



Process Automation— An Untapped Opportunity for Government Agencies

Financial Services

Process Automation— An Untapped Opportunity for Government Agencies

Government and public sector organizations today are under constant pressure to generate more value, enhance their operational efficiencies, and attract and retain skilled employees—all while facing increasing levels of risk and public scrutiny.

Within such a dynamic environment, leveraging automation is key to transforming an organization's operating model. The challenge is that implementing and monitoring controlled, automated processes can be complex, costly, and require specialized resources. Many organizations perceive developing automated processes as "a moving target" requiring constant improvements and new emerging technologies.

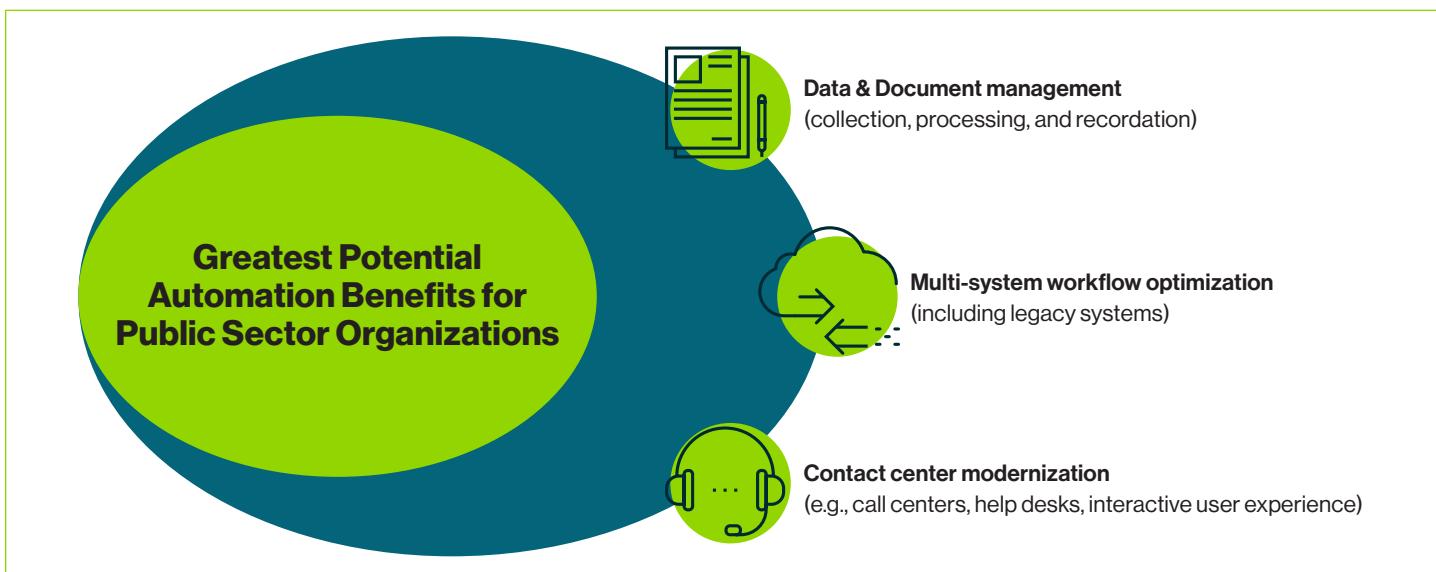
Conversely, this presents the opportunity for organizations to apply custom, targeted solutions focused solely on their needs with the help of a team experienced in implementing such bespoke solutions.

In 2020, FedScoop surveyed federal and state government IT, business, and program executives on their organization's automation environment maturity. A large majority of respondents to this survey foresee considerable value in using automation—with 48% of

respondents reporting already-implemented tools have saved them 5,000 to 100,000+ hours of work, allowing their staff to focus on higher-impact efforts.¹

While many government and public sector organizations see enormous potential for automation to enhance their management of internal processes and controls, far fewer have moved forward with integrating automation into their activities. FedScoop concluded that 42% of federal and state agencies have yet to implement any automation; additionally, of the 58% that have begun exploring automated solutions, about half are still conducting a pilot program or have implemented automation within the past 12 months. Integrating automation technologies into an organization's existing activities in a way that limits excessive interruption of operations and offers tangible value is challenging.

