Intelligent Automation (IA)
A critical component of Business Transformation

NASC
March 14, 2019
Agenda

► What you should think of when you hear Intelligent Automation

► What State of Georgia is doing

► Intelligent Automation hot spots and trends

► Why you should be looking at Intelligent Automation

► Q&A
What you should think when you hear Intelligent Automation
Automation is revolutionizing “work”…but is only the beginning
Organizations are “learning” and capturing quick wins with RPA, creating a “new normal” of efficiency and effectiveness, but AI and Human/Machine collaboration will fundamentally reinvent industries, generating entirely new opportunities and business models.

1970’s and prior
Human labor intensive
- Manual
  - Armies of human FTEs manually performed pricing, costing, recording, reporting, recruiting, IT support, etc.

1980’s
Step change in efficiency
- Computers
  - Customized data warehouses and office applications allowed more time for analysis and less to produce the data

1990’s to present
Added effectiveness
- Applications
  - ERP, CRM, SCM, HRIS, EPM, etc. represent “purpose” built, “out of the box” applications requiring only configuration

We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another.
- World Economic Forum, 2016

Today
Intelligent Automation

Tomorrow…
Human & Machine Collaboration

Government & Public Sector activity:
Federal: US Army, US Coast Guard, DoD, Freddie Mac
State & Local – Georgia, California, North Carolina
State Universities & Hospitals - University of Texas, USC, University of California

30%-50%
Typical cost savings from RPA enabled automation 24x7x365

60%-70%
Of business processes contain manual activities that could be automated

“Train
Collaboration
Empower”

Today…Only 3% of the potentially useful data is tagged, and even less is analysed.
-IDC
Intelligent Automation (IA) – Market Update
Many organizations are just starting their Intelligent Automation journey

The IA journey

- The automation market is estimated to be $19B by 2020
- While less than 5% of companies are at scale with RPA today, 40% say they are moving to scale in the next 12 to 18 months
- Companies are recognizing the convergence of robotics process automation (RPA), analytics, machine learning (ML) and artificial intelligence (AI)

Chatbots and Artificial Intelligence to utilize the outputs produced by Robotic Process Automation

- Desktop automation
  E.g., Desktop automation, Macros

- Robotic process automation (RPA)
  E.g., Automation Anywhere, Blue Prism, UiPath

- Cognitive RPA (including machine learning, natural language processing)
  E.g., Azure, Arago, Work Fusion

- Chatbots
  E.g., Kore, Conversable

- Artificial intelligence (AI)
  E.g., Watson, Holmes
Robotic Process Automation (RPA) is software that mimics human interaction with core systems, web, and desktop applications to execute processes; working through the same interface that humans use. “Robotics enables a virtual workforce.”

Characteristics and benefits of RPA:

1. RPA robots enable “fast IT” because they sit on top of existing systems leveraging data and controls in place.

2. The Robots work 24/7, with consistency and accuracy, but at a speed much faster than humans (1 robot = 4-5 human FTEs of work).

3. Benefits can include:
   - Cost reduction / avoidance
   - Increased productivity for high value employees
   - Scalability
   - Improved accuracy
   - Enhanced revenue

“Robotics takes the robot out of the human”
RPA Example
Human resources onboarding process illustrated in Blue Prism RPA software
Impact: 138 minute process reduced to 3 minutes; 100% accuracy

RPA bot emails new hire to complete the New Joiner Form with appropriate information.

RPA bot reads the New Joiner Form and realizes it needs more information. After sending and receiving emails with the new hire, it reads the form again and verifies it has all information.

RPA bot accesses EY systems such as Performance Management, PeopleSoft General Ledger, Payroll, Training, etc., to set up the new employee.
How to get started

We believe it is important to keep the 3 work streams below in sync with each other to ensure longer term success and avoid delays in reaching the Automation ROI.

1. IA Strategy Development  
   *Steer the program*

2. Establish operating model  
   *Lay the foundation*

3. Automation delivery & IT enablement  
   *Accelerate execution*
What State of Georgia is Doing
State of Georgia
Problem statement – How do we become more digital in our operations?

