# TRANSFORM YOUR OPERATIONS THROUGH ROBOTIC PROCESS AUTOMATION

Lonestar CFMA conference

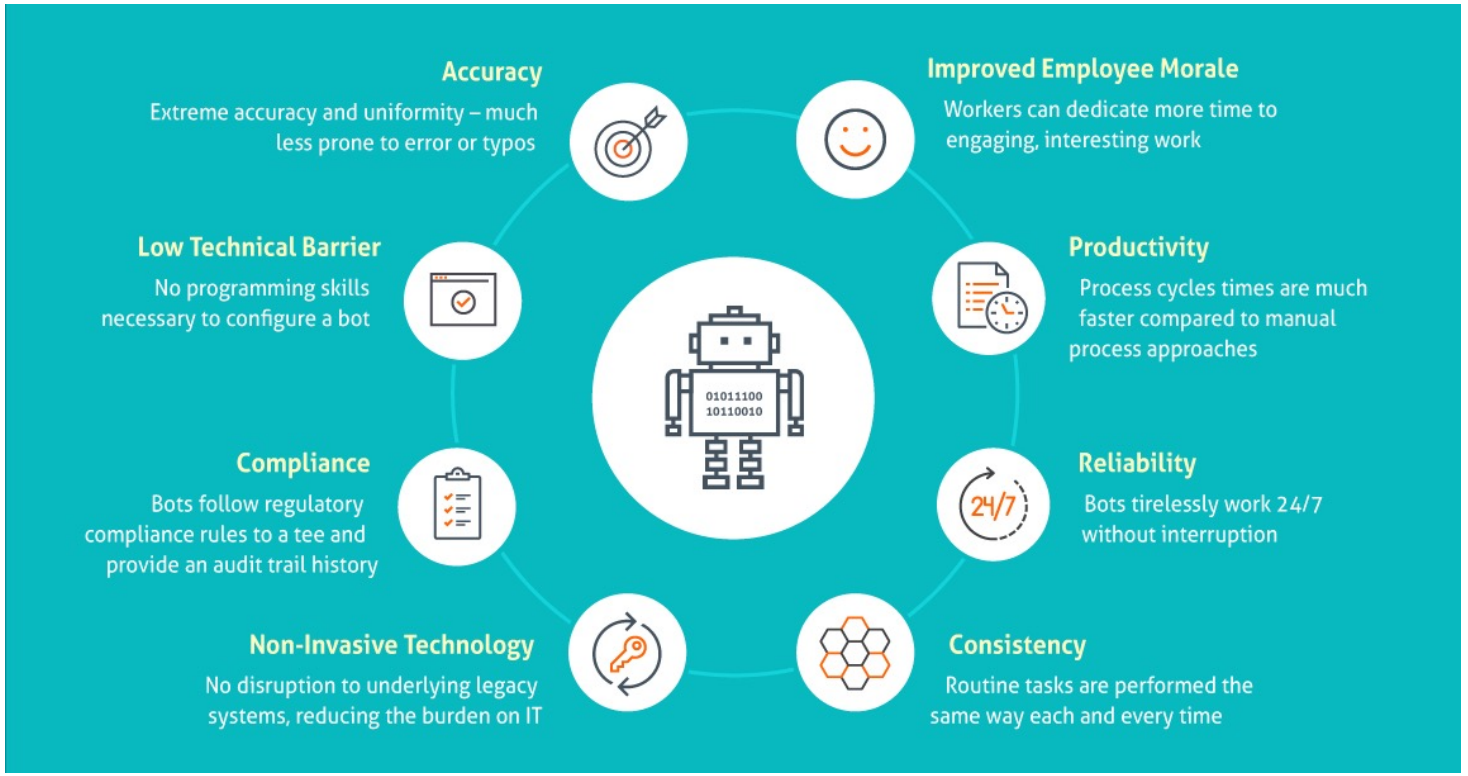
2021

RSM

# Speakers

Mike Courtney

Principal – Management Consulting



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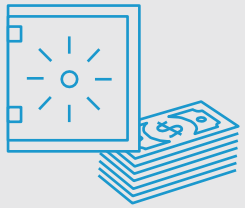
# Automation key metrics

## Demand

LinkedIn search results produced

**11,214**

LinkedIn RPA Job Results



## Investment

RPA software costs expected to decrease

**5%-10%**

in 2021 and 2022

## Growth

RPA software market expected to grow to over

**$ 3.0 billion**

By 2024

## Savings

By 2024 Organizational will decrease operational costs by

**30%**

By combining hyperautomation technologies with redesigned processes

*"As we emerge from the crisis, firms will look to automation as a way to mitigate the risks that future crises pose to the supply and productivity of human workers." (Forrester Research, The COVID-19 Crisis Will Accelerate Enterprise Automation Plans)*



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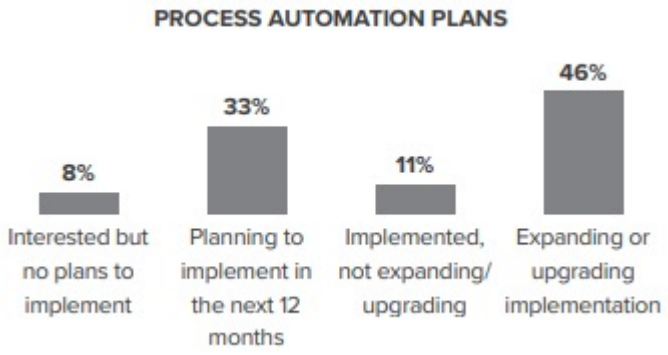
# Why Automate Now?

