

IIBA Dallas Chapter Meeting

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Role of Business Analyst in Automation

Introduction

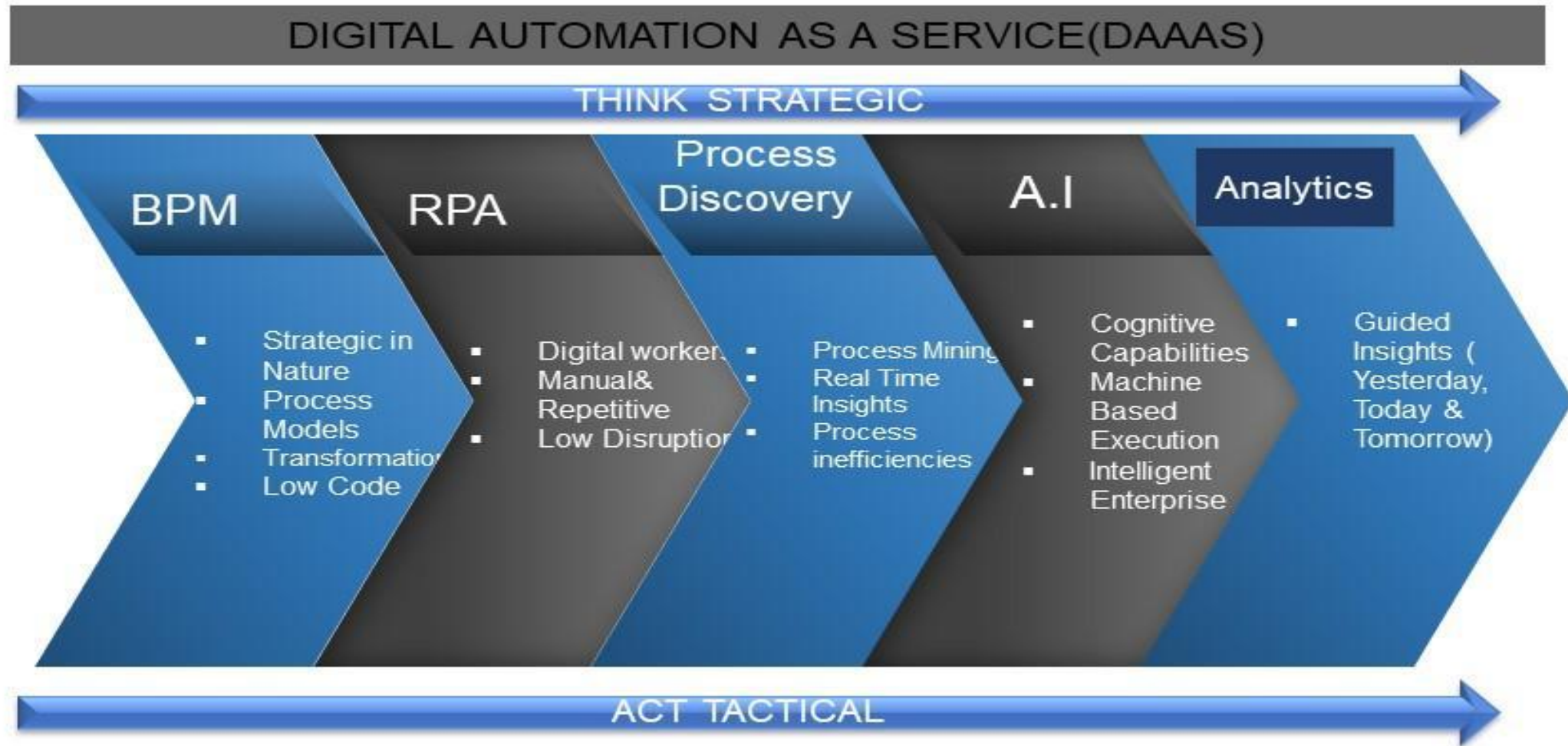
The Automation Analyst is a Key role that plays the foundation from RFP to End to End Automation

The Process Analyst identifies the Business process after a thorough evaluation, Identifies Process in-efficiencies, suggest areas of Improvement ,build traceability matrix and prioritizes Automation candidates

Role Specification

- Person be able to clearly communicate and build relationship to Business
- Prior Business Analyst experience and nice to have any Kind of Automation experience
- Able to Help Enterprise Architects to build the RFP, vet the vendors
- Perform Opportunity Assessments to Identify and Prioritize Business Process for Automation(Process Discovery)
- Identify the Process in-efficiencies and suggest ways to eliminate In-efficiencies and suggest for Re-engineering(Process Mining)
- Clearly documented process to generate Process Design Documents(PDD) which includes screen shots and step by step process
- Define the UAT uses cases and Success Criteria
- Act as SME and Liason between Business and I.T and resolve fires as needed