Here we discuss process automation, examine key usage factors, and weigh approaches to integrating automation into current operations. Whether you are new to the concept of using automation or want to enhance your approach, this paper will give you a strong place to start.



1. FedScoop. (2021). RPA's Expanding Role in Government. <<https://cdn.fedscoop.com/robotic-process-automation-in-government-report.pdf>>

Why Implement Process Automation?

Process automation can drive operational effectiveness by using innovative technologies and tools to systematically perform specific tasks. Many proponents see process automation as a tool to reduce the manual effort required to perform routine activities, maintain data and task integrity, and improve risk management controls. Process automation can be used to automatically merge data from various sources, perform robust quality assurance (QA) checks, and present comprehensive information in a pre-made report or dashboard. This can reduce the risk of human error and amount of time to complete a task, while enabling the use of wider populations of larger and disparate data to provide more accurate results.

Automating data-heavy processes can potentially provide organizations with:

Low-investment trials: Existing staff, or “citizen developers,” are well-positioned to lead automation efforts with low-code and no-code applications due to their familiarity with existing infrastructure and procedures. Conducting proof-of-concept testing allows organizations to understand how and where automation can add value without upfront investment in specialized staff or technologies.

Enhanced efficiency and optimization: Repeatable codes and scripts can enhance efficiency and optimize various procedures over time. It can also reduce the number of manual tasks that need to be conducted, allowing employees to focus on higher-value activities.

Faster, more reliable results: Manual tasks require data collection, consolidation, and integrity checks, leaving little time for analysis. Data automation, in most cases, can execute end-to-end activities in less time and with higher confidence in output.

Process Automation Pilot Program

At Guidehouse, we developed a four-step, flexible and scalable pilot program for organizations to understand how implementing process automation can create repeatable, reliable, and sustainable value for our clients. This **Discover, Design, Implement, Refine** approach can serve as a roadmap for any organization seeking to begin or enhance their automation journey. Below, we provide a brief overview of each stage in the process automation pilot program.

DISCOVER

- Current-state analysis
 - Identify presently licensed technologies that can enable automation (e.g., MS Office Suite, SharePoint, or other cloud tools)
 - Determine current data infrastructure (e.g., data warehouse vs. data lake, general data consistency and integrity)
- Benefits estimation
 - Evaluate potential time/cost savings from automating procedures
 - Establish intentions for value-add (e.g., budget reduction, static staff count conducting more higher-value activities)

DESIGN

- Automation targeting
 - Identify processes most appropriate for pilot program
 - Review procedural documentation for end-to-end understanding and capability assessment
 - Where possible, create visual aids, such as process maps and data flowcharts (with or without swim lanes), to identify potential process improvements that can be implemented during automation development
- Obtain stakeholder input
 - Elect existing staff to lead effort (i.e., “citizen developers”) and define roles/responsibilities
 - Obtain leadership buy-in/support for pilot program and long-term vision upon successful trial
 - Create presentations and guides for stakeholders to understand how automation impacts their work

IMPLEMENT

- Automation scripting
 - Write code in chosen software(s) with which the automation script will run
 - Test and debug automated processes until procedure can complete with no errors
- Ongoing evaluation
 - Assess realized benefits against forecasts for proof-of-concept decisioning and forward planning
 - Run automated processes concurrently with manual process for output validation
- Future-proofing
 - Define and publish (internally) data infrastructure and quality standards
 - Operationalize procedures for continued refinement of newly implemented automated processes

REFINE

- Rescoping/project planning
 - Repeat Discover activities to further identify and prioritize processes most appropriate for automation
 - Determine need for additional software and/or staff for increased optimization
 - Design cycle for continuous development and implementation of new automated processes

Guidehouse in Action

How Guidehouse Helps Agencies Build and Scale Automation Using the Discover, Design, Implement, and Refine Method

#1 Large Cabinet-Level Agency

CHALLENGE: A large Cabinet-level agency faced intense audit scrutiny from various private and federal regulatory bodies, primarily due to lack of effective internal controls and coordination across program and field offices. Guidehouse assisted the agency's Chief Financial Officer in developing an internal controls program that would address current audit findings, increase accountability, and drive program integrity.

