

Build a Case for Intelligent Automation

Intelligent automation, at several levels, can help agencies streamline operations and reduce costs.



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Agencies are having to do more with less, but still must deliver valuable and efficient services to meet the rising expectations of the citizens they serve. It's a familiar trend. This environment makes a compelling case for intelligent automation, which can help agencies improve interactions with their constituents, enhance employee job satisfaction, and provide accurate and prompt responses to citizen queries.

Intelligent automation is a spectrum of technologies ranging from software bots to automate routine, repetitive tasks, such as data entry into multiple systems; to complex, data heavy, cognitive processes, such as IBM Watson. Many agencies have begun using these tools in areas such as call center operations and in the back office.

With shrinking budgets, a smaller civilian workforce, and increased demands for better services, they really can't afford to do otherwise. And with the growing support and economic viability for cloud computing, and greater availability of APIs means deploying intelligent automation is more affordable and scalable for agencies than it has been in the past.

CLASSES OF INTELLIGENT AUTOMATION

There are three classes of intelligent automation technology, ranging from simple to complex. Agencies are already using facets of each to varying degrees.

The first class is known as robotic process automation (RPA). This leverages technologies or software bots to automate routine, repetitive tasks and processes such as when a person cuts and pastes data from one form or system to another.

These tools leverage capabilities such as workflow, OCR, rules engines and event data collection to automate existing manual processes by mimicking actions of a user. This means it can work with existing IT architecture without compromising it. This technology is a good entry point into using intelligent automation. Agencies can then move to more widespread use from there.

The second class is learning cognitive automation. This includes tools and technologies to deal with processes that may involve a high number of complex transactions and require a deeper level of analytics involving structured and

unstructured data. This is where natural language processing and learning capabilities or "learning assist" come into play.

These are different from the quick hit tools of RPA. These technologies typically require integration with the organization's existing IT infrastructure. They have the potential to transform the back office operations and automate the learning process itself. Think about a chat bot on a web site or mobile device that helps a citizen engage an agency through text or voice chat. It can also automate routine tasks such as password resets.

The third class of technologies is reasoning cognitive automation, the most advanced class of intelligent automation. While still the least mature, it also offers the greatest potential. This cognitive solution has the ability to learn and solve problems using artificial intelligence, machine learning and natural language processing. These technologies ingest massive amounts of data to formulate hypotheses, which would be too complex or time consuming for a human.

IBM Watson, which can analyze all forms of data, continuously learns, and gains knowledge over time, is a good example of this advanced technology. Reasoning cognitive automation can significantly help with decision making and enhance mission delivery. It would be like having an expert by your side to help make challenging decisions

when it comes to managing complex cybersecurity situations or identifying fraud cases.

START AUTOMATING

Getting into the world of intelligent automation is relatively easy. RPA tools are affordable and offer significant ways to improve performance and reduce the burden of back-office operations. Reasoning cognitive automation is more expensive and takes more time to implement, but also offers the biggest potential return on investment.

The integration of big data and cognitive automation can have a significant impact on an agency's business processes and the agency as whole. It brings together massive amounts of diverse, unstructured data, and offers almost limitless alternatives and hypotheses to quickly form cognitive conclusions that humans on their own could not.

The first step is for agencies to choose the right tool for the job. Pick a particular process to automate, develop a proof of concept around that, and start small. Then gradually scale across the enterprise and move toward automating more complex processes and creating a center of excellence.

Don't underestimate the importance of culture and governance issues either, particularly if your organization has plans to expand its use of intelligent automation on a broader scale. Both the CIO and functional leaders from the business side of the organization should have a seat at the table. This is not simply a technology solution, but an approach that directly impacts business outcomes.

Agencies should communicate what these changes will mean to their workforce as well. Let staff know how intelligent automation will create new roles

and positions for automation process specialists and help them focus more on value added, strategic tasks.

MOMENTUM IS GROWING

Many government programs have already embraced intelligent automation tools. Early indications show these technologies improving employee satisfaction. For example, KPMG recently worked with a U.S. health

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care agency to deploy automation to improve the efficiency and quality of its data collection processes. As a result, certain employees were able to focus on more mission-focused and customer-facing roles.

There are other examples of agencies using intelligent automation, ranging from the mundane to the complex. For example, the General Services Administration is using a chat bot to onboard new employees, the NIH is using cognitive computing to help it determine where to spend research money, and the FDA is automating certain data sets.

Awareness of intelligent automation is growing among agencies. This is partly because they can see tangible results in the short term as they automate simple tasks. Agencies can accomplish much of this without having to distract core IT resources from enterprise-wide endeavors. More

complex cognitive processing will become more common over the next few years as its role in government and the business world evolves.

Intelligent automation will change the landscape of an agency's back office functions. It will likely affect front office functions as well, but it will happen incrementally. Over time, it's possible the fields of accounting, procurement, logistics,

and human resources management may transform completely.

Intelligent automation can help agencies deliver better performance and greater accountability for less. Be thoughtful and engage the rest of the organization to carry these initiatives forward. Most importantly, lay the groundwork for a wider transformation within an agency.

Kirke Everson, Government Intelligent Automation Lead at KPMG LLP. Everson will be speaking at KPMG's Government Intelligent Automation Forum on June 6 in Washington, DC.

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