

Automation QUICK START GUIDE

A practical resource for evaluating, prioritizing, and staging the automation of business processes with RPA and Cognitive Automation



Your RPA journey: Where to Begin and How to Progress

The Maturity Spectrum of Automation

RPA

RPA +
Exceptions
Handling

What does it solve?
High-volume process with variability and judgment

Cognitive

What does it solve? Manual, repetitive, rulesbased processes

 RPA can be a good first step for automating data gathering, reconciliations, validations, structured copy-paste data entry, and any repetitive processes that requires no human

judgment

 Key point: may result in exceptions due to automation limitations on the process that requires human effort/manual resolution

Automates 20 to 50% of a process

What does it solve?
RPA alone creates exceptions. Adding
Machine Learning Tasks to handle
exceptions reduces manual effort.

- For operations starting their RPA journey today or for those who have experimented with rules-based RPA, adding ML to identify and handle exceptions reduces bot error rate and allows a business to scale automation faster. Can also be used to migrate automated process from another RPA tool to a more robust RPA platform to improve ROI
 - Key point: reduces exceptions and frees up additional human capacity

Automates 60-75% of a process

 Adding Al-powered cognitive automation to RPA allows bots to learn from historical data and real-time human actions. This radically increases automation rate in a business process with high variability / judgment-based decisions

 Key point: the combination of RPA and Cognitive automation drives true digital transformation and delivers the highest ROI

Automates up to 90% of a process

Early Stage

Growth-stage

Digital Operations



Use Case identification and Scoring

These criteria and guidelines will help you determine the suitability of a business process for intelligent automation and prioritize these processes based on metrics. Each criterion has a plus or minus numeric score. Tally the scores you assign to each criterion will help you directionally prioritize your processes for automation.

	Process Criteria	Criteria Definition	Scoring	KPIs / Metrics
Impact (Benefits)	Materiality (Scope of Impact)	 Process requires a high number (10+) FTEs and is performed frequently (e.g., hourly or daily) 	+ 10	FTETransaction volume
	Suitability (Automation Candidate)	 Process has repeatable business rules that can be automated (RPA) Process involves the operation of one or more systems which require manual intervention Process includes judgment work on variable tasks and / or unstructured data (Cognitive) 	+ 5	FrequencyPercentage of rules vs. judgments
	Regulatory / Risk	 Process supports high-risk, control, regulatory and compliance related requirements which would be enhanced through automation 	+ 3	Percentage improvement in coverageReduction in risk
	Financial	 Automation of the process would drive additional revenue, grow business volumes / market share or would result in recovery of costs that can not currently be recovered 	+ 5	Increased revenue% of market share improvementDollar value of cost recovered
Implementation Complexity (Cost to Achieve)	Process Complexity	 Process has repeatable steps that are uniformly executed, regardless of the people it takes to perform them (RPA) Process is stable and is not undergoing major change or redesign prior to automation Process has numerous variations and/or rules or relies on human judgment that would be impossible to configure one by one (Cognitive) 	+ 5	 Number of major process variations Number of process roles Internal or external process roles
	Regional Complexity	Process is controlled / governed in one location rather than across multiple regions	+2	Number of locationsNumber of local offices
	Data Privacy	Process involves PII that may cause cross-border data privacy issues	- 3	DPO requirements
	Technical Complexity	 Data required to execute process is poorly defined and inconsistent Process requires data pulled from more than 5 systems 	-1	Number of applicationsNumber of screensNumber of data sourcesNumber of external systems
	Organizational Complexity	Process is conducted across multiple disparate teams and/or is not standardized	- 2	Number of teams supporting process



Total:

Use Case Identification: Workflow Overview

This is a general, customizable workflow for developing use cases to build out your Intelligent Automation book of work.

Key Activities	Identify Candidates	Develop RPA Profiles	Develop Use Cases	Prioritize Use Cases
Input	 Level 1-3 processes with associated process characteristics (FTE counts volume, optimal complexity, risk and criticality) 	Ranked Level 4 processes Process Profile Template	Process flow diagrams of the selected use cases processes	 High-level target state use case design Target state process description
Detailed Activities	 Identify potential Level 4 processes and drill down to tasks Develop initial process ranking based on characteristics 	 Develop process profile for each candidate Conduct process profile review session to refine and finalize each process profile Store profiles in repository 	 Review current state process flow Identify steps that can be removed (leaned) Develop post-automation depiction of the process 	 Define metrics to assess implementation results Develop impact analysis Prioritize/select use cases for pilot Complete Lean review (optional)
Tools and Outputs	Level 1-4 Process Candidate Map	Process Profile Documents	Use Case Design	Impact Analysis
Roles	 Business Lead (A/R) Business Analyst (C) Process SME (C) Business Tech Lead (C) 	 Business Lead (A/R) Business Analyst (C) Process SME (C) Business Tech Lead (C) 	 Business Lead (A/R) Business Analyst (R) Process SME (C) Business Tech Lead (C) 	 Business Lead (A/R) Process SME (C) Business Tech Lead (C)