- Pandemic Response – a “gray swan”
  - The way we work is changing
  - Supply chains moving
  - Risk & resilience focus
  - Cost pressures
  - Software pricing is driving down




Source: Forrester – May 2020

- Automation:
  - Boosts productivity
  - Delivers time & labor savings
  - Scalable
  - Improved service levels
  - Flexible & adaptable
  - Promotes Organizational Agility

| Size of enterprise (by employees) | Large (More than 5,000 employees) | Medium (1,000 to 5,000 employees) | Small (Less than 1,000 employees) | Total |
|---|---|---|---|---|
| Total number of clients globally – rounded up | 9,000 | 7,500 | 2,500 | 19,000 |

Source: Gartner (September 2020)



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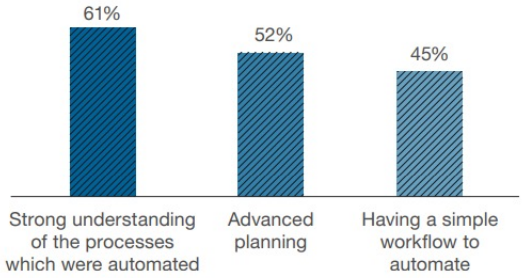
# Where to automate & insure success

## Assuming that cost was no issue, how do you think RPA would be helpful in your organization?

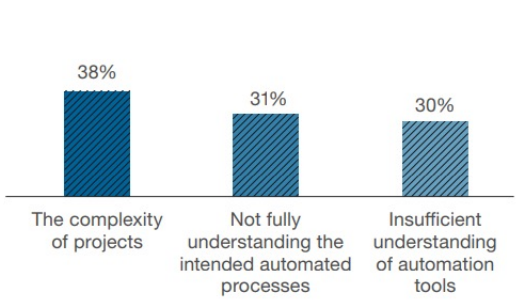
## 69% of the factors leading to RPA project failure are due to the complexity of projects and not fully understanding the intended automated responses

The majority of attempted RPA projects have been successful when there was a strong understanding of processes.

The key reasons given for the success of an RPA project were:




Conversely, the predominant factors that led to the failure of projects were:




With regards to how such RPA projects failed, just over half stated that these projects were expensive (52%), followed by requiring too much human intervention (44%).

*Research from: Abby – 2020 State of Process Mining and Robotic Process Automation*



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# Most are looking to finance first

IMA – Transforming the finance function – July 2020

| TABLE 1: What emerging technology do you believe will have the greatest impact on the finance and accounting profession in the next three years? | |
|---|---|
| a. Robotic process automation | 34.4% |
| b. Data science | 14.1% |
| c. Artificial intelligence | 22.7% |
| d. Data visualization | 5.8% |
| e. Blockchain | 6.6% |
| f. Budgeting, planning, and forecasting tools | 12.1% |
| g. Something else | 0.9% |
| h. Not sure | 3.5% |

| TABLE 2: How much do you believe your organization's finance and accounting processes can benefit from RPA? | |
|---|---|
| a. **Significantly!** I believe greater than 50% of our finance and accounting processes can benefit from RPA. | 28.4% |
| b. **Moderately;** I believe between 16% and 50% of our finance and accounting processes can benefit from RPA. | 46.8% |
| c. **Somewhat;** I believe between 1% and 15% of our finance and accounting processes can benefit from RPA | 20.4% |
| d. **Not at all;** I do not believe our finance and accounting processes can benefit from RPA. | 4.5% |

**Activities Automatable in Finance**

*Source: McKinsey – Bots, algorithms, and the future of the finance function*



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# Prevalent Mid-Market Automation Technologies

**Robotic Process Automation**

- A set of modular software programs (or “bots”) to complete structured, repeatable, and logic-based tasks by mimicking the actions taken by existing human staff.
- Leading Vendors:

AUTOMATION ANYWHERE · UiPath · Microsoft

**Data Blending**

- Software that easily preps, blends, and analyze all of their data using a repeatable workflow, then deploy and share analytics at scale for deeper insights in rapidly.
- Leading Vendors:

alteryx The Thrill of Solving · rapidminer

**Document Extraction Automation**

- Software that combines OCR & Computer vision to extract data from structured and semi structured documents.
- Leading Vendors:

ABBYY · Microsoft · KOFAX · AUTOMATION ANYWHERE

**Procure to Pay / AP Automation**

- AP automation automates the process from invoice receipt to payment processing with supporting workflows
- P2P automation focuses on PO through requisitioning processing
- Leading Vendors

coupa · avidxchange · basware · Bill.com

**Expense Automation**

- Software to streamline and automate employees turn in expense reports and how you approve, review, archive, and manage them.
- Leading Vendors:

certify · SAP Concur · Expensify

**Close Automation**

- Software designed to automate and control the entire financial close process.
- Leading Vendors:

FloQast · BLACKLINE

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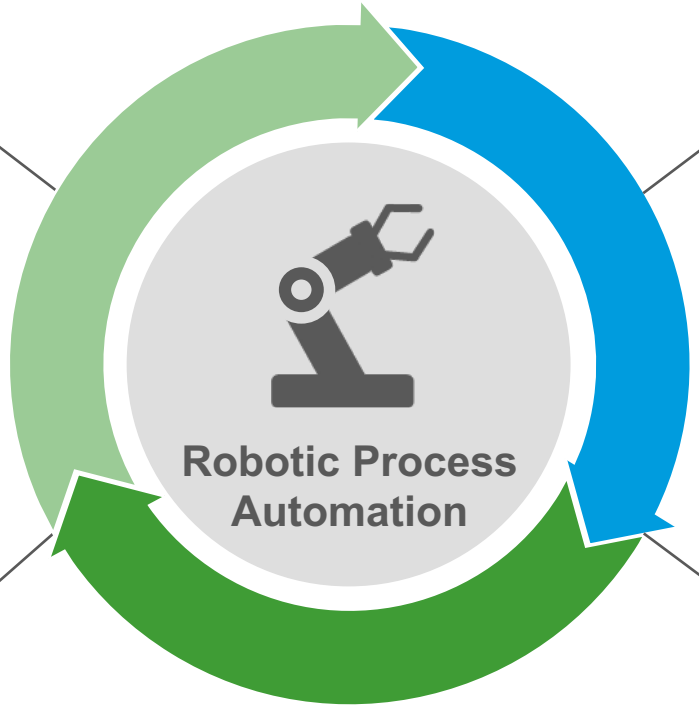
# OVERVIEW OF RPA

# Robotic Process Automation Overview

## What is RPA

**Robotic process automation** (“RPA”) refers to a set of modular software programs (or “bots”) to complete structured, repeatable, and logic-based tasks by mimicking the actions taken by existing human staff.




## RPA Extensibility

Developed bots are capable of interacting with and integrating disparate enterprise applications, databases, and files to limit the business need to develop custom, application specific integrations.

## RPA Value Proposition

Across industries, RPA enables organizations of all sizes to efficiently scale operations with minimal impact to existing business processes.

## RPA Scalability

A set of scheduled bots are capable of running on multiple servers within a company’s environment simultaneously with minimal impact to resource and network capacity.

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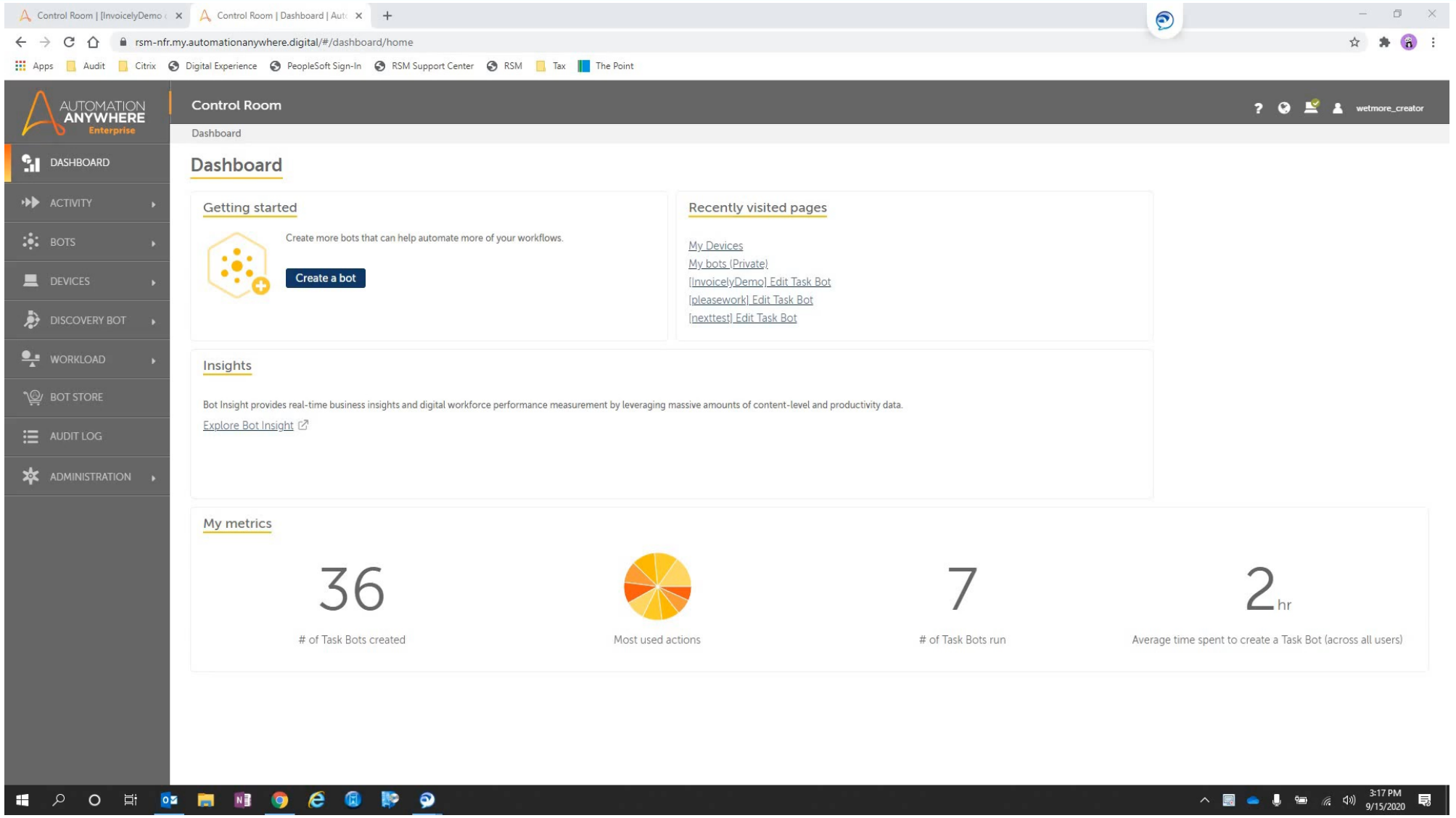
# RPA in action