DIGITAL AUTOMATION



What is RPA



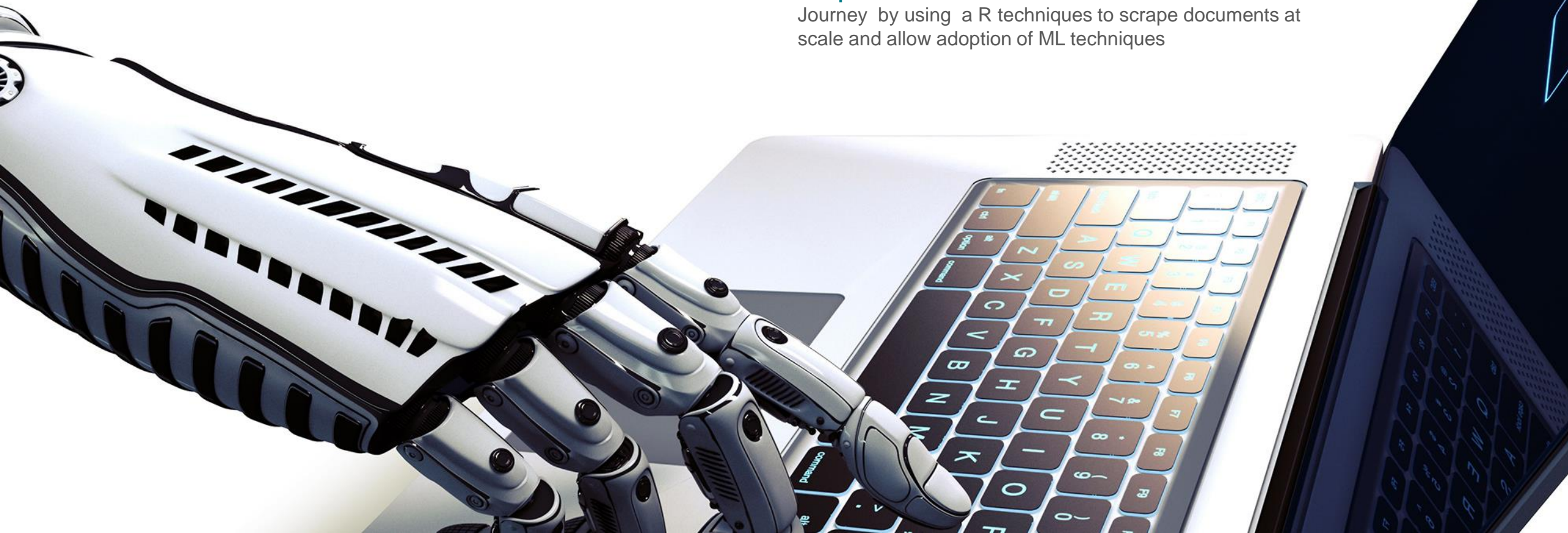
DIGITAL BUSINESS AUTOMATION

What is RPA?

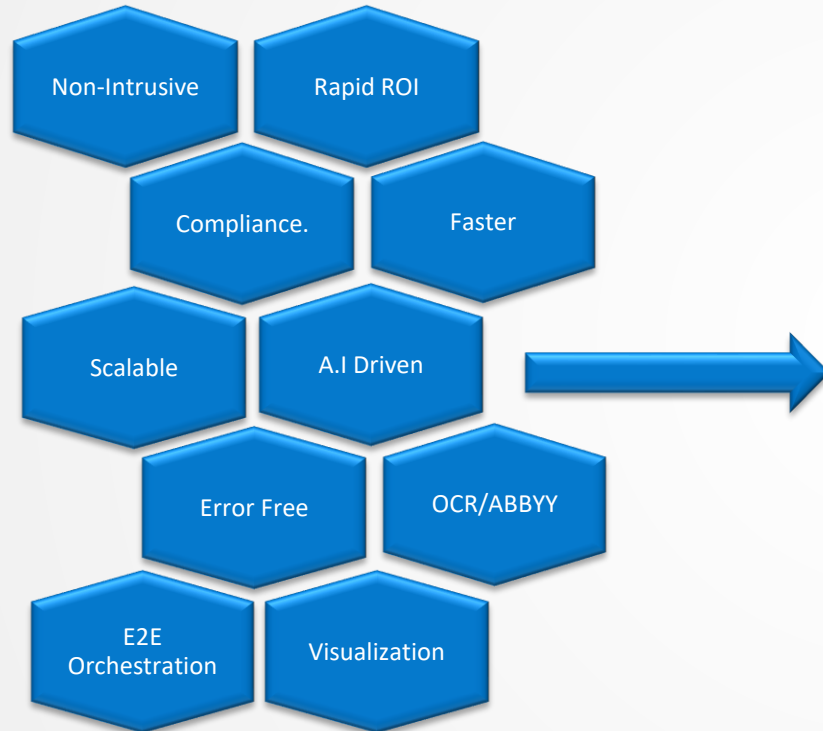
Robotic Process Automation is the innovative use of software to perform repetitive rules-based knowledge work across an organization as a substitute for, or **aid to, human workers**.

“Virtual Workers/Digital Workers” replicate the specific actions a human would take while working with IT systems, the decisions they make, and the logical processes they follow, while interacting between different systems and applications.

