


RPA, AI, and Machine Learning – How to Employ and Use Effectively in Your Organization

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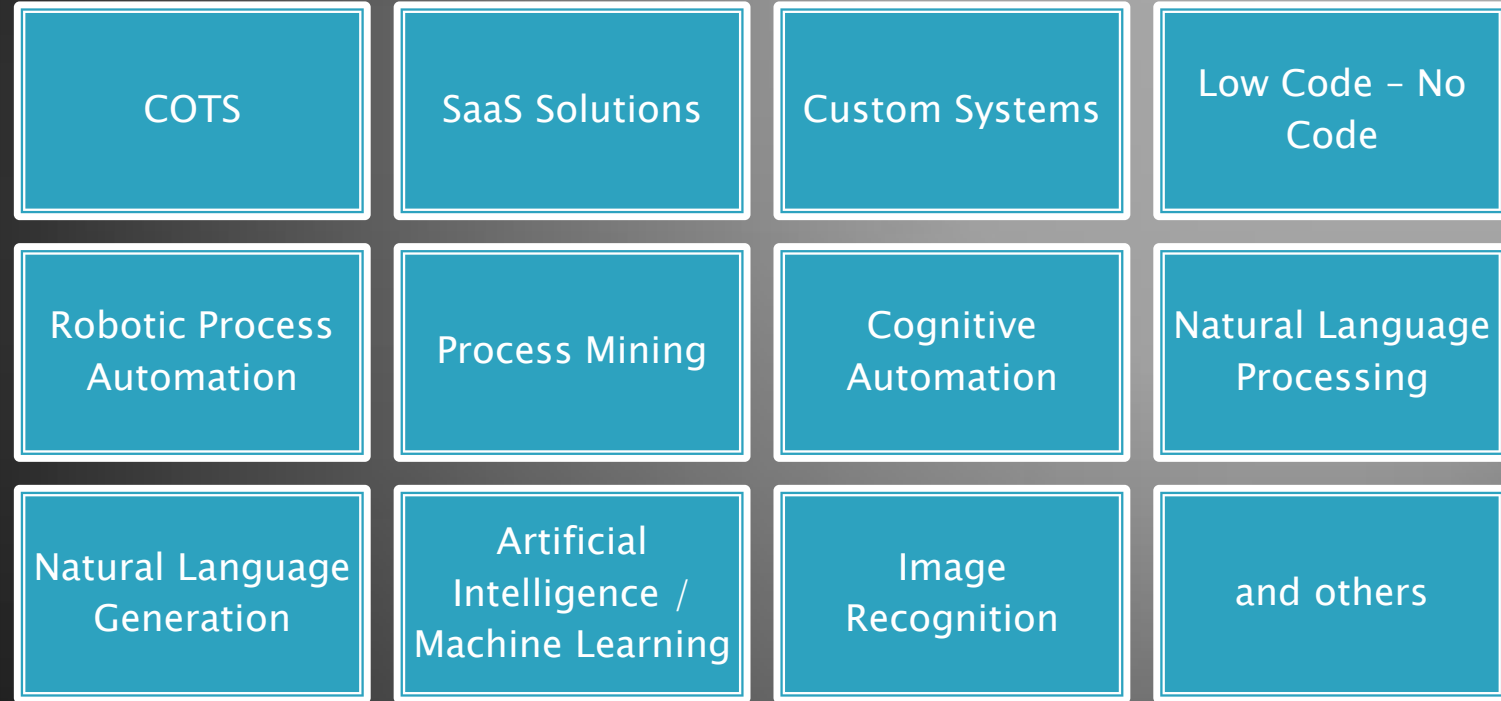
Questions

- ▶ Where are you on your automation journey?
 - ▶ What successes have you had?
 - ▶ What are some of the impediments you've run in to? How have you overcome them?
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Opening Thoughts

- ▶ 50% of the initiatives are driven by the end user
- ▶ RPA is a popular first step and a launching point for other automation solutions
- ▶ Most firms will leverage third party AI/ML solutions rather than developing their own
- ▶ Data is key – quality and cleanliness

There is an Evolving Ecosystem of Digital Technologies



Definitions

	Robotic	Autonomic	Artificial Intelligence
Business Goals	Automation of algorithmic processes to reduce cost and enhance speed, accuracy, availability and auditability	Automation of repetitive, algorithmic processes to reduce cost and enhance speed, accuracy, availability and auditability, primarily in IT	Automation of non-standard, heuristic processes typically requiring human intervention.
Focus Areas	Any process (F&A, HR, Ops, IT, etc.) involving structured digital data and business rules	IT processes involving structured digital data and business rules, such as in dev/ops, service desk and end user computing	Processes that require voice interaction, image recognition, fuzzy logic and/or involve semi and unstructured data
Value Proposition	<ul style="list-style-type: none"> Automate any process without changing the process or the systems - GUI Level No change to systems - no data level (API) required Business rules-driven Enterprise-ready - security, controls, auditability, analytics, scalability and reporting Low cost to deploy/run Typical Pilot = 4-6 weeks 	<ul style="list-style-type: none"> Automate IT "commodity" processes Business rules plus learning algorithms; actions based on trends/patterns Medium cost to deploy/run Typical Pilot = 3-6 months 	<ul style="list-style-type: none"> Structure, semi-structured, unstructured data Automate human interaction Analyze "big data" trends/patterns Enterprise-ready - security, controls, auditability, analytics, scalability and reporting Higher cost to deploy/run Typical Pilot = 3-18 months
Requirements	<ul style="list-style-type: none"> Structured digital data - as found in most applications and systems Business rules - clear, mature, objective 	<ul style="list-style-type: none"> Structured digital data and data sets for autonomic trending and pattern analysis Business rules - clear, mature, objective 	<ul style="list-style-type: none"> Huge data ingestion required Data quality is critical Business rules - clear, mature, objective or subjective



Why RPA?