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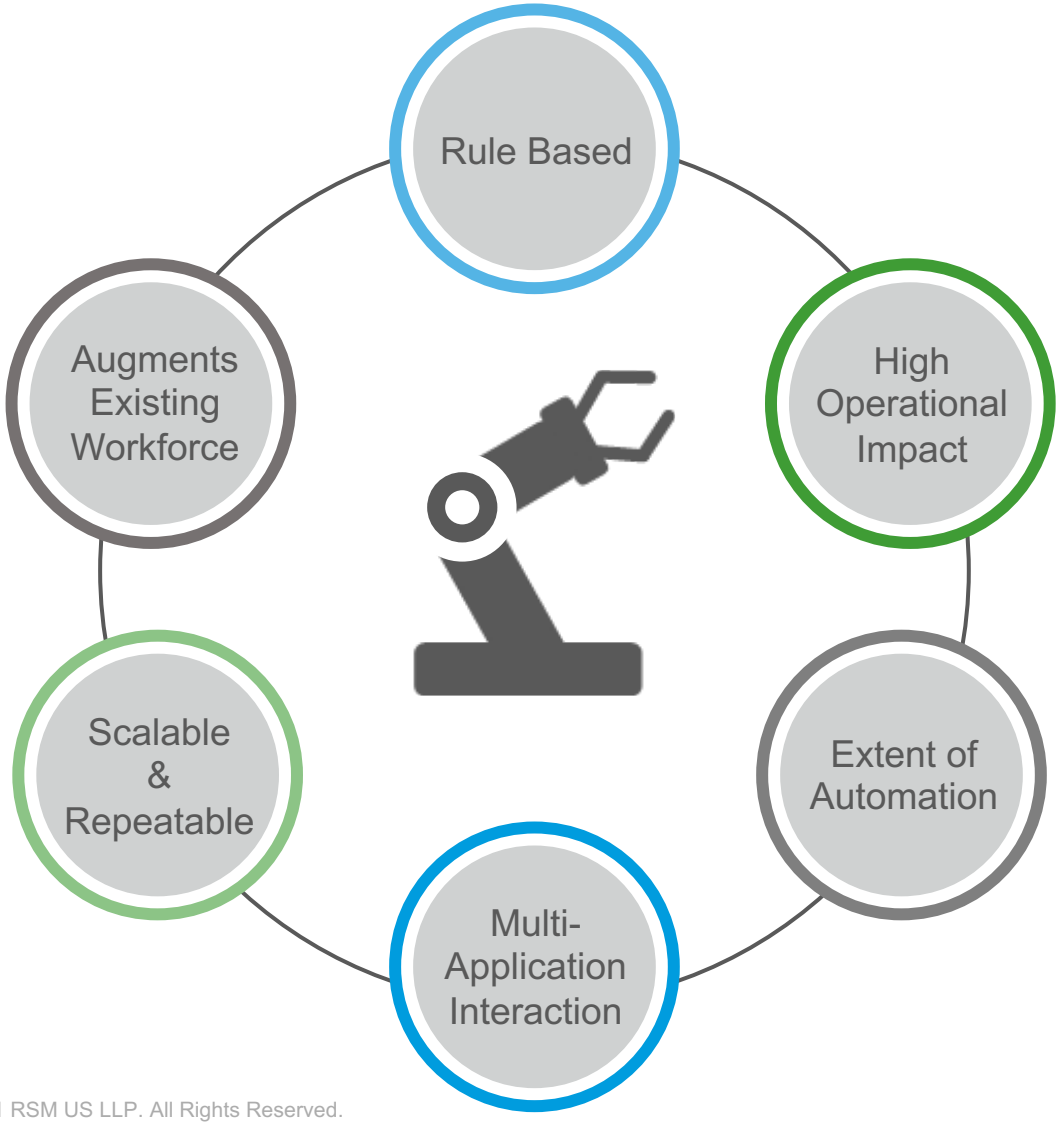
# Ideal Use Cases




## Ideal Process & Business Conditions for Automation

1. 75% of process is rule based 25% is programmable human logic
2. Process should be high volume and largely manual with large efficiency gain potential
3. The automation extends to the majority of the process, not just a subset
4. Interacts with 1-3 business applications or data stores
5. Regularly repeated across a department or organization
6. New developments that augment human workers or those that add to or builds on existing automations
7. Best represents the overall complexity of the business
8. Applications have available test environments for development resources to test in progress automation work
9. Business rules are clearly defined and SME availability is guaranteed
10. Includes, but does not rely, on optical character recognition



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# Favorable RPA Processes & Conditions

| Is the process standardized? | Is the process defined? | Will there be a return on investment? |
|---|---|---|
| • Easily defined, limited variability<br>• Stable data structure<br>• Easily repeatable<br>• Strong data integrity and accuracy<br>• Standardized forms, fields<br>• Measurable outcomes for evaluating efficiency | • Defined beginning/end<br>• Limited human discretion<br>• Few exceptions<br>• Defined exception paths<br>• Defined number of systems<br>• Defined system flow<br>• Defined, consistent inputs/outputs | • Strategically important<br>• High volume<br>• High frequency<br>• Manual/duplicative effort<br>• Lacking alternative solutions<br>• Compliance or regulatory requirement(s) |