JumpStart A.I. combination of OCR/ICRPA accelerates the A.I Journey by using a R techniques to scrape documents at scale and allow adoption of ML techniques

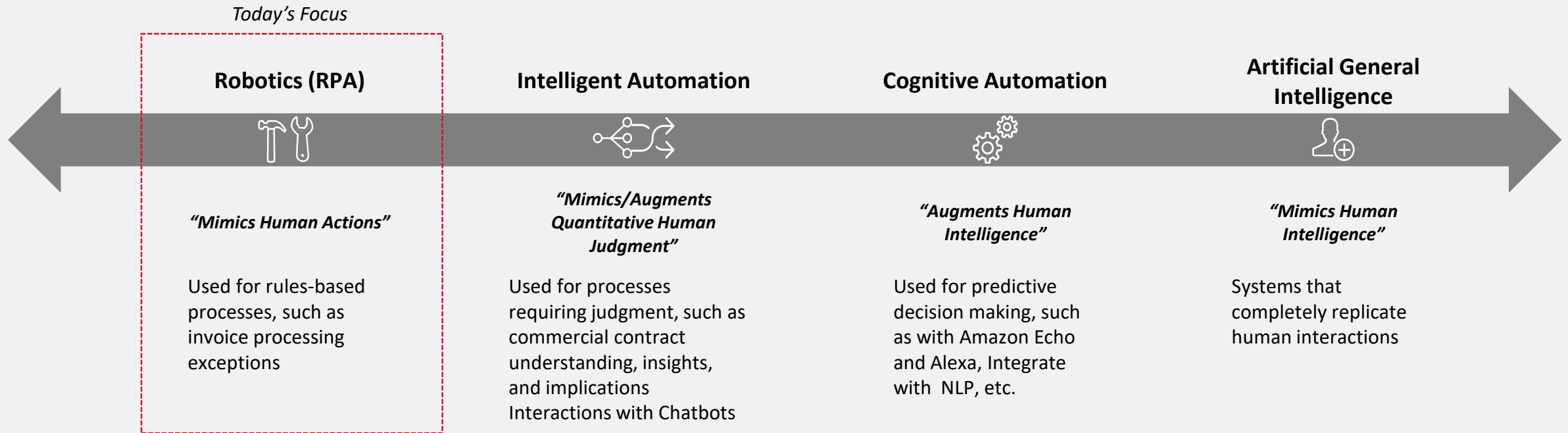


Value Proposition to Tangible Benefits



Value	Description
Costs	RPA runs @ -10%onshore costs and -33% offshore costs
Quality	RPA can reduce errors to near zero
Flexibility	Bots can run 24*7 and need no Holidays
Scalability	Bots could be scaled at ease up and down based on work loads and does not need huge Infrastructure.
Risk	Automating of repeatable process reduces risk
Compliance	Bots can reduce compliance errors involved with human errors
Faster	RPA can reduce efforts from months ,weeks, days to minutes
ROI	Returns of over 300% Implementation(weeks to Months)
Support	Read from structured & unstructured data

The Automation Journey



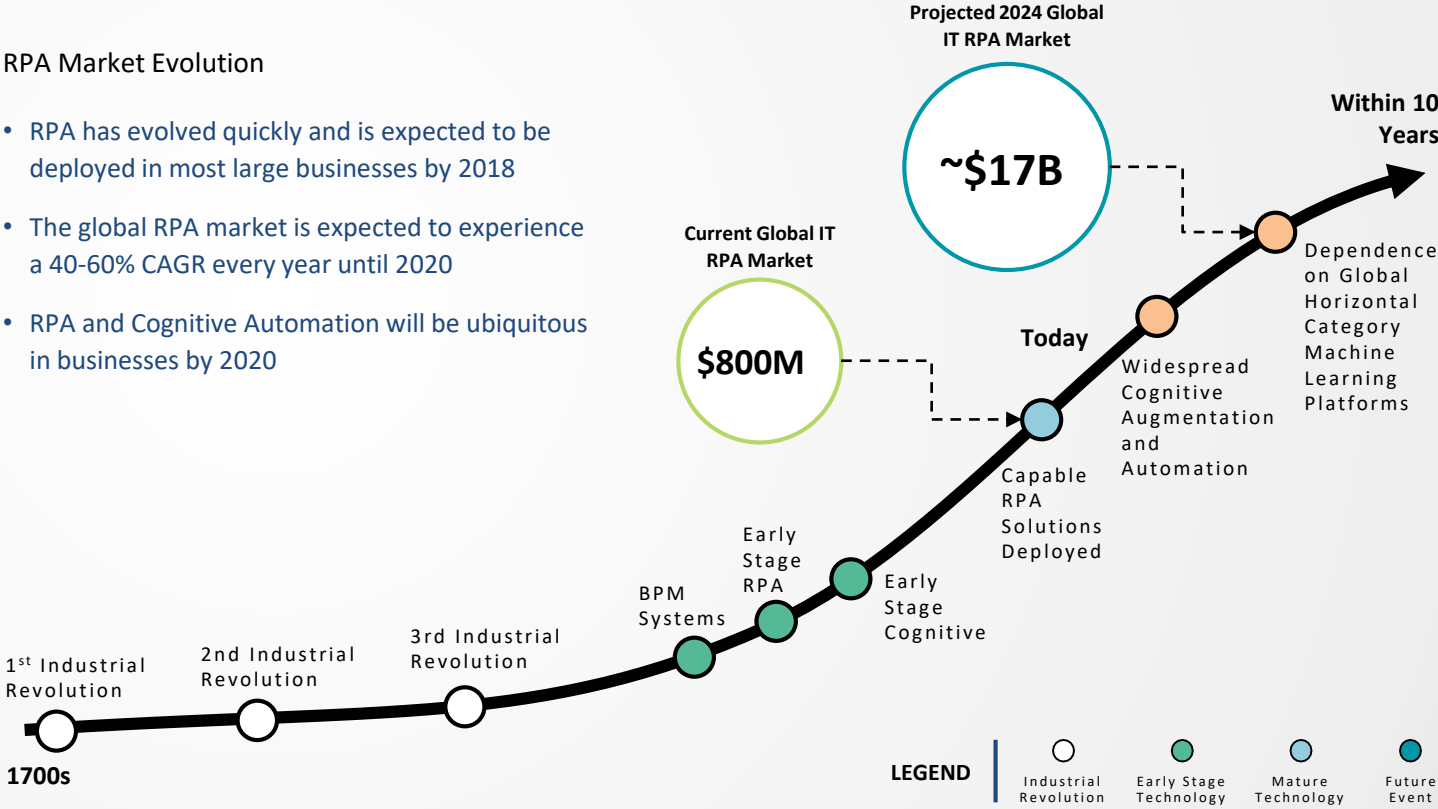
**RPA is the Accelerator for A.I and are the next step in Automation
SOA, Containers, DEV OPS are the pillars of automation**