APPROACH: Introducing a new program of this scale across a very decentralized organization required significant coordination and governance. Guidehouse supported the agency's Office of Chief Financial Officer (OCFO) in establishing a charter, governance structure, training, and marketing strategy to gain buy-in from program offices. After clearly defining the current state, Guidehouse worked in tandem with the agency's OCFO to develop automated solutions for many of its financial management business processes.

RESULT: These efforts resulted in more than 7,000 hours saved across seven manual business processes. The automated solution of the grant accrual validation process has increased the agency's OCFO's efficiency and its ability to be compliant. The old process, from start to finish, took approximately 2,100 hours over the course of six and a half months to complete. After implementing the automated solution, the process, from start to finish, takes approximately 65 hours over three to four weeks. Further, the intelligent automation solution resulted in a 97% reduction in level of effort by government personnel.

Guidehouse also supported the agency in reviewing other manual processes, controls, and testing documentation associated with its internal control program. Guidehouse supported the agency in identifying ideal automation candidates and analyzing processes to identify further opportunities to increase execution consistency, efficiency, and auditability. Our team identified more than 60,000 hours in savings and developed a roadmap to accomplish this over a three-year period.

#2 US National Science Foundation²

CHALLENGE: In June 2019, the U.S. National Science Foundation (NSF) hired Guidehouse to help transform its successful internal control program into a Data Analytics & Assurance Program (DAAP). NSF's Division of Financial Management sought to make better use of emerging technologies to gain new insights, decrease the compliance burden, and shift staff to higher-value work.

APPROACH: The DAAP team is responsible for spearheading the NSF risk management and internal control programs. The internal control support included automating manual key reconciliations within the financial reporting business cycle, enabling flexible data modeling and analytics in the grants management business cycle, and automating portions of the charge card misuse review process and developing a dashboard that increased transparency into results. Within risk management, the team helped develop a variety of data modeling tools to better understand the external risk environment, investigate anomalous spending patterns, and identify characteristics associated with undelivered orders.

RESULT: By shifting to an analytics-based approach, the Guidehouse team has helped NSF better understand and control the risks facing the organization while lowering the compliance burden on key internal and external stakeholders. In addition, Guidehouse assisted NSF in the development of an improper payments predictive model, leveraging data from the Federal Audit Clearinghouse, agency systems, and other federal agencies to help forecast and assess which NSF awardees may present a higher risk of improper payments. The model minimizes manual burden through automation, provides a quantitative view of risk, and won AGA's 2020 Innovation Challenge award. Guidehouse is also supporting the operationalization of a textual analysis tool to turn volumes of unstructured data into valuable information to better categorize and quantify the nature and extent of challenges that grantees face. This tool's future applications won the AGA 2021 Innovation Challenge award.

2. Nothing in this Case Study should be construed to state or imply NSF endorsement or recommendation of Guidehouse products or services.

#3 US Small Business Administration

CHALLENGE: The Coronavirus Aid, Relief, and Economic Security Act launched new initiatives and bolstered several existing programs to provide critical assistance and deploy capital to aid small businesses negatively impacted during the pandemic. Given the unprecedented need for immediate program development and resource distribution, the Small Business Administration (SBA) sought to leverage robotic process automation, data analytics, and other tools to increase processing speed without sacrificing agency/program integrity.

APPROACH: Guidehouse analyzed the state of SBA's lending platforms' infrastructure and system load capacity, then leveraged a variety of project management tools to effectively map process flows, stakeholders, risks, and opportunities, etc. We developed a roadmap for accelerated implementation and kept all stakeholders engaged in the decision-making process to ensure conceptual alignment amongst various offices. Further, we planned implementation efforts to enable all parties involved to quickly learn and adopt new procedures and created training materials and other resources as needed.

RESULT: We partnered to build an automated rules engine and designed controls to detect instances of noncompliance with eligibility requirements and or indications of fraud; this tool screened 12 million-plus loans—if performed manually, this review process would have required thousands of work hours and would have necessitated the rapid onboarding of scores or hundreds of new staff in a short amount of time to avoid delays in decisioning applications. Following the success of the rules engine for this work, we replicated and customized the tool for batch-screening on some of the SBA's other programs.