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# Challenges to Automation with RPA

While RPA can be an effective solution to many of the challenges facing businesses and their processes, there are inherent limitations that can cause a process to be removed from candidacy or face reduced effectiveness in improving business operations

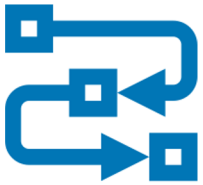
Lack of structure for process inputs & outputs

Decisions that require human Intuition

Intended application changes or upgrades

Frequent process changes

Data quality & integrity issues



Significant number of exceptions requiring human intervention



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# Common Use Cases

## Finance & Accounting

- Order to Cash / AR
  - ✓ Credit Analysis
  - ✓ Sales Order Processing
  - ✓ Customer MDM
  - ✓ Order Entry
  - ✓ Reports by segments
- Procure to Pay / AP
  - ✓ 3 Way Match
  - ✓ PO Issuance
  - ✓ Invoice Receipt
  - ✓ Vendor Master
  - ✓ Payment Process
  - ✓ Duplicate Payment Tracking
- Record to Report
  - ✓ Monthly close
  - ✓ Treasury and tax
  - ✓ Financial statements
  - ✓ General ledger
  - ✓ Journal entry processing
  - ✓ Inter-company accounting
  - ✓ Account reconciliations
  - ✓ Fixed assets and projects
  - ✓ Cost and inventory accounting

## HR/Payroll

- Maintain Master Data
- Offer Letter Process
- Onboarding and Exit
- Appraisal-updating process / Change Payroll Status
- Position Management
- Reporting Line Change
- Superannuation
- Payment Summaries
- Employment Type Updates
- Service Desk Reports
- Distribution
- Leave Amendments

## Network & IT

- Active Directory
- File Systems
- FTP Management
- Automated Installations
- Server / Application Monitoring and Alert Management
- Service Desk Management
- Notification & Escalation
- VMware Integration
- Data Movement
- Provisioning
- Configuration Management
- Routine Maintenance

## Supply Chain

- Order Prioritization
- Master data management
- Invoice verification
- Receipt confirmation
- Scheduling processes
- Reporting
- Production information capture
- Inbound processing
- Inventory management processes
- Pricing management
- Billing
- Freight costing

## Audit and Compliance

- Quarterly Access Reviews (UAR)
- Data/Evidence Gathering
- System Configuration Testing
- Rules-Based Workpaper Automation
- Orchestration of audit automation tools and scripts
- User provisioning and de-provisioning controls
- Master Data Management Compliance
- Application Change Management Compliance
- Continuous Monitoring
- Reporting Automation



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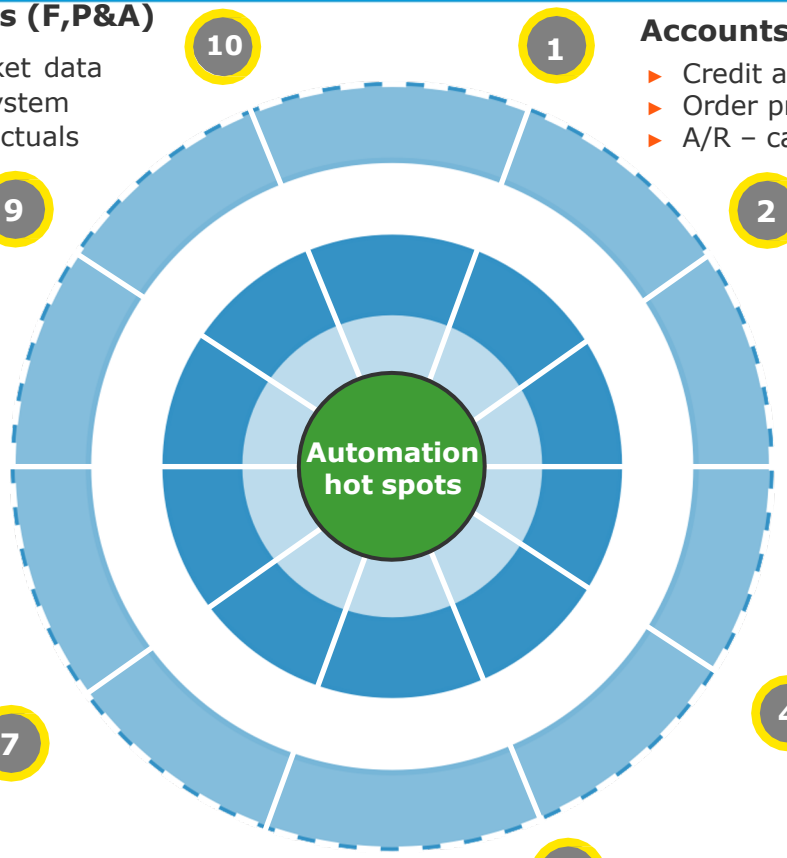
# Automation "hot spots" for Finance




### Financial Planning & Analysis (F,P&A)

- Pre-population of forecasts using historical and market data
- Loading pre-populated balances into the planning system
- Creating variance reports to pre-population and to actuals

### Regulatory & Management reporting

- Data capture and cleansing to support automated generation of regulatory reports
- Pre-populating complex annual reporting
- Automating the preparation of management review slide decks by collecting data from multiple finance systems and reports