Significant Operational Improvements

Make staggering improvements by automating work processes that capture high impact value.

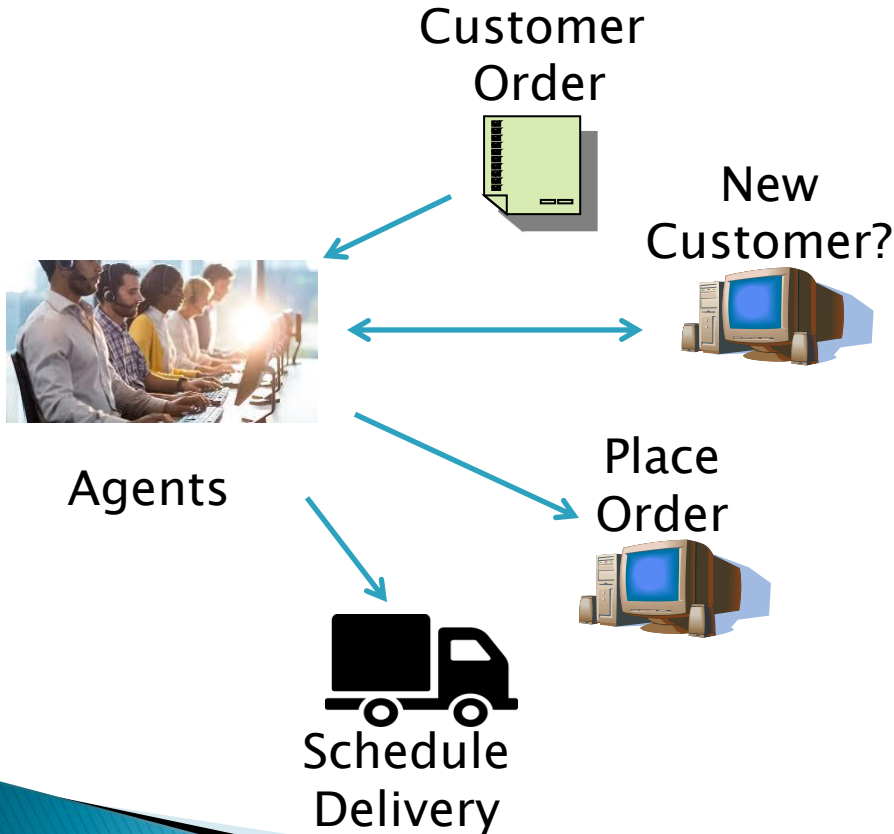
30–90% Staff Reduction

Accelerate exceptional financial results from reduced human labor for RPA-automated processes.

24/7 Labor – 100% Accuracy

Increase operational windows to relentlessly drive superior outputs, reduce human errors and improve compliance.

RPA Example



The agents work can be performed by RPA



High-Level Use Cases for RPA

Repetitive Tasks

- Back office, middle office and front office

Interim and Pilot Solutions

- Before other solutions are readied

Data gathering/grooming/augmenting

- For analytics – ad hoc, temporary or permanent

Customer Relationship

- Agent augmentation

Process Mining



Discovery

- Audit Trails / Transaction Logs / Event Logs / Data
- Process Design
 - Prescriptive
 - Descriptive



Conformance

- Harmonization
 - Known Models
 - New models
- Discrepancies
- Exceptions
- Errors



Enhancement

- Optimization
 - Elimination
 - Goals
 - Comparisons



Data Mining

Process Mining

Business Process Management

Automation Use Case



Personalization



Point of Sale

Other Use Cases

- ▶ Fleet management – optimizing predictive maintenance cycles
- ▶ Retail category management – increasing total sales and adjusting allocation of shelf space
- ▶ Supply chain optimization – prediction of optimal replenishment and on-hand inventory

Automation Adoption

Adoption	Automations
42% – Experimenting	
38% – Piloting	1–10
12% – Implementing	11–50
8% – Automating at scale	51+

Source: Deloitte 2019 Survey of Global Companies

Getting to Scale with Automation

- ▶ **Commitment**
 - Support from the top is a critical success factor
- ▶ **Structure**
 - It's not enough to have candidate lists
- ▶ **Discipline**
 - Standards, methods and processes – “loose-tight”
- ▶ **A culture that is open to change**
 - Turn organizational resistance into opportunity

Organization Archetypes

Line of Business	Information Technology Organization
We Don't Need Any Help. Does it all themselves with no involvement of IT.	Not Invented Here or Doesn't Fit Into Our Enterprise Architecture. Dismisses automation as a flawed strategy and offers limited support, if any.
We'll Tell You Only What We Need. Engages with IT but only for very specific infrastructure requests such as servers and applications.	We'll Do What We Have To. Provides limited support for automation but does not become knowledgeable of automation especially with implementation and scaling issues.
Let's Work Together. Coordinates closely with IT to optimize outcomes.	Let's Work Together. Embraces automation as one of many strategies to improve the efficiency of the business.

Other Considerations

- ▶ A digital strategy is essential
- ▶ Automation will not cure cancer; there are appropriate and inappropriate uses
- ▶ Software engineering principles are important
- ▶ Many of the digital technologies will add complexity to your enterprise architecture
- ▶ Business resilience must be addressed as part of your overall strategy
- ▶ Get ready – automation technologies are being ‘consumerized’ – *“eat or be eaten”*

For further information:

- [RPA's Elephant in the Room](#)
- [Accelerating the Automation Journey](#)
- [Doing More for Less with Intelligent Automation](#)

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