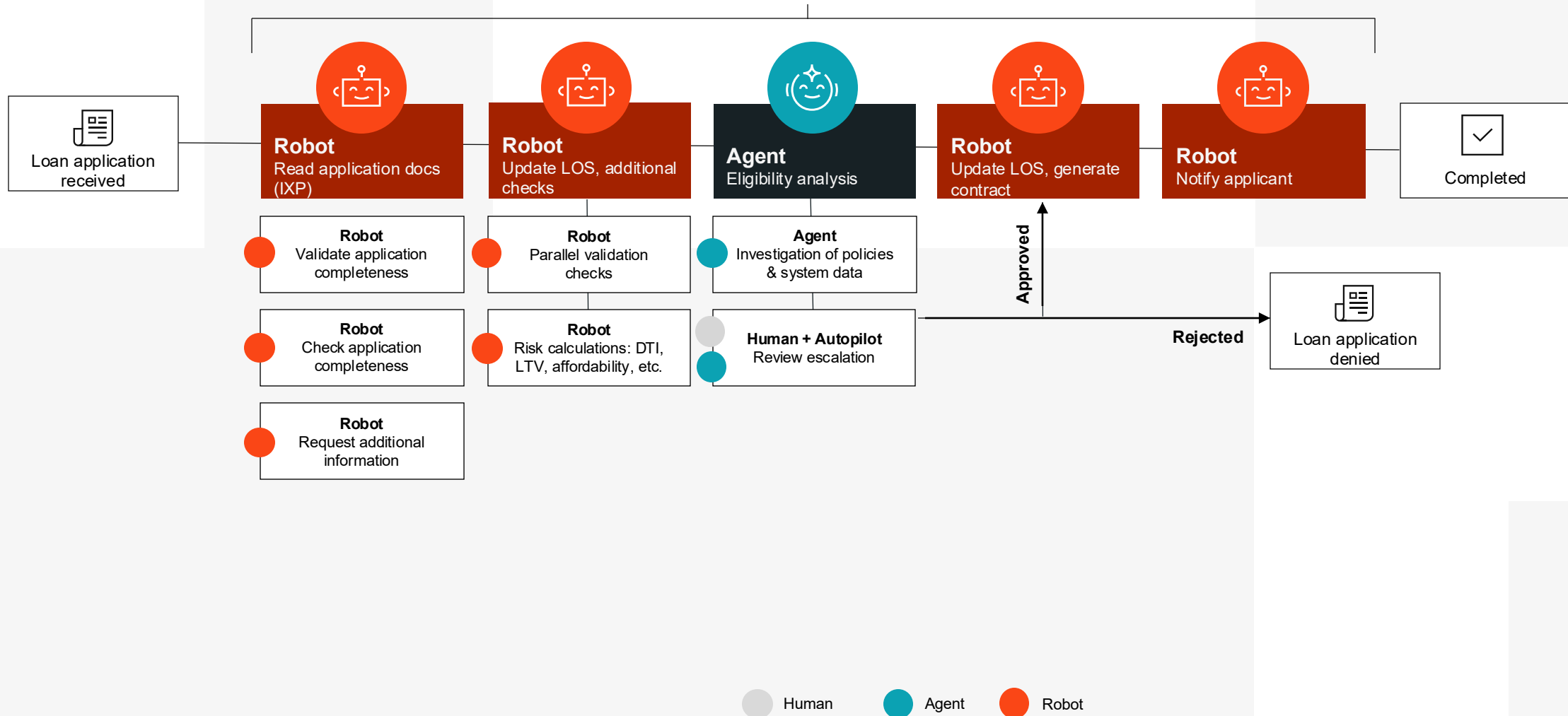
Existing manual workflow



Loan origination process

Upgraded workflow

Agentic Orchestration – Loan origination



The Value of our Agentic Platform

ENTERPRISE AGENTS



Trustworthy AI agents that act independently and **make dynamic decisions**.

AGENTIC ORCHESTRATION



End-to-end process flows for business outcomes across robots, agents, and people.