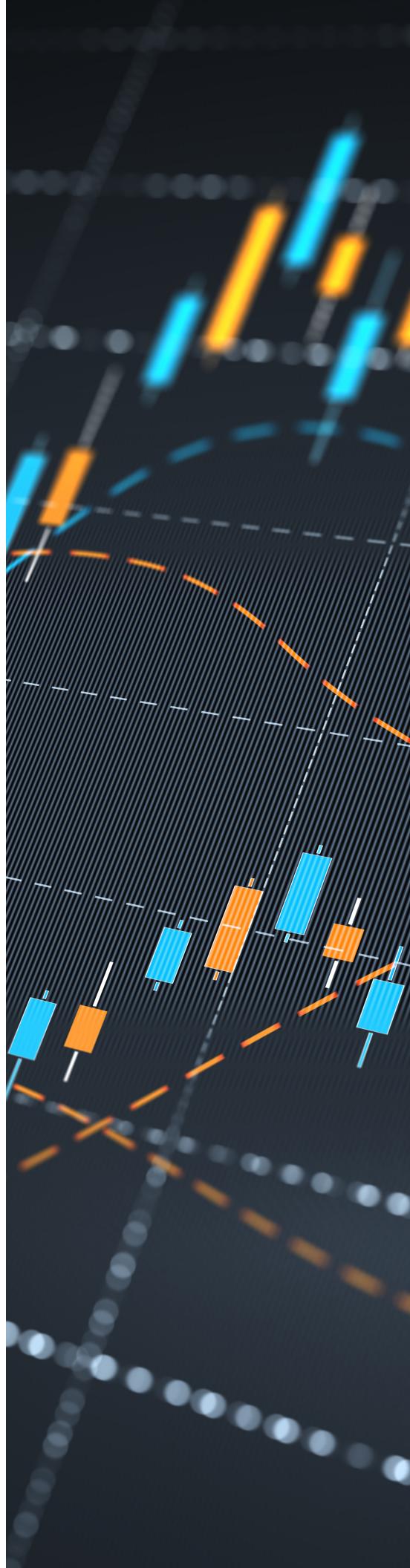
How Guidehouse Can Help

Guidehouse can help organizations assess their readiness for and implement transformative automated processes to improve their operational effectiveness.

Using our scalable automation framework, Guidehouse can quickly review and assess your current technology and data infrastructure to determine the benefit of implementing process automation. We will support the design of a process automation environment that categorizes and prioritizes various processes, as well as the identification and training of personnel designated to maintain the health of said environment. Guidehouse is well-equipped to make an individualized assessment of your unique circumstances and offer innovative advice and solutions for taking advantage of emerging technologies or desire to follow industry better practices.

The Guidehouse team has relevant expertise in many areas, including:

- Implementing a full spectrum of automation tools, such as PowerBI, BluePrism, Automation Anywhere, Power Automation, UI Path, to ensure the best solution for medium, large, and global organizations.
- Optimizing data environments for automation.
- Developing automated business processes that leverage open-source scripting tools such as Python and R.
- Coordinating stakeholder outreach efforts to enable automation implementation with a one-voice mentality for maximum impact and minimal friction across the organization.



Authors



Caitlin McGurn

Partner, Financial Services
cmcgurn@guidehouse.com



Farhan Bandukda

Associate Director, Financial Services
fbandukda@guidehouse.com

Contributor:

Ian Carchman

Senior Consultant, Financial Services
icarchman@guidehouse.com

 [linkedin.com/company/guidehouse](https://www.linkedin.com/company/guidehouse)

 twitter.com/guidehouse

guidehouse.com

About Guidehouse

Guidehouse is a leading global provider of consulting services to the public and commercial markets with broad capabilities in management, technology, and risk consulting. We help clients address their toughest challenges and navigate significant regulatory pressures with a focus on transformational change, business resiliency, and technology-driven innovation. Across a range of advisory, consulting, outsourcing, and digital services, we create scalable, innovative solutions that prepare our clients for future growth and success. The company has more than 10,000 professionals in over 50 locations globally. Guidehouse is a Veritas Capital portfolio company, led by seasoned professionals with proven and diverse expertise in traditional and emerging technologies, markets, and agenda-setting issues driving economies around the world. For more information, please visit: www.guidehouse.com.

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