Robotic Process Automation & The Market Evolution

Robotic Process Automation (RPA) is software that captures and interprets existing applications to automate rules-based processing, data manipulation, and communication across multiple systems, including web-based and local applications

RPA Market Evolution

- RPA has evolved quickly and is expected to be deployed in most large businesses by 2018
- The global RPA market is expected to experience a 40-60% CAGR every year until 2020
- RPA and Cognitive Automation will be ubiquitous in businesses by 2020



WHERE CAN I USE RPA?



Paper Based Transactions



Broken IT Systems



Complex Legacy Systems



Exceptions Transaction and Judgmental Decision



Unstructured Information

Resulting in Repetitive Manual Processes



Data Entry



Hopping across multiple screens to read or update relevant customer details



Verification, validation and comparison of data across multiple sources



Decision making - Rule or Judgment



Letter Generation and Email communications

RPA FEASIBILITY ASSESSMENT (PROCESS DISCOVERY/PROCESS MINING)

Technology Considerations

- Static Business Rules
- # of Systems, IT Subsystems involved
- Stability of the Current systems
- % of exception handling
- Level of process documentation
- Faulty systems – Downtimes

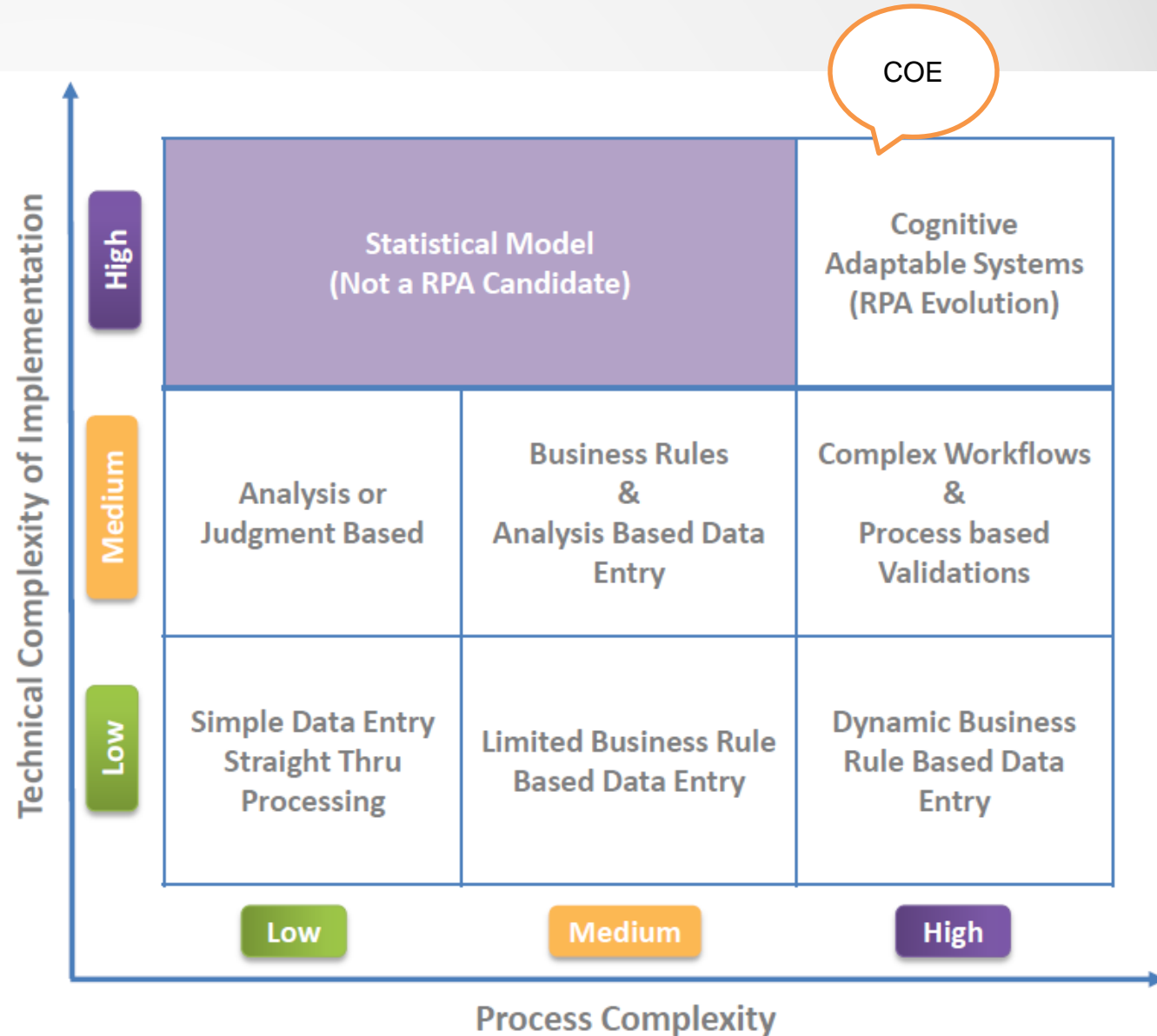
S.A
+B.A
+Tech
lead

Business Considerations

- # of Transactions
- # of Process steps / FTEs involved
- AHT/TAT for the Process
- Upfront Investment
- Maintenance cost
- Cost per Transaction

B.A

PROCESS RISK & COMPLIANCE EVALUATION



Attended Vs Un-Attended

