Digital automation tools
Helping improve capacity and efficiency in shared services
Contents

Introduction 01
Innovative Service Delivery Models 02
The Digital Automation Tool Box 03
The Need for a Digitally-Enabled Operating Model 04
Establishing a Digital Management Office 05
Conclusion 06
Introduction

Today’s shared services organizations (SSOs) and their customers face significant challenges as operations continue to grow in complexity and cost. This is often due to organizations managing an ever-increasing portfolio of applications and volume of data, all while maintaining compliance and enabling missions. To manage these challenges effectively, SSOs need solutions that operate on the principles with which shared services and other service delivery models were created: consolidation, standardization, and scale. Today’s existing digital automation tools, broadly defined here as process robotics, cognitive and artificial intelligence (AI), meet these principles. During the last decade, digital technologies have matured to a point where they can transform traditional shared services models and operations.

Shared services organizations now have the opportunity to use automation tools to integrate disparate and disconnected systems and automate processes within an organization or across a department. These new tools can act as a catalyst to help streamline processes, improve data management, reduce costs, improve customer experience, strengthen controls, and reduce backlogs.
Innovative Service Delivery Models

In the past, shared services in the federal government focused on large enterprise resource planning (ERP) system implementations. These typically require significant planning, training, and the reassignment of resources and processes within the future-state environment. The advent of robotics, cognitive, and AI—new and more agile technologies—can enable mission support and SSOs looking to modernize their IT infrastructure to improve existing ERP systems and augment legacy operations. These new tools can help bridge system gaps or shortcomings without the need for an extensive, complex, time- and resource-intensive system overhaul.

Organizations often implement a variety of applications to supplement primary ERP systems that do not directly communicate or interact with each other. This can be a significant pain point for organizations, as disjointed applications and systems often result in process workarounds and added manual efforts. Digital automation, however, can be the connective tissue to bring applications together into a single, streamlined process. Implementing these enhancements in a targeted manner can help organizations maximize the efficiency and capability of existing systems and applications in a cost-effective manner.

Automation can also be deployed to enable system modernization efforts. Organizations preparing for a large system implementation can use automation to ease and minimize the time to go-live by performing time-intensive preparatory activities, such as data cleansing and extraction. These tools are nimble and can be utilized across a variety of systems, so existing tools can be re-configured for use even within a newly implemented system.
The SSO of the future should be armed with a variety of automation tools. This helps increase flexibility and the ability to handle changing operational needs and customer expectations for service levels and cost management. The automation tools of today have been used successfully in the private sector and are just now starting to be deployed broadly within government agencies. The spectrum of tools, which includes process robotics, cognitive, and AI, is becoming increasingly intuitive, skilled, and sustainable as vendor competition drives improvements. This spectrum of digital automation tools addresses the oft-heard government question, “How are we going to do more with less”?

**Process Robotics** is a commercial-off-the-shelf software that automates human activities for repetitive, rule-based tasks. The software typically operates in the user interface layer where it cannot compromise underlying information technology infrastructure, systems, and business rules. These automated processes follow prescribed protocols and procedures with precision, enabling a decrease in human error, improved accuracy, and increased cost savings. For example, one government agency is deploying process robotics to automate the input of budgetary and continuing resolution information into their financial system as well as to track funding levels by office. This automation has freed agency staff to perform budgetary analysis instead of executing routine data entry. The result is a more productive team completing more mission critical work at a faster pace.

**Cognitive Automation** is the next evolution in automation technologies. Cognitive systems are designed to uncover insights that can enable decision-making by using judgement, reasoning, and remembering. Examples of cognitive technologies include computer vision, machine learning, language processing, and speech recognition. One government agency has deployed an intelligent chatbot to automate its responses and request handling for policy questions from its constituents and the public. Another agency utilizes similar technology to automate users’ requests for updates on important shipments and other supply chain statuses. In both cases, the agencies were able to synthesize complex data to better serve their customers and stakeholders while freeing up staff for other value-added tasks.

**Artificial Intelligence** is the apex of digital automation tools. AI mimics human intelligence to help solve complex problems and takes cognitive a step further by making predictions, presenting recommended courses of action based on its own analysis, and acting to implement a solution. AI could enable SSOs and their customers to address their most challenging problems, such as synthesizing extremely complex and multifaceted data sets, automatically implementing process improvements, or making data migration recommendations for potential customers.

