Federal RPA Use Case Inventory

Instruction Manual

A step-by-step guide on how to access, navigate and leverage the Federal Robotic Process Automation (RPA) Use Case Inventory (UCI).

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Note: The Federal Robotic Process Automation (RPA) Community of Practice (CoP) developed the RPA Use Case Inventory with input from leaders across government. All submitted use cases have only been approved for sharing between federal programs. The Use Case Inventory is not available for sharing outside of federal programs and this restriction will be strictly enforced. For any questions, please contact the Federal RPA Community of Practice at **RPA_COP@gsa.gov**.

OVERVIEW

Robotic Process Automation

Robotic Process Automation (RPA) is a low to no-code Commercial Off the Shelf (COTS) technology that can be used to automate repetitive, rules-based tasks. Like an Excel macro operating within a spreadsheet, RPA can record actions performed across a personal computer, access systems, and perform delineated tasks for human users. RPA products vary in their exact capabilities, but all RPA technologies emulate human actions, enabling process owners or staff with appropriate training to rapidly design, test, and deploy automations to dramatically reduce an organization's workload. Popular uses of RPA include data entry, data reconciliation, spreadsheet manipulation, systems integration, automated data reporting, analytics, and customer outreach and communications.

Many agencies across the federal government have initiated RPA programs to automate tasks of varying complexity. Automations developed to date have focused on multiple functional areas including finance, acquisition, IT, human resources, and security/mission assurance.

As part of its mission to accelerate the adoption of automation solutions across the government, the Federal RPA Community of Practice (CoP) has carefully collected information on many of the automations operating within active RPA Programs. These successfully deployed automations, or use cases, have been combined to form the Federal RPA Use Case Inventory (UCI). Available to all Federal employees, the UCI acts as a repository of RPA applications that have been developed and deployed across the government. It is intended to accomplish the following outcomes:

- Promote knowledge sharing within federal agencies of RPA applications currently operational across the federal government.
- Promulgate great ideas, insights, and best practices that can lead to new RPA opportunities within additional federal agencies.
- Facilitate collaboration and information sharing between federal agencies on RPA opportunity identification, solution design, deployment strategy, and technology management.
- In time, promote the creation of RPA applications leveraged by multiple agencies, such that government-wide adoption of RPA is as efficient and cost-effective as possible.

Purpose

This instruction manual provides federal employees with a brief background on the capabilities of the UCI, as well as, instructions on how to access and search the inventory. This manual also includes a brief section on how agencies that find a compelling use case should evaluate the opportunity and begin design and deployment as appropriate.

The Federal RPA Playbook provides additional information for new RPA programs and is available at https://digital.gov/pdf/rpa-playbook.pdf.

ACCESS THE FEDERAL USE CASE INVENTORY

Data2Decisions (D2D)

The UCI is housed under the GSA Data2Decisions (D2D) portal via MAX.gov. Access to the UCI requires registration with MAX.gov. This website is for government-wide advanced collaboration, information sharing, data collection, publishing, and analytical capabilities for federal agencies and partners.

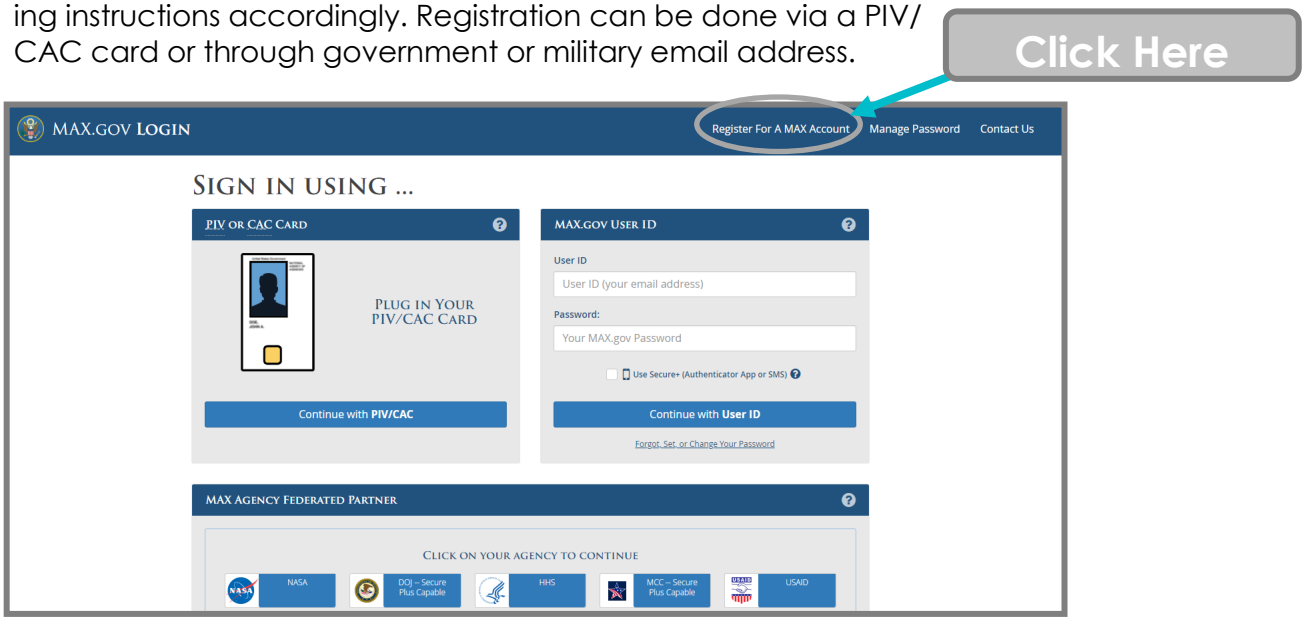
How to Login

Step 1: Register .gov or .mil email address with MAX.gov.

If registered with MAX.gov, no action is needed (***proceed to Step 2***).

If not yet registered, complete the following actions:

1. Click here to go to the OMB MAX.gov homepage.
2. Select "Register For A MAX Account" in the top-right corner, and follow the resulting instructions accordingly. Registration can be done via a PIV/CAC card or through government or military email address.



Step 2: Log into the D2D Portal using your MAX.gov credentials

Click here to login to the D2D Portal using MAX.gov credentials. Users will have the option of logging in with a User ID or with a PIV/CAC card.

How to Login (continued)

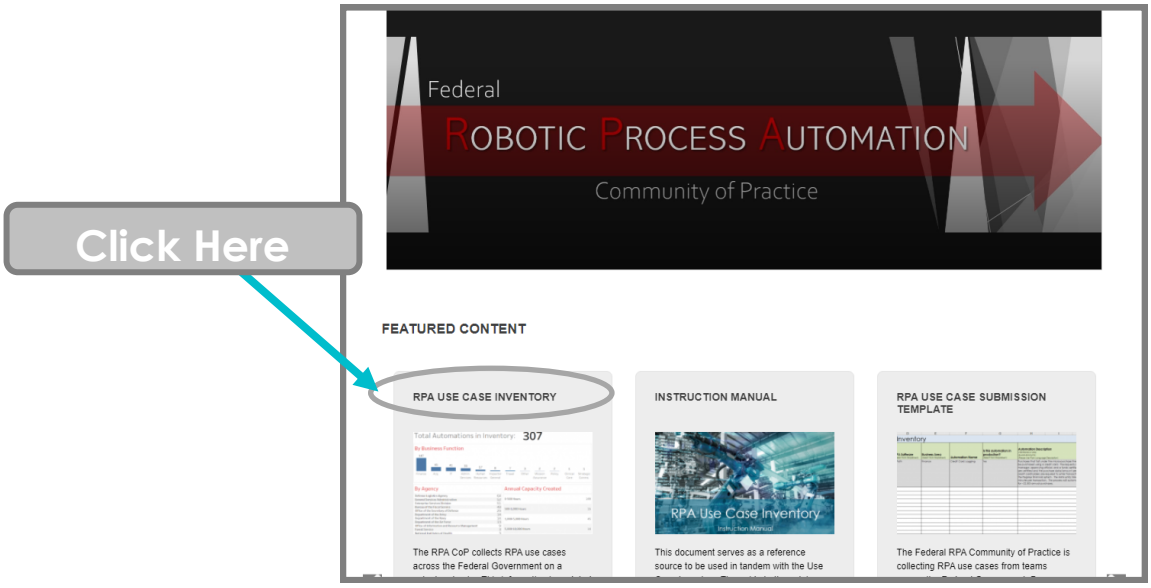
Step 3: Access the Federal RPA CoP D2D Site

Registered users will be navigated back to the D2D Portal and will be logged in.

1. Click here to navigate to the RPA CoP D2D page.
2. Click 'Add Bookmark' to have the RPA Use Case Inventory homepage easily accessible.

   Note: In the future, users can navigate back to the page by hovering over the 'My D2D' tab, under 'My Bookmarks'.

3. Access the UCI by clicking on the box titled 'RPA Use Case Inventory', found under the 'Featured Content' portion of the home page.



Contact Information for Troubleshooting

To contact MAX Support for assistance with registering for a MAX ID, creating a password, or logging onto the MAX Homepage, email **maxsupport@max.gov** or call (202) 395-6860. MAX Support Hours are from 8:30 AM to 9:00 PM EST Monday through Friday, and 9:00 AM to 6:00 PM EST on Saturday through Sunday.