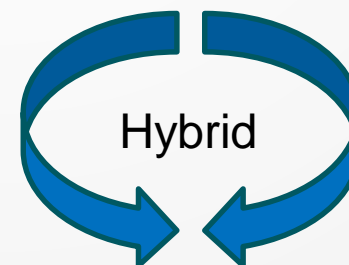


Front-office Automation



Back-office Automation

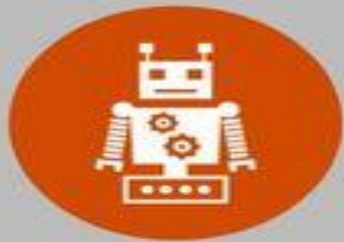
Description	<ul style="list-style-type: none">• Also called as “Attended” / “Assisted” / “Desktop” automation• Involves mashups or reskinning applications for real-time	<ul style="list-style-type: none">• Also called as “Virtual Workforce”• Use techniques like workflow, prioritization and scheduling to process large volumes of work securely
Execution of work	<ul style="list-style-type: none">• Partial automation, involving human to intervene• Runs on each associate’s desktop	<ul style="list-style-type: none">• Straight-thru processing with no human intervention• Runs on servers and not on associate’s desktop
Decision Making	<ul style="list-style-type: none">• Non-judgmental, rule-based, assisted by human where needed	<ul style="list-style-type: none">• Non-judgmental, rule-based, minimal to human intervention
Benefits	<ul style="list-style-type: none">• Increases efficiency of existing workers• Helps to consolidate information and provide consistent customer experience	<ul style="list-style-type: none">• Large-scale unattended processing without human intervention• Secure, reliable and scalable, and can’t be interrupted by human staff



WHAT SHOULD I KNOW ABOUT BOTS?

RPA robots, and risk:

Crucial questions to stay in control



How will you choose your projects?



How will robots share?



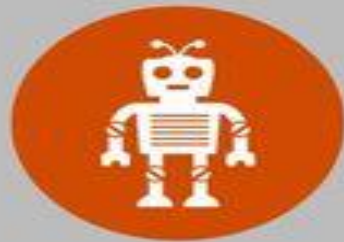
How do you configure robots?



Who's in charge?



Are you in compliance?



What about cybersecurity and data privacy?



