Intelligent Automation for the Federal Workforce

How bots can make the federal workforce happier, more productive, and agile

Increasing budgetary pressure and a workforce faced with retirements and changing skillsets creates an opportunity for Agencies to push beyond typical operational strategies.

**Intelligent Automation**

*How does it work?*

As federal agencies are facing ever increasing pressure to do more with less, technological advances in Intelligent Automation solutions offer innovative federal agency leaders new ways to maximize productivity while minimizing cost. Intelligent Automation puts tools into the hands of process owners to better manage costly, complex, labor-intensive tasks. These tools often sit on top of existing applications and automate, learn, and execute employee tasks and decisions.

**What is the spectrum of Intelligent Automation?**

Automation tools have been around for a long time in various forms, but recent advances in computing power have created opportunities and access to tools that with far greater capability. The applications range from automating minor routines, to applying cognitive computing and managing a vast array of complex contextual decision-making processes.

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<tr>
<th>Cognitive Computing</th>
<th>Algorithmic Business</th>
<th>Natural Language Programming (NLP)</th>
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<tbody>
<tr>
<td>Use of a cognitive framework with artificial intelligence to develop insights, applying learning from experience to data from multiple sources</td>
<td>Use of digital algorithms to execute business processes and provide guidance, wherever needed, for human action</td>
<td>Computer generated virtual assistant that simulates a conversation to provide guidance</td>
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<th>Business Process Automation (BPA) Platforms</th>
<th>Robotic Process Automation (RPA)</th>
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<tr>
<td>Using software applications and integrating those including restructuring user processes in order to minimize costs</td>
<td>Aggregating data from multiple sources to develop an integrated single view to complete business processes across multiple systems and platforms</td>
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At this early stage of what will ultimately be massive sea change in how both the public and private sectors operate, a thoughtful approach on where to begin is important. Given the current maturity of technology, Federal agencies are achieving quick wins by utilizing one type of Intelligent Automation - Robotic Process Automation. Agencies are creating centers of excellence and governance structures that will form the foundation for future, more complex Intelligent Automation applications by piloting processes utilizing RPA. Think of these automation opportunities as high-performance computing delivered at the desktop level.

Mega Trends Drive Need for New Technology Approaches

The move towards technology solutions to intelligently automate processes could not have come at a better time. The federal government faces two key mega trends.

1. Changing Demographics
   The federal workforce is facing one of the largest expected waves of retirements. The GAO expects that more than a third of employees will become eligible for retirement by the end of the decade. In addition to attrition from retirements, younger employees are joining the workforce with a very different set of expectations and changing skillsets.

2. Data Explosion
   Over the next decade, Guidehouse expects the amount of federal financial, business, and machine data to continue to double in size every two years. This explosion of data is being driven by increased prominence of cloud storage, decreased storage costs, and growth in artificial intelligence with higher capacity data formats.

Expectations for Value of Intelligent Automation

Intelligent Automation is not about replacing humans. It is about addressing changes in the workforce combined with exponential growth in data head-on to empower the federal workforce to be more efficient, flexible/agile, and ultimately happier.

More Efficient
As data grows exponentially, automation of data management processes will become invaluable to the federal workforce. Employees using Intelligent Automation will be empowered to handle workloads more quickly and with fewer errors, due to the nature of the bots’ speed and workflows, and be well-equipped to deal with surges in workload seasonality.

Flexible and Agile
Federal employees who have Intelligent Automation as a tool at their disposal will be able to work in a more flexible and agile manner without relying on costly or time-intensive technology system enhancement cycles. Intelligent Automation is system agnostic and interacts with any desktop application at the user-interface level, and can continue to deploy and function in a stable manner regardless of system updates or enhancements at the application level.

Happier Workforce
When manual, repetitive processes are lifted from the workload of employees and transferred to automated bots, human employees are empowered to focus their time and energy on more rewarding, creative tasks and knowledge work. Federal agencies will be able to offer more meaningful day-to-day work to the incoming workforce without sacrificing quality and delivery of normal, necessary processes. Employees who feel they are solving problems or contributing a creative solution instead of focusing on monotonous procedures are happier employees overall.

Opportunities for Automation

RPA can be applied to a multitude of processes across multiple functions

As public sector leaders consider how to do more with less, one of the first questions asked is, “Where do we start?” The answer is simpler than you may think.

The first candidates for Intelligent Automation solutions are the manual and repetitive processes being performed right on employee’s desktops, such as data entry or validation. Take a look at what’s happening at headquarters and at regional offices and you will likely find repetitive, manual work being done in every arm of the organization including HR, IT, Finance and Accounting, property and facility management, contracting and procurement, and customer-facing service operations.

Lessons Learned and Items to Consider as Agencies and Departments Explore Applications of Intelligent Automation

When you consider all the prevailing trends that will impact the federal workforce over the next decade, the real opportunity of Intelligent Automation lies in using these tools as an agent for long term change.

Define the vision. Imagine what you could achieve by bringing intelligent automation to the team. Is the goal better customer service? Higher employee engagement? Lower costs associated with data input, processing and validation? Who can potentially benefit and how? How might an augmented and transformed workforce contribute to core mission objectives?

Prove It! Successful integrations of intelligent automation demonstrate a measurable impact for both employees and the organization through a pilot project. Pilot projects are a great way to gain early buy-in across the organization, demonstrating the win-win for everyone. Organizations will pilot based on the prospect of efficiencies but will continue to build on expertise gained because of predictability and speed of delivery.

While increasing workforce efficiency and effectiveness have long been a priority, adoption of digital workforce solutions like Intelligent Automation can pave the way for more transformative benefits and continuous innovation, with proper controls to mitigate risks.

Everything about the notion of work is rapidly changing – and technology is at the center of it all. The federal government is under pressure to keep up with the pace of change without incurring significant costs to the taxpayers and Intelligent Automation is a key part of advancing the federal workforce into the future.