Key: A/R: accountable / responsible; C: consulted

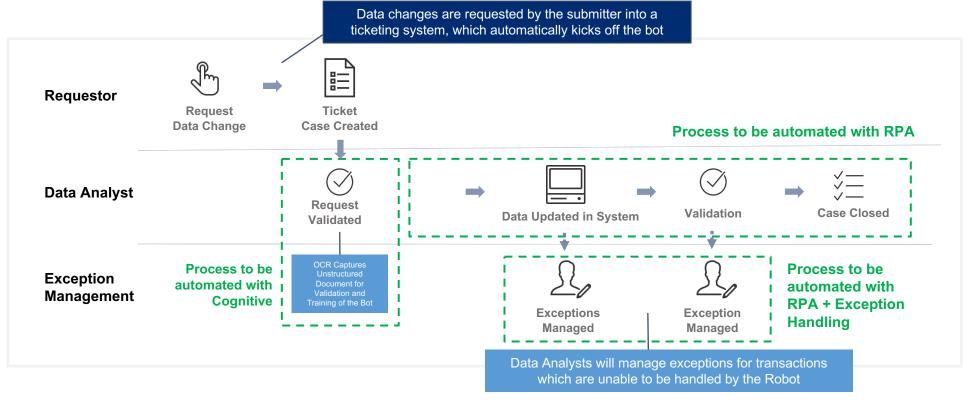
Potential considerations (dependent on institutional protocol)

- Have a more than 5 processes across the organization been evaluated and considered for potential automation?
- Was a Lean review completed for the identified use cases?
- Do all the process candidates have documented workflows?
- Can the target state process flows be further improved?
- Have all potential impact metrics been identified and analyzed?
- Has the reason for the selected use cases been articulated (e.g. largest impact, ease of implementation)?
- Has the Use Case Prioritization been agreed to by the Business Lead?



Use Case Design: Illustrative Process

- The infographic below is a data entry process that originates with a workflow request, receives a manual validation, and then is
 manually updated in the requested source system. It can serve as a guide for how to visualize your business process.
- This particular business process of receiving, manually validating requests, and then updating the source system is performed by 35 analysts globally.
- RPA and Machine Learning are leveraged in concert to automate the validation, updating, and closure of each case.





SPA benefits

Less

Banking Ecosystem

Consumer/Retail

L1 Business

L2
Business

Retail/Business Banking	Lending/ Mortgage	Cards
Origination	Origination	Origination
KYC, AML	Loan Application Processing	Fulfillment
Account Maintenance	Underwriting and QC	Authorization
Investments and Brokerage	Documentation & Funding	Chargeback
Cash Management	Account Maintenance	Settlement
	Default Servicing	Query Handling and investigations
	Loan Closure and Lien Release	

L3
Processes
across
Functions

Marketing Analytics
Fraud Analytics
Risk Analytics
Fraud/Risk Operations
Payment/Recon Operations
Customer Interaction Management

Private/Institution

Research	Trading	Corporate Finance		
Research Advisory	Trade Finance	Advisory		
Analytics	Trade Execution	Issuance		
Research Production	Debt Finance	Complex Finance		
Investment/ Valuation Maturity	Custody & Clearing	Wealth Management		
Mergers & Acquisition	Account Servicing	Service Usage Tracking		
Arbitrage	Broker/Dealer	Business Service Provisioning		
	Trading Risk Management			
	Confirmations			
Cash Management & Payments				
Inventory Management				
Data Management				
Clearing & Settlement				
	renue Accounting & Cor Collateral Management			
Trade Lifecycle Management				
110	Trade Ellecycle Management			

Enterprise Operations

Shared Services	Enterprise Supply Chain	Global Functions
Finance & Risk Operations	Sourcing	Financial Planning & Analysis
HR Shared Services	Payment Operations (A/P & A/R)	Legal
General Services & Travel	Procurement	HR
Resource & Location Strategy	Control & Governance	Risk/Audit
Risk & Compliance	Operations Support	IT/Infrastructure
	Purchasing Operations	СТО



Banking Case Studies

Consumer/Retail

L1 Business

L2
Business

Lending/Mortgage

Loan Application Processing

Process Background:

Title Documents are sent to loan analysts to be keyed into loan accounts, and sent to downstream process team for servicing via a workflow.