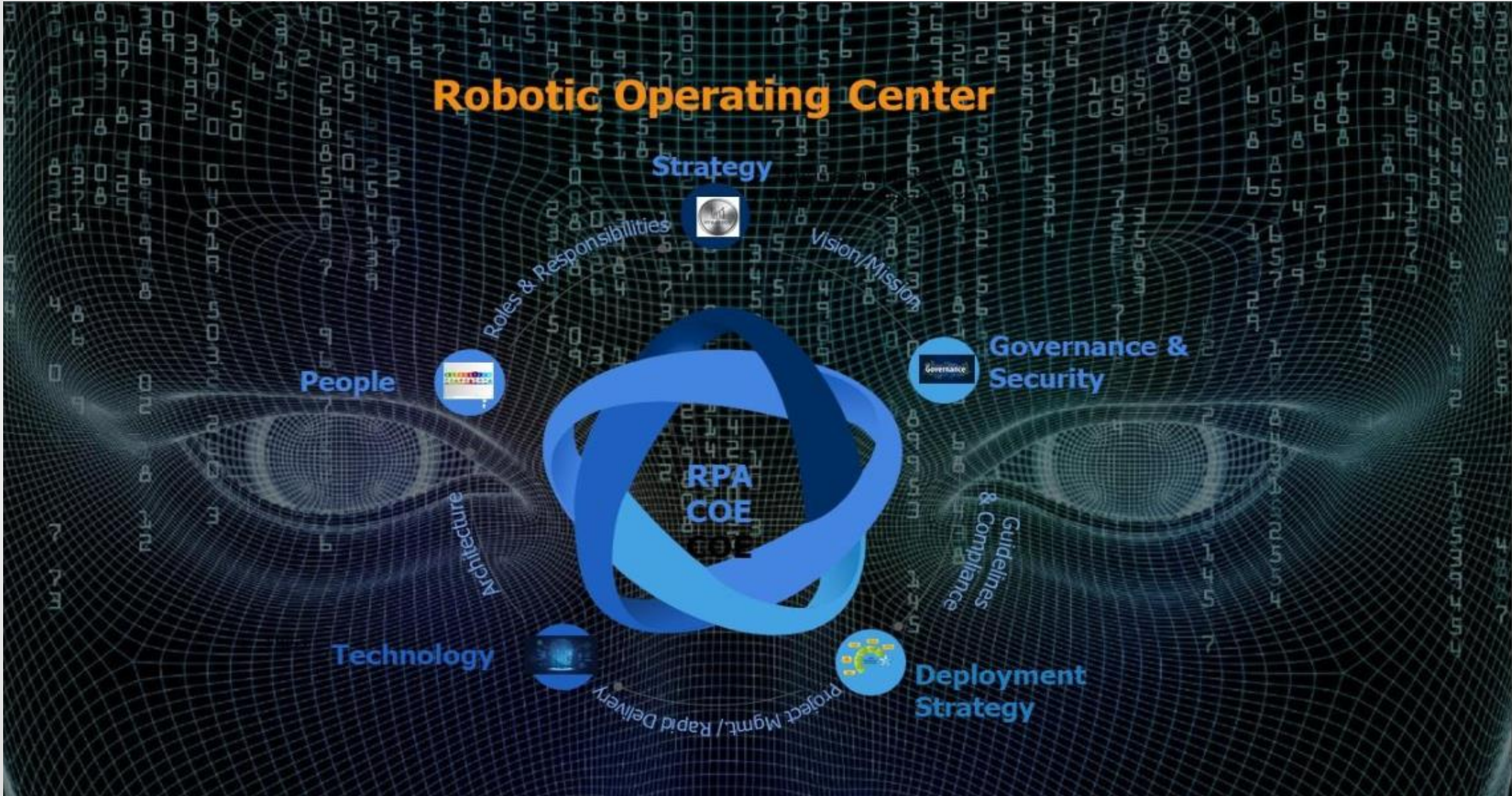
What's the backup plan?