### Accounting change

- Automating the collection of data for leases or revenue transactions
- Categorizing, summarizing and analysing data based on history and pre-established parameters
- Producing reports for internal analysis

### Expense Reimbursement

- Automating policy compliance reviews
- Calculation of purchase discounts
- Compliance and management reporting
- P Card or expense program maintenance

### Intercompany reconciliation

- Automated checking and reconciliation of intercompany balances
- Basic research and reporting for exceptions
- Creating exception file and email report for finance review and approval

### Accounts Receivable processing

- Credit approvals & customer master file maintenance
- Order processing
- A/R – cash receipts processing & sending late notices via email

### Accounts payable processing

- Vendor set up and maintenance
- Automating the workflow processes and approvals
- Data entry and payments preparation
- Automating processing of payments and bulk payment files for journal entries to sub system

### Operational finance and accounting

- Automating pricing reviews based on customer contracts and pre-approved price lists
- Calculation and processing of rebates
- Downloading of detailed monthly sales data and calculation of commissions
- Creating files and emails to gain approvals
- Posting to detailed sub systems and General Ledger

### Standard Journal entries

- Creation of standard monthly journal entries using templates provided by different business users and pulling/calculating data
- Performing validation analytics
- Posting to ERP

### Account and Bank reconciliations

- Automating the download of subaccount balances and bank statements
- Uploading detailed transaction data from various sub systems
- Reconciling balances and transactions to core finance sub systems
- Creating balancing journal entries to handle discrepancies

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# Document Extraction - Abbyy Vantage Demo



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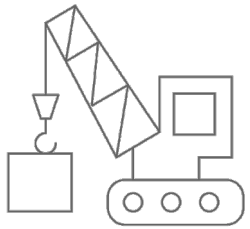
# Construction use cases



Billing Operations

Increase cash flow through optimizing DSO. Use RPA to gathering billing support for clients

Invoice Creation

Gathering data and consolidating information to generate invoices

Updating Databases

Working with legacy systems or those without APIs or other systems such as procore.

Document Management

Use OCR/computer vision to properly read and file documents

Site Cost monitoring

Produce cost-to-estimate reports by pulling data and importing in the project budgets.

Invoice Processing

Extract data from invoices and enter them into the ERP, highlighting missing data.

RFP Responses

Create automated estimates and gather required documentation



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# RPA in ENR Top 10 (From Public Research)

- Bechtel – Procurement, HR, GDPR Compliance
- FLUOR – Treasury
- Kiewit Corp
- AECOM
- SKANSKA
- DPR Construction



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# Robotic Process Automation Case Study

## BACKGROUND

After adopting a new ERP system, a top construction and project development company, identified new processes that should be required as part of their daily work practices. However, the company had limited resources to incorporate these processes into their daily tasks. The company discovered by utilizing Robotic Process Automation (“RPA”) it presented an opportunity to improve these processes while removing many of the mundane, error-prone tasks that the center’s staff had to complete.

1

### IMPROVING INVOICE PROCESSING

The company introduced a new ‘digital colleague’ to handle many tasks involving customer invoices, payments, reminders, approvals and management of accounting journals. The digital colleague would alert someone when action needs to be taken. They found by using RPA, they were able to quickly deliver process efficiency and cost improvements they were seeking.

2

### TRANSFORMING HUMAN RESOURCES

Human resources department leverage RPA to quality assure and control vast amounts of payment data sent from their payroll system to their ERP. By automating this process not only did it improve speed and efficiency, but it eliminated human error by providing checks and controls.

3

### MINIMIZING BUSINESS RISK

The company was able to remove human error and accelerate their partner project registration process through automation. Done manually, the process required a lot of data entry and offline calculations. This information was essential to the project profitability and maintaining strong supplier relations. Through automation, the company’s business risk was reduced and provided greater confidence in the data shared with their partners.

### SUCCESS BY THE NUMBERS

**35**
processes automated in under three years

**10,000**
hours returned to the business each year

**5 min**
payroll data processing reduced 1 week

**30 min**
monthly automation maintenance reduced from one week monthly



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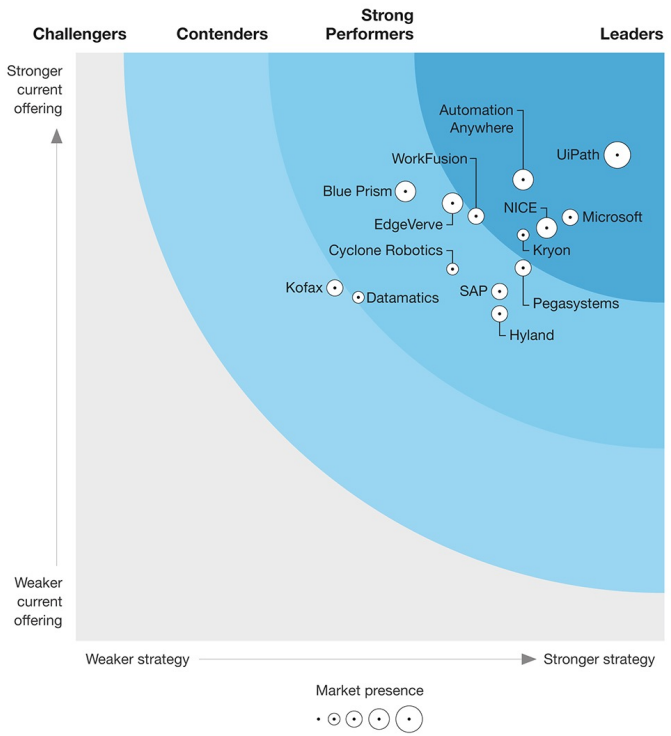
# RPA Industry Landscape