BEST-IN CLASS AUTOMATION



Core automation and integrated value across the platform including RPA, API, IDP, Test, PM.

TRUSTED CLOUD



Cloud-first innovation with enterprise-grade governance and reliability.

AGENTIC TESTING



Supercharge testing with AI agents that accelerate, simplify, and extend the entire testing lifecycle.

We found that there are 5 core strategies for Agentic Success:

1

Embed Autonomy into High-Value Workflows

Deploy agentic AI in areas like loan processing, fraud detection, and compliance monitoring

Let AI agents act independently within guardrails to reduce manual intervention and accelerate decisions

Example: An AI agent can autonomously approve low-risk loans based on real-time creditworthiness data

2

Leverage Real-Time Data for Proactive Decision-Making

Integrate agentic AI with live data streams to enable dynamic responses

Use behavioral signals, market trends, and transactional data to adjust strategies instantly

Example: AI agents can rebalance portfolios or flag suspicious transactions midstream

3

Deliver Hyper-Personalized Customer Experiences

Use agentic AI to tailor financial advice, product recommendations, and alerts

Adapt interactions based on customer goals, financial literacy, and life stages

Example: A first-time borrower might receive simplified guidance, while a seasoned investor gets detailed forecasts

4

Strengthen Risk and Compliance Frameworks

Automate regulatory checks, internal audits, and fraud prevention with agentic systems

Ensure continuous monitoring and instant escalation of anomalies

Example: AI agents can validate identity documents and enforce policy thresholds in real time

5

Scale Operations Without Increasing Overhead

Agentic AI as a digital workforce to handle routine decisions and tasks

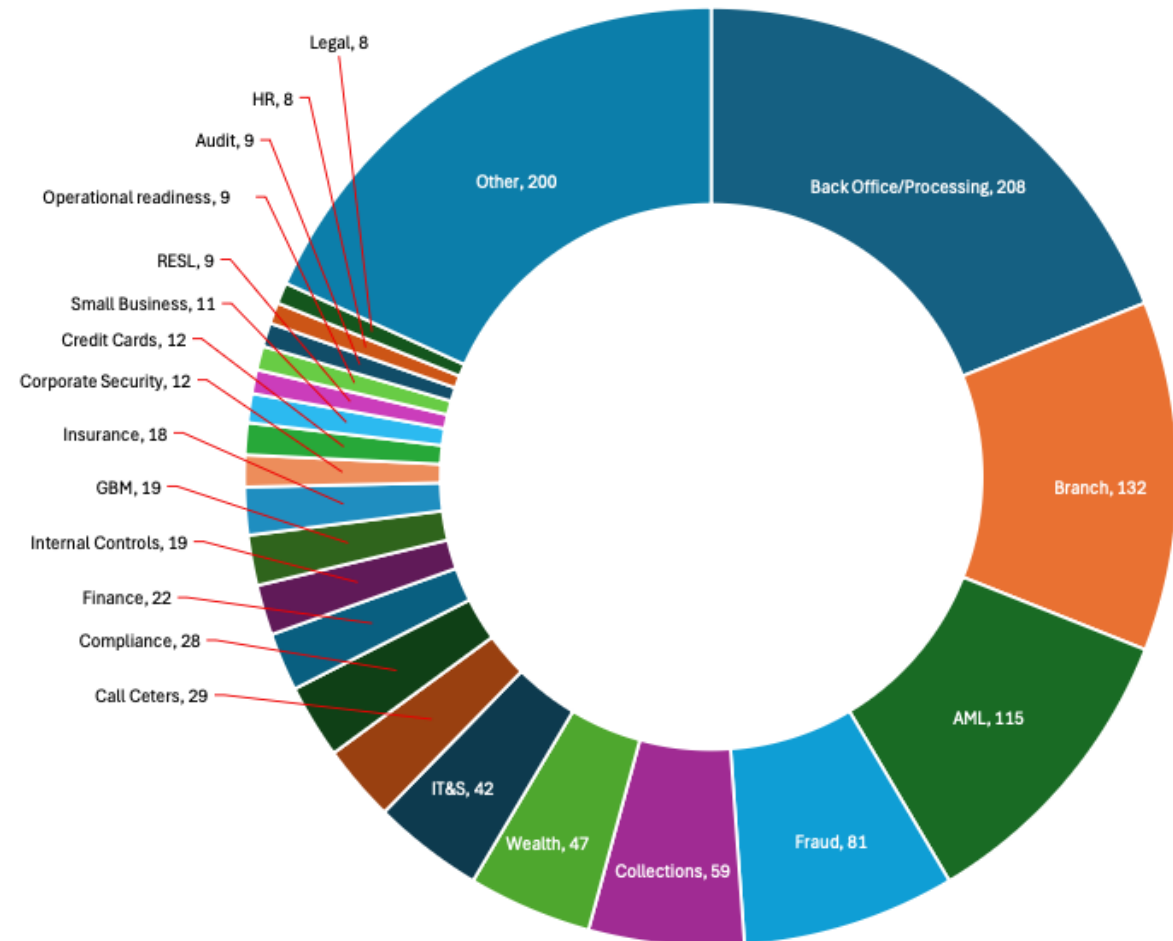
Free up human teams for strategic initiatives and complex problem-solving