The types of questions we are asking ourselves:

- Why is our current process this way?
- Are processes logically organized?
- If this was a new process, how would we design it with Intelligent Automation?
- How can we reduce our paper footprint for collecting, exchanging, and storing of information?
State of Georgia
Program update – Actions we are taking to save hours and refocus our efforts

**Our Intelligent Automation Journey**

**Define the Operating Model – State Accounting Office**

- Our program objectives and outcome
  - Define Intelligent Automation purpose and set achievable targets
  - Define organizational design / R&Rs
  - Prepare for Change Management needs
  - Define policies and standards
  - Design the end to end process flow
  - Confirm our software selection and development approach

- Top Down Assessment
  - Prepare and understand ongoing operations and maintenance
  - Raise Intelligent Automation awareness
  - Define a starting point for our Operating Model
  - Create something tangible (Operating Model ‘Playbook’ and ‘Pocket card’ for quick reference)

- Next steps
  - Shift more energy to developing Intelligent Automation
  - Activate appropriate champions to replenish the Intelligent Automation pipeline and backlog
Intelligent Automation Hot Spots and Trends
State Themes and “Hot Spots”
There are many areas where Intelligent Automation is making an impact at the State level

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<th>State themes</th>
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<td>High level of autonomy</td>
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<td>Pockets of shared service-like approaches</td>
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<td>Scalable processes across agencies / institutions</td>
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<td>‘We are more similar than we think’</td>
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<td>Very manual and paper based</td>
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<td>Low resistance to ‘give the work up’</td>
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<th>“Hot Spots”</th>
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<td><strong>Finance and Accounting</strong></td>
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<td>Account / Bank reconciliation</td>
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<tr>
<td>Data Validation</td>
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<tr>
<td>Recurring invoices and billing</td>
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<tr>
<td>Cash Application</td>
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<tr>
<td>Payroll</td>
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<td>Management Reporting</td>
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| **Call Centers**                 |
| New citizen or customer setup    |
| Collating Agency-specific information |
| Desktop agents                   |
| Processing benefits              |

| **Human Resources**              |
| Recruiting and resume screening  |
| Onboarding and offboarding       |
| Employee registration and validation |
| Policy reviews                   |
| Timesheet validation and follow up |

| **Procurement**                  |
| Contract management and set up   |
| Buy versus spend analysis        |
| PO and Requisition creation / audit |
| Strategic Sourcing / Event Sourcing |
| PCard set up and maintenance     |
What’s Next for RPA and IA

► **More advanced use cases** focused on front office and more complex back office functions

► **Move to scale** – while less than 5% of companies are currently at scale with RPA, multiple studies show a significant movement to scale with RPA in the next 12-24 months and this is consistent with our conversations with clients and prospects

► **More combined RPA and AI solutions** recognizing the increased benefit of deploying the entire spectrum of automation

“Companies that have already invested in RPA tools plan to increase the number of bots deployed by more than 90% in the next 12 months”

-Horses for Sources, 2018
Why You Should Be Looking At Intelligent Automation
State Approach
How Intelligent Automation may be executed at the state level

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<th>Focus on solving critical business problems</th>
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<td>States seeking advice with any of the following may be interested in Intelligent Automation:</td>
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<tr>
<td>▪ Cost reduction / efficiency programs</td>
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<td>▪ Higher value of work / retention</td>
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<td>▪ Process standardization / centralization</td>
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<td>▪ Customer satisfaction initiatives</td>
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<td>▪ Federal and state-wide initiatives</td>
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<td>▪ Improvement and efficiency of administrative efforts</td>
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<td>▪ Reducing business risk / managing turnover inefficiencies</td>
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<td>▪ IT challenges: stretched IT budgets, siloed systems, complex IT landscape</td>
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<th>Identify the right processes that can be transformed</th>
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<td>Key message: improvement of processes can deliver wider transformational benefits beyond replacing humans with ‘Bots’</td>
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<td>Start with low-risk, back office cases to prove it works versus public-facing processes</td>
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<th>Change must be Business-led, IT-supported, and Agile</th>
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<td>Intelligent Automation should be treated as a business transformation program, not just as technology deployment</td>
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<td>Key stakeholders are likely the business/process owner with IT in a supporting role to maximize success</td>
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<td>Focus is on achieving:</td>
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<td>▪ Business value</td>
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<td>▪ Speed to delivery</td>
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<td>▪ Business agility</td>
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Q&A

▸ Questions

▸ Key thoughts
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1711-2500526
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