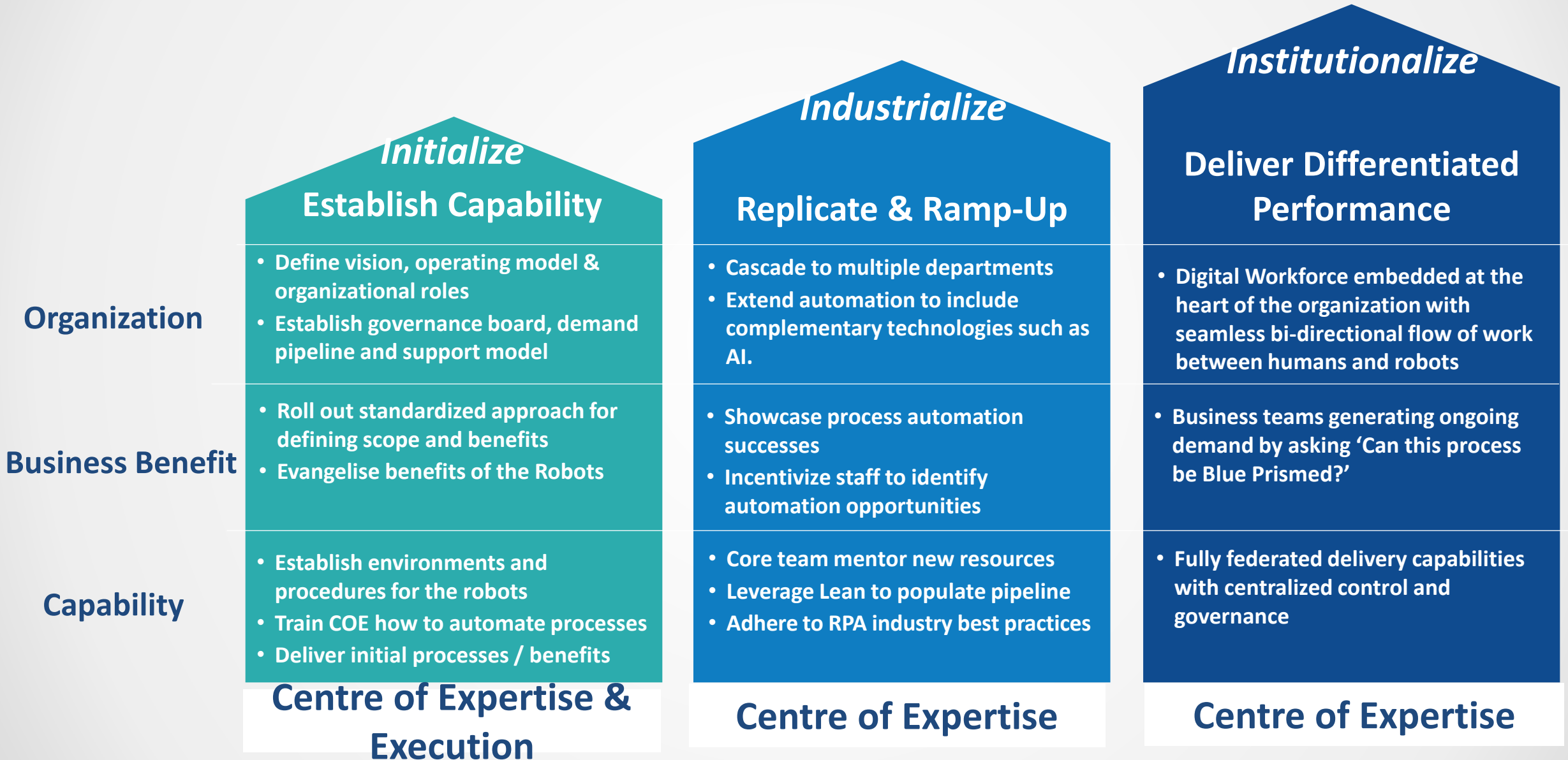
How will you manage changes?

SOC → NOC → ROC

Robotic Operating Center



POC → PILOT → PRODUCTION (Scaled up Model)



STAGES OF Automation maturity

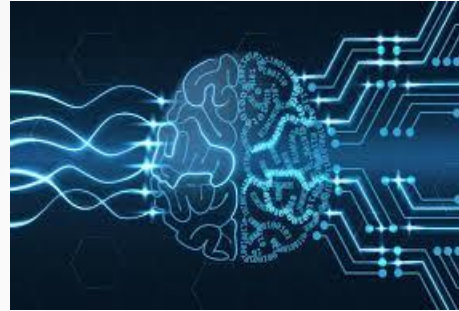
RPA 1.0



Controlled Automation

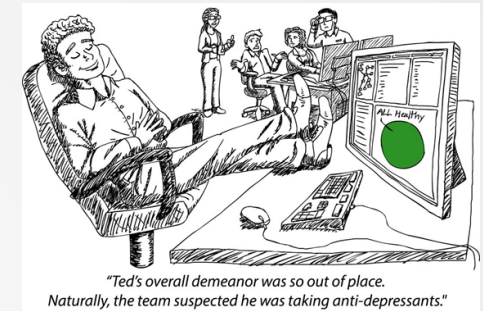
- Pilot Phase of Automation with Limited Scope and Systems Integration(Roadmap well defined)
- Key Areas identified and Metrics well defined
- Human assisted bots and well Monitored
- Pro-Active in Nature
- Automate Mundane Tasks /Human/Legacy systems
- Digitize documents
- Expand OCR/ICR Limited capabilities

RPA 2.0



Intelligent Automation

- Extensive Rollout of Automation across Enterprise
- Key Areas identified and Metrics to be continuously optimized and Improved
- Human assisted/Un assisted bots aided with experience using A.I coupled with Business rules to drive outcomes
- Identify Areas of Automation and improve Process through Analytics & Process Discovery/Mining
- Less Intervention of Human Being
- Tighter compliance and Security rules
- Move from Back end to Modern Systems
- Use of NLP to read UnStructured data



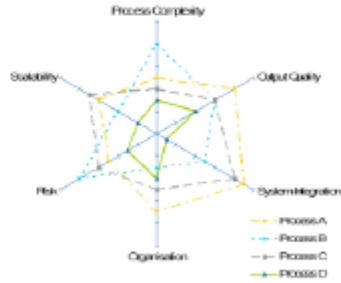
Decision Support Systems

- Self-Learning/Self-Healing and optimizing on the fly
- Widespread use of Machine Learning and A.I and possible use of Deep learning
- Automation become Inherently smart and connect to Industry 4.0
- Possible use of Blockchain use cases
- Automation becomes adaptive to the process being automated