Example: Customer service agents can resolve password resets or balance checks instantly, escalating only nuanced cases

Top 15 Bank in North America – Case Study

Number of Processes by Dept

Area of Operations	Number of daily active processes	%
Back Office/Processing	208	19.0%
Branch	132	12.0%
AML	115	10.5%
Fraud	81	7.4%
Collections	59	5.4%
Wealth	47	4.3%
IT&S	42	3.8%
Call Ceters	29	2.6%
Compliance	28	2.6%
Finance	22	2.0%
Internal Controls	19	1.7%
GBM	19	1.7%
Insurance	18	1.6%
Corporate Security	12	1.1%
Credit Cards	12	1.1%
Small Business	11	1.0%
RESL	9	0.8%
Operational readiness	9	0.8%
Audit	9	0.8%
HR	8	0.7%
Legal	8	0.7%
Other	200	18.2%
TOTAL	1097	100%



Initial UiPath Agentic Pilots across lines of businesses at your peer banks



Consumer Banking

Post close loan validation, income verification, Fraud Investigation

Agents think

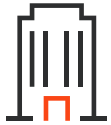
AI agents detect loan data defects, analyze income patterns, create narratives for Fraud ops

Robots do

Robots extract data from loan file, get transactions from core banking

People lead

Underwriters review the debt/income ratios, Fraud operations validate the disposition summary



Commercial Banking

Commercial Lending QA/QC, KYC Document Validation, CIP Validation

AI agents interpret loan validation rules, detect errors across client documents

Robots extract data from credit memos, LOS and Client onboarding platforms

Onboarding teams perform enhanced due diligence for high-risk clients, review escalations



Capital Markets

Trade Ops: Service request triage, Middle office reconciliation analysis

AI agents detect intents in client emails, extract trade data and perform semantic matching

Robots downloads attachments, update trading system of records

Middle office teams review escalations, approve system of record updates



Payments / Treasury

Treasury ACH/Payments investigations, Merchant Code classification

AI agents detect type of exceptions, perform research on Fed portal and create summaries

Robots gets data from payments platform, updates statis data

Treasury client servicing team reviews the resolution summary, approves the data updates



Wealth and Asset Management

Term sheets reconciliation, Customer account rollovers

AI agents interpret complex trade agreements, client positions

Robots handle OTC trade platform updates, downloads from document hubs

Operations teams approve trade platform updates



Corporate functions

Payroll reconciliation, Invoice disputes (P2P),

AI agents perform break analysis for payroll exceptions, semantic data interpretation for 3 way matching

Robots provide access to HR and Payroll platforms, download invoices

Payroll managers review any changes to paystubs, Finance operations approve journal entries and review vendor communications