FORRESTER®

**THE FORRESTER WAVE™**

Robotic Process Automation

Q1 2021

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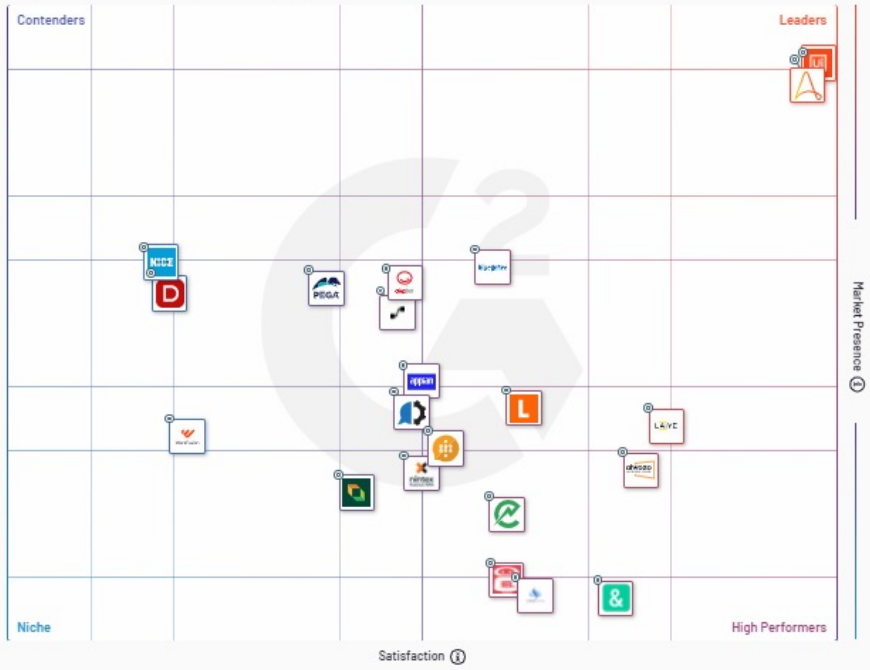
## G2 Grid® for Robotic Process Automation (RPA)

Check out the G2 Grid® for the top Robotic Process Automation (RPA) Software products. G2 scores products and sellers based on reviews gathered from our user community, as well as data aggregated from online sources and social networks. Together, these scores are mapped on our proprietary G2 Grid®, which you can use to compare products, streamline the buying process, and quickly identify the best products based on the experiences of your peers.




G2 Grid® Scoring

**Figure 1: Magic Quadrant for Robotic Process Automation**

Source: Gartner (July 2021)



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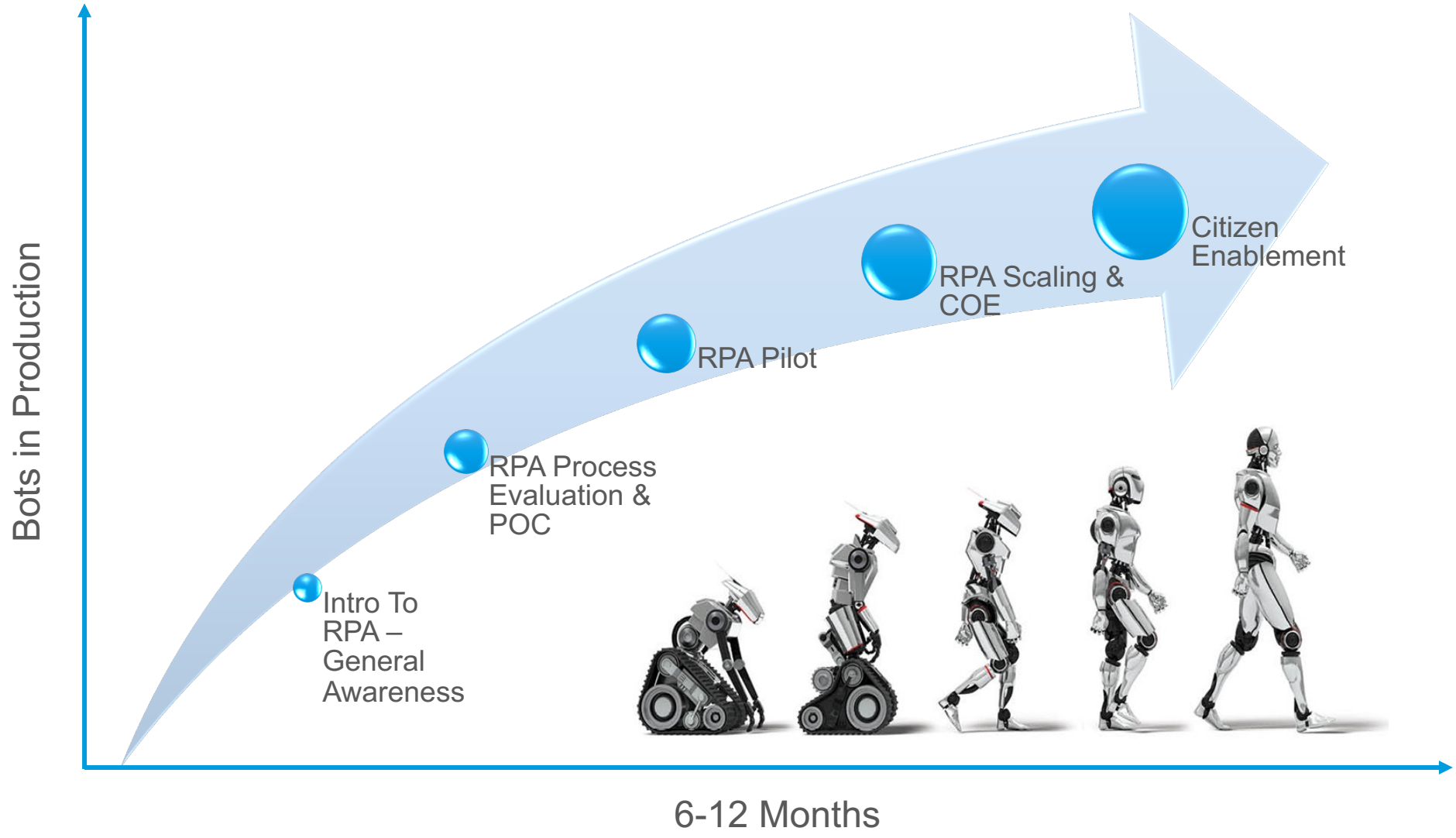
# RSM – RPA Maturity Methodology