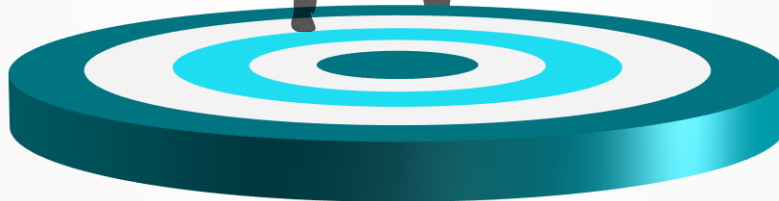
ROLE OF BUSINESS ANALYST

Assess | Suitability Analysis | Attribute & Sample

Attribute	Objective
Process Complexity	To gauge Process flow variation, NIGO rate and Business rule complexity
Output Quality	To assess text type
Organization	To understand Expertise, Profit/Cost center and Talent management
System Integration	To determine number of user interfaces
Risk	To gauge Metlife financials, regulations and cost of remediation
Scalability	To determine number of FTEs, Average handling time



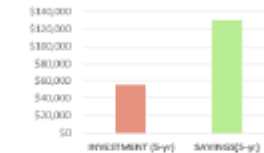
Suitability Analysis Chart



Assessment | Financial Benefit Analysis

CURRENT COST						
ITEM	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
FTE Cost	\$14,000	\$15,000	\$16,000	\$16,000	\$16,000	\$79,000
Overhead Cost	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
BA & Compliance Cost	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
INVESTMENT						
Robot initial setup	\$18,000					\$18,000
Robot implementation	\$25,000					\$25,000
Maintenance & license	\$1,400	\$1,400	\$1,400	\$1,400	\$1,400	\$7,000
SAVINGS (Direct/Indirect)						
Reduction in FTEs	\$14,000	\$15,000	\$16,000	\$16,000	\$16,000	\$79,000
Overhead Cost	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
Automation Savings	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
Reduction in Overhead	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
Reduction in BA	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
Improvement in Compliance	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
Reduction in Average Handling Time	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$5,000
NET SAVINGS						\$49,000

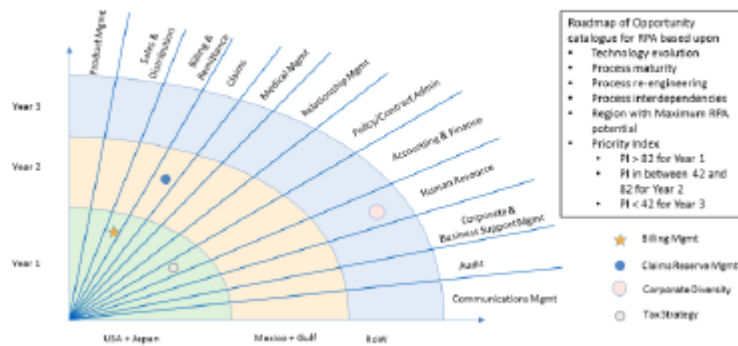
Total Investment v/s Savings



Cumulative Cash flow



Roadmap | Criteria Sample



Process Selection – Scoring Methodology

Criterion	Weight	Complexity				Automation Benefit			
		Process A Rating	Process A Score	Process B Rating	Process B Score	Process C Rating	Process C Score	Process C Rating	Process C Score
Level of human decisioning required	3	1	4	4	0	2	4	3	4
How availability of well-defined work items	2	1	4	4	0	2	4	3	4
Number of departments and stakeholders (person roles) across	1	1	3	3	0	2	2	2	2
Number of screens / systems / applications used	4	1	1	4	4	4	4	4	4
Number of EHRs used	2	4	4	4	4	4	4	4	4
Non-availability of digital information	4	2	3	1	0	4	4	4	4
Frequency of change in application used to perform the task	1	1	1	1	0	1	1	1	1
Degree of variability of data input & output	4	1	3	1	4	4	4	4	4
Requirement variability for Dev, QA, UAT	1	1	1	1	0	1	1	1	1
Operational Risk	4	1	2	1	1	1	1	1	1
Average Score		6.2	6.6	6.7		8.4	8.7	8.8	9.3

Weight & Rating: Scale of 1 to 4, 1 being lowest and 4 the highest
Score = Weight * Rating
Complexity: Process with highest Score is most complex
Impact: Process with highest score has greater impact

Process	Complexity	Benefit	Time to Implement
A	Low	High	Quick
B	Medium	Low	Slow
C	High	Medium	Long

Q&A

When? Why? How? WHAT? WHERE? WHEN? HOW? Why? WHAT? When? HOW? WHEN? When? WHERE? Why? When? WHERE? WHAT? Why? When? WHO? WHERE? WHEN? What? WHERE? WHEN? What? WHERE? When? WHERE? Why? When? HOW? WHERE? What? WHEN? HOW? When? WHERE? When? WHAT? Why? WHEN? HOW? Where? Where? WHERE? When? What? What? WHERE? When? When? HOW? WHAT? Why?