Intelligent Automation

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Automation continuum range from enabling strategies that improve parts of business processes to sophisticated technologies with cognitive elements.

- **Robotic Process Automation**
  - Transactions, data, and communication across multiple IT systems and applications are interpreted and automated.
  - Screen scraping data collection
  - Rules based business process management
  - Tactical toolset to automate repetitive tasks
  - Cheaper and faster step towards process efficiency

- **Intelligent Automation**
  - Tasks requiring human-like skills and abilities, such as judgment, creativity, or problem solving, are automated.
  - Data input and output in any format
  - Pattern recognition within unstructured data
  - Replication of judgment based tasks
  - Basic learning capabilities for continuous improvement to quality and speed

- **Artificial Intelligence**
  - Technology mimics human skills and abilities to the utmost complex level.
  - Natural language recognition and processing
  - Dealing with unstructured super data sets
  - Hypothesis based predictive analysis
  - Self-learning rules continuously rewritten to improve performance

As the appetite for automation grows, the interplay of emerging technologies will lead to fundamental changes in how the State operates and delivers services to constituents.

Source: Gartner Hype Cycle for Emerging Technologies
Note: Trends across time are not to scale
RPA software provides advanced macro-like capabilities that can be deploy

<table>
<thead>
<tr>
<th><strong>What It Is</strong></th>
<th><strong>What It Is Not</strong></th>
<th><strong>What It Can Do</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Computer coded software" /></td>
<td><img src="image" alt="Physical hardware" /></td>
<td>Open, read and create emails</td>
</tr>
<tr>
<td><img src="image" alt="Cheaper and faster way to automate processes" /></td>
<td><img src="image" alt="A multi-year technology deployment" /></td>
<td>Log into enterprise apps</td>
</tr>
<tr>
<td><img src="image" alt="Cross-functional, cross-application macros" /></td>
<td><img src="image" alt="Artificial intelligence" /></td>
<td>Move files &amp; folders</td>
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</tbody>
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**Benefits**

- Lower labor costs
- Increased process throughput
- Improved process quality
- Greater delivery model flexibility
- Better scalability
- Better payback / ROI – relatively low cost to implement

Source: Deloitte, Robotic Process Automation (RPA) Overview
OAKS must be monitored constantly along with routine health checks to ensure thousands of end users are supported throughout the State.

16 software robots checking hundreds of services & statuses across the OAKS environment.

Robots log in, read/write to databases, collect data, generate status updates, and send exception alerts.

When monitoring is completed, the robots compose and send an email to administrator team.

If there is an issue, the robots immediately alert administrator team via text and email for resolution.

Results:
- Reduced labor costs
- Takes 58% less time
- More efficient issue resolution
- Enhanced user experience with reduced disruptions
A governing survey found that 53% of state and local officials had trouble getting their work done in a 35 to 40 hour week due to excessive paperwork burdens. Emerging technologies, such as Process Automation, can help workers address backlog and focus their time on tasks that require human judgement.

**How can Process Automation help?:**

Process Automation in its basic form, automates manual processes by replicating repetitive tasks with a computer-based application.

The technology mimics a user or a set of user’s activities and can be implemented in a matter of weeks.

Process Automation can be imbedded in an existing application or sit on top of multiple systems in order to automate a process.

**Key features of Process Automation:**

- High ROI
- Minimal System Integration
- High Speed to Automation
- Monitored and Controlled Environment
IT Optimization Summit
Process Automation Implementation Methodology

Conduct Process Assessment
- Workflow analysis
- Complexity determination
- Prioritization

Pilot Processes to Prove Concept
- Business process documentation
- Robust testing
- Measure operational efficiencies

Expand Scope
- Agile development
- Iterate based on feedback from pilot
- Training and knowledge transfer

Scale across Enterprise
- Develop consistent methods/controls
- Create governance structure
- Manage change

Continuous Ideation / Breakthroughs
- Use case identification, development, & selection
DAS, in partnership with Hamilton County, is piloting a Process Automation project. This project aims to automate manual and time consuming tasks for cases workers, allowing them to focus on tasks that require human-judgement.

**SCOPE OF PILOT PROJECT:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Process Diagram</th>
<th>Benefits to the State</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process 1:</strong> Adding a newborn to a mother’s Medicaid case</td>
<td>Managed Care Plans send newborn’s information to Counties via email → Process Automation adds newborn to mother’s case on the same day and sends newborn’s billing information back to Managed Care Plans → Newborn receives access to care without any delay</td>
<td>Ensures timely access to care for newborn and reduces risk of infant mortality</td>
</tr>
<tr>
<td><strong>Process 2:</strong> Updating SSI information on a Medicaid recipient’s case</td>
<td>An alert is received from SSA about a change in individual’s disability information → Process Automation updates information in individual’s Medicaid case on the same day → Case worker is notified if additional action is needed</td>
<td>Saves valuable case worker time and allows them to focus on other high impact activities</td>
</tr>
</tbody>
</table>
As a next phase of the pilot project, Ohio will continue to expand its Process Automation footprint to gain operational efficiencies across the State. Two main pathways to expand are: Taking a proven Process Automation solution statewide and adding new high-value processes to Ohio’s Process Automation portfolio.

**Taking a Proven Process Automation Solution Statewide**

- Taking the process to other counties across the state to maximize impact

**Adding New High-Value Processes to Ohio’s Process Automation Portfolio**

**PROCESS STEPS:** Automating the process of updating the incarceration status of Medicaid recipients

1. County jail sends electronic notification regarding incarceration status of a Medicaid recipient
2. Process Automation updates the Living Arrangement Code for the Medicaid recipient in Ohio Benefits
3. Individual’s Medicaid category is updated and receives appropriate health coverage
Use Case: ACD Dashboard for the CSC Helpdesk:
Send a text message ("tweet"), whenever the left most 'Name' column is red and the queue is listed as 'Open'

It took two weeks to get the required firewall rules configured and then three days to get the prototype up and running. The robot is now sending text alerts to a subset of users since 12/5.
Using Machine Learning for ServiceNow Assignments

- **Problem:** An average of 8,000 inbound request for assistance come in via email into ServiceNow, with an accuracy rate of 80%
- **Today:** An analyst opens each item in ServiceNow, evaluates the email text, and assesses which group can best address the issue or request
- **Objective:** Train IBM Watson to automatically access the incoming tickets, and determine the proper assignment group based on the content.
- **Expected Benefits:**
  - Allows analysts to spend more time with callers and seek strategies to improve IT effectiveness.
  - Improve accuracy (Currently at 82%)
Watson Service Assignment

Incoming Tickets / Last 10 minutes

Watson Assignment Progress

Watson Assigned Groups

Tickets for the day

Days Since Learning Session

8

No. of Learning Samples

51,267
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53,135
IT Optimization Summit
Automation Closing Thoughts

- Don’t dive in the deep end. Mundane processes may be a good place to start.
- There is a time and place for each type of automation.
- Know and prioritize your processes. Don’t automate broken ones.
- Pilot first and plan to scale.
- Include stakeholders and communicate across organizations.