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# GUIDING PRINCIPLES

# Guiding Principles – Understand the Opportunity

- Vendors are quick to highlight their tool and expect you to have figured out the business case
- Create an opportunity portfolio with potential ROI for areas that are very labor intensive
- You might not automate everything
- Identify quick wins to evangelize
- Focus on the future state

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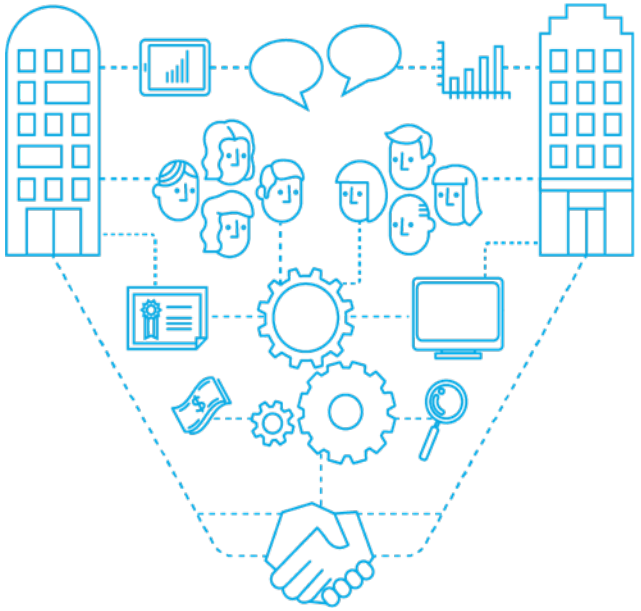
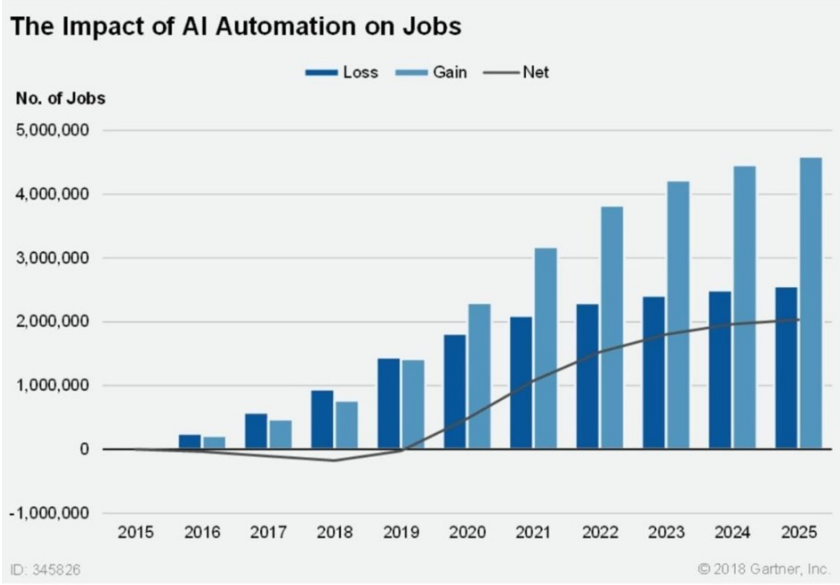
# Guiding Principles – Engage the organization

- Employees worry about their jobs
- Open communication & find champions
- Redefine job descriptions early
- Focus on the pain points to be removed





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# Guiding Principles – Understand the ecosystem

- Leverage resources to find the right tool for the opportunity
- New products are constantly being introduced
  - Look for point solutions that are built for your current applications
- Talk to your peers
- Buy vs Build?
- Watch for more AI solutions
- Cloud first where possible
- Talk to us

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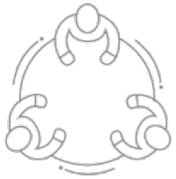
# Guiding Principles – Start small

Ask for low cost proof of concepts (POC) to verify technology will work before long term commitments

Create a roadmap – don’t try to automate all at once



Start with a centralized center of excellence



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