**Process Robotics Impact**
Large federal shared services center utilizes Process Robotics to facilitate funds distribution and several other financial processes
- These automations save the center 25,000+ hours of manual work each year, resulting in an estimated $1M in annual savings
- This $1M+ of labor can now be redirected for more impactful activities

**Cognitive Impact**
Large civilian agency implemented a cognitive chatbot to assist with customer requests and inquiries
- Supports over 2M customers
- Achieved 40% increase in call center deflection
The Need for a Digitally-Enabled Operating Model

Digital automation technologies deployed simultaneously across multiple groups or processes without coordination can result in varying development standards, approval and management protocols, and review criteria, making it difficult to manage effectively. To help prevent this scenario, SSOs should incorporate automation tools into planning, strategy, and operating model development.

A strategic operating model can enable SSOs to understand their own systems and capabilities, enabling a targeted deployment. By developing an understanding of current systems – including system providers, technical environment, and organizational alignment – and their respective capabilities, SSOs can select groups and processes where these tools can make the greatest impact. Organizations that strategically plan for the integration of automation tools into their operating models will be able to maximize the demonstrated benefits and be rewarded with smoother implementations.
Establishing a Digital Management Office

To effectively sustain and grow digital automation technologies, a centralized group will need to be established to oversee and prevent them from becoming siloed or underutilized. Just as distinct offices are set up to manage specific parts of an organization (e.g., HR for personnel management, OCIO for IT, etc.), a small “Digital Management Office” (DMO) can manage automation capabilities and coordinate with process owners. A DMO manages automation tools just as any other group would manage its resources to address issues such as malfunctions, expectation shortfalls, the need for expanded capabilities, or communication breakdowns (robotic or human). The implementation of automation technologies should be organized and involve appropriate stakeholders across the organization – a DMO can provide the needed structure to achieve this.

A DMO’s role within a shared services organization would manage the development and operation of automation capabilities, coordinate closely with process and system owners, and prioritize integration across the organization. In addition, the DMO would collaborate with other program management groups to leverage the capabilities of other groups within the SSO to prevent overlap and utilize existing resources.

Functions of the DMO

• Governance: overall management of digital resources, coordinate with process and system owners, and enforce quality standards;
• Program Management Coordination: collaborate with other functional departments and stakeholders to manage vendor relationships, licensing models, communications, training, and documentation of leading practices and lessons learned.
• Development & Operations: create, distribute, operate, and maintain automation tools;
• Performance Management & Reporting: develop, track, and report on performance metrics;

The DMO would oversee capabilities and initiatives throughout the organization – among end-to-end process owners, system owners, and automation tool owners. A core function of the DMO would be prioritizing tool development, maintenance, and management to help maximize impact across the organization. The DMO can be tapped to design and develop automation solutions. It would prioritize all requests to determine processes that would benefit the most from automation, the potential level of effort for implementation, and tool sustainability. Once a tool is developed, the DMO would continue to work with process and system owners to maintain tool functionality and perform maintenance in the event of process, system, or policy changes.

Many other groups within an organization have responsibilities in areas such as technology vendor relationship management, communications, and IT security protocols; replicating these within the DMO would be inefficient and create redundancies within an organization. Therefore, the DMO would be the point of contact for each of these groups and coordinate activities for specific tasks and initiatives. The DMO would also act as an ambassador for automation technologies communicating opportunities, leading practices, and providing training throughout an organization.
Conclusion

Emerging automation technologies offer an unprecedented opportunity for SSOs to maximize their value proposition to their customers. Organizations that effectively harness these tools can unlock opportunities to enhance their existing systems and deliver dramatically improved service for their customers and internal stakeholders. SSOs that implement automation technologies strategically through a centralized Digital Management Office within their operating model can transform themselves to become premier service providers. These organizations of the future will help to redefine best-in-class service in a cost-effective manner to internal and external stakeholders alike.
Authors

Teia Clarke
Principal
tclarke@deloitte.com
+1 571 814 7475

Marc Mancher
Principal
jmancher@deloitte.com
+1.312.486.0244

Hilton Robinson
Senior Manager
hirobinson@deloitte.com
+1 571 858 1886

Brian Siegel
Principal
brisiegel@deloitte.com
+1 571 882 5250

Jennifer Walcott
Principal
jwalcott@deloitte.com
+1 571 882 5345

Chih-Wei Yi
Principal
cyi@deloitte.com
+1.703.251.4004