Process Inputs/Outputs:

Unstructured Documents (Title documents in pdf format), Loan Servicing System

Intelligent Automation Solution:

RPA Rules applied to initial front end process to provide lead in to analysts to train the robot to recognize actionable fields from the title documents; Machine Learning Tasks applied to the title documents to extract key data; RPA rules applied to accept and close out ticketing of title service request

Business Benefit:

55% Automation with RPA, 82% adding RPA + Exception Handling with 96% Quality; Decreased Title Serving time from 60+ minutes to 2 min per transaction (1000+ volume/mo)

37 FTE savings @ \$33,000 fully loaded cost per FTE (\$1.22MM)

Private/Institution

Capital Markets

Trade Execution

Process Background:

Brokers monitor FX Currency Thresholds of trades, and set limits for selling and buying of positions when the thresholds are breached.

Process Inputs/Outputs:

Bloomberg Terminal Trade Servicing System Outlook Email

Intelligent Automation Solution:

RPA rules applied to monitor threshold breaches and send alerts to brokers to be actioned (Phase 1)

Machine Learning Tasks applied to take action on breaches and offload trade positions (Phase 2)

Business Benefit:

89% Automation with RPA on Phase I with 85% quality 78% Automation with RPA + Exceptional Handling on Phase II with 90% quality

FX breakage exposure decreased from \$2mm per quarter to <\$15,000; bot execution 10x faster than the Broker

Enterprise Operations

Enterprise Supply Chain

Invoice Processing

Process Background:

Third party invoices are sent into the invoice processing queue to be validated by A/P team

Process Inputs/Outputs:

Unstructured Documents (Invoice documents in pdf and tiff format)

Procurement to Pay System Email and Work Flow Applications

Intelligent Automation Solution:

RPA Rules applied to initial front end process to provide lead in to analysts to train the robot to recognize actionable fields from the invoice documents

Cognitive applied to the invoice documents, which trained the robot to identify the necessary fields, and input into Procure to Pay system

Business Benefit:

60% Automation with RPA, 86% with Cognitive with 93% Quality; Decreased Invoice cycle time from 6-8 minutes to 30 seconds (3,000+ volume/mo)

67 FTE savings @ \$60,500 fully loaded cost per FTE (\$4.05MM)



Enterprise Supply Chain - Level 2 and 3 Process Candidates Map

L2 Business





Office (26)

Administrative

Control & Governance (69)

Audit Readiness and

Management (25.1)



Procurement

(511)Business Stakeholder

Relationship Mgmt

(102)



Strategy &

Functional

Leadership (21)



Support (35)



nvoice Processino

and Compliance

Payment Processing



Operations (65)

Administration (6)

PO Buyer (45)

POFA (8)

PMO (45)



Operational

Readiness and

Support (66)

Third Party Compliance (207)

Aggregate Data and

Report on a 3rd Party

(24.3)

Gather & Interpret

Data (53.5)

Monitor 3rd Parties

(24.3)

Processes across **Functions** Spend reporting and analysis (10)

Savings Validation

(17)

Operations, Sourcind

and Risk analytics,

reporting & metrics

Strategic Analytics

Development (5)

Workforce Planning.

Budgetary Control &

Internal Scorecards

Support (3) Deal Support & CFO

Marketing Content and Design (2)

User and employee

communications (4)

Functional / Org

Strategy (12)

Monthly Op Review,

Regular/Ad-hoc

reporting (3)

Talent Management

(2)

Control Gap and Issue Management (21.3)

Information Security

COB and Fraud

Management (11.3)

(11.3)

Contract Administration / Management (26)

Deal Reviews and Approvals (26)

Risk Assessments, Country Reviews

In Country Sourcing and Stakeholder Engagement (128)

Sourcing Execution

Supplier Information Sharing and Management (35)

(189)

Supplier Onboarding and Risk Mgmt (5)

Global Process Ownership (5)

Help Desk (20)

Quality Control and Assurance (5)

Service Delivery Management (5)

T&E Processing and

Vendor Record Maintenance (22)

Change Management Buying Desk (6)

Project Execution (24)

Reengineering and

Project Management

Project Tracking and

Reporting (8)

Training Content

Development &

Maintenance (6)

Solution Integrator **Global Process Design Processes** Management (1) (46)

> Solution Integrator Implementation & Config. (64)

Stakeholder &

Project Management (20)

Strategic Systems Planning & Roadmap

Provide Policy. Process. Risk Guidance (14.6)

Review, Analyze & Assess Data (90.4)

SPA benefits



Recommended starting point to assess your Organization's appetite for Intelligent Automation Less

More

(#) FTE

FTE Totals: 1.908 Global FTE Run Rate: \$126.88MM



Enterprise Supply Chain: Invoice Processing Case Study

Level 4 Invoice Compliance Process: Compliance Check of Third Party Invoices processed for payment through Procure to Pay system

Overview of the Process

Low coverage: 10% checked only

Highly unstructured: Invoices from Third party vendors in pdf or tiff format

High-volume: 1000s of transactions/month **Time-sensitive:** Same Day Processing

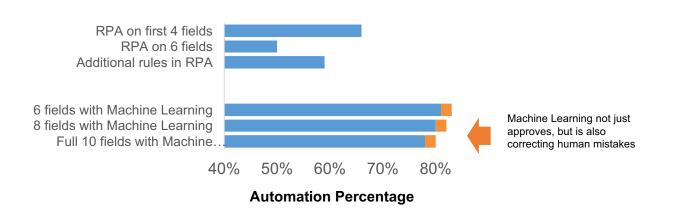
Global: 80 countries

Intelligent Automation Solution Phase 1: RPA

Testing how much can be accomplished with RPA

Phase 2: SPA

Machine Learning-based compliance based on 3000 transactions



Business Value Outcome Average of 60% STP with RPA, 86% STP with SPA/Machine Learning Applied 93% Quality (increase of >20% from Manual Process)

Decreased Invoice cycle time from 6-8 minutes to 30 seconds (3,000+ volume/mo), which decreased SLA breach by 70% Replicatable process and configuration for accelerated roll out in subsequent Invoice Processing areas

67 FTE savings @ \$60,500 fully loaded cost per FTE (\$4.05MM)

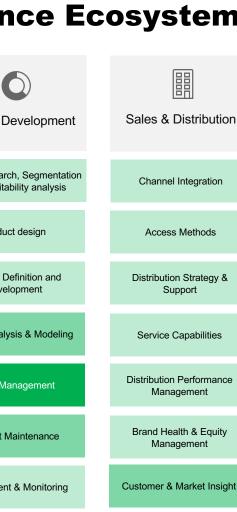
Benefit to Enterprise: Part of strategic effort to decrease costs in Enterprise Operations by >50% over five years



surance Ecosystem

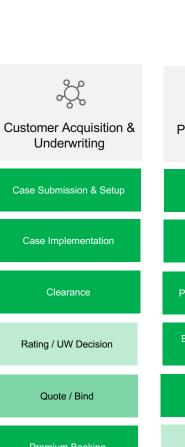
Ins
L1 Business
L2 Processes across Functions
L1 Business L2 Processes across

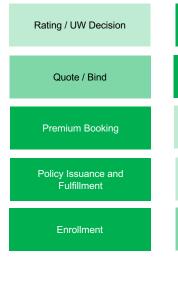


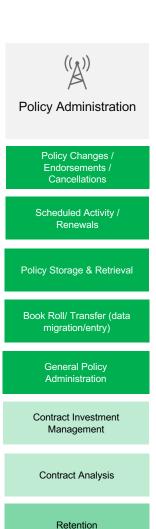




Management









Payments & Refund

Processing

Queries. Metrics. &

Reporting



Claims Reporting



Less

More





Insurance Claims: Claim Sanctions Processing Case Study

Global sanctions process involves name matching for individuals, organization, or vessel names to identify potential match or false positive for Sanctions

Overview of the Process

Highly Manual: Each sanction search is highly manual and repetitive with heavy copy and pasting from one system to another for Level 1 clearance

Highly structured: System to system data extraction and input with like for like fields

Time-Consuming: Each record takes approximately 6-10 minutes to complete Level 1 clearance

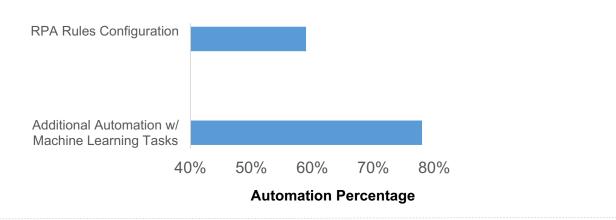
Time-sensitive: Same Day Processing

Smart Process Automation Solution

Phase 1: RPA
Apply RPA for rules-based
data extraction/data entry

Phase 2: RPA + Exception
Handling

Machine Learning Tasks applied to Exceptions



Business Value Outcome

Average of 60% Automation with RPA, 79% Automation with Machine Learning tasks added; 97% Quality, Decreased cycle time from 6-10 minutes to 90 seconds

Replicatable process and configuration for processes accessing similar source system

14 FTE savings @ \$71,600 fully loaded cost per FTE (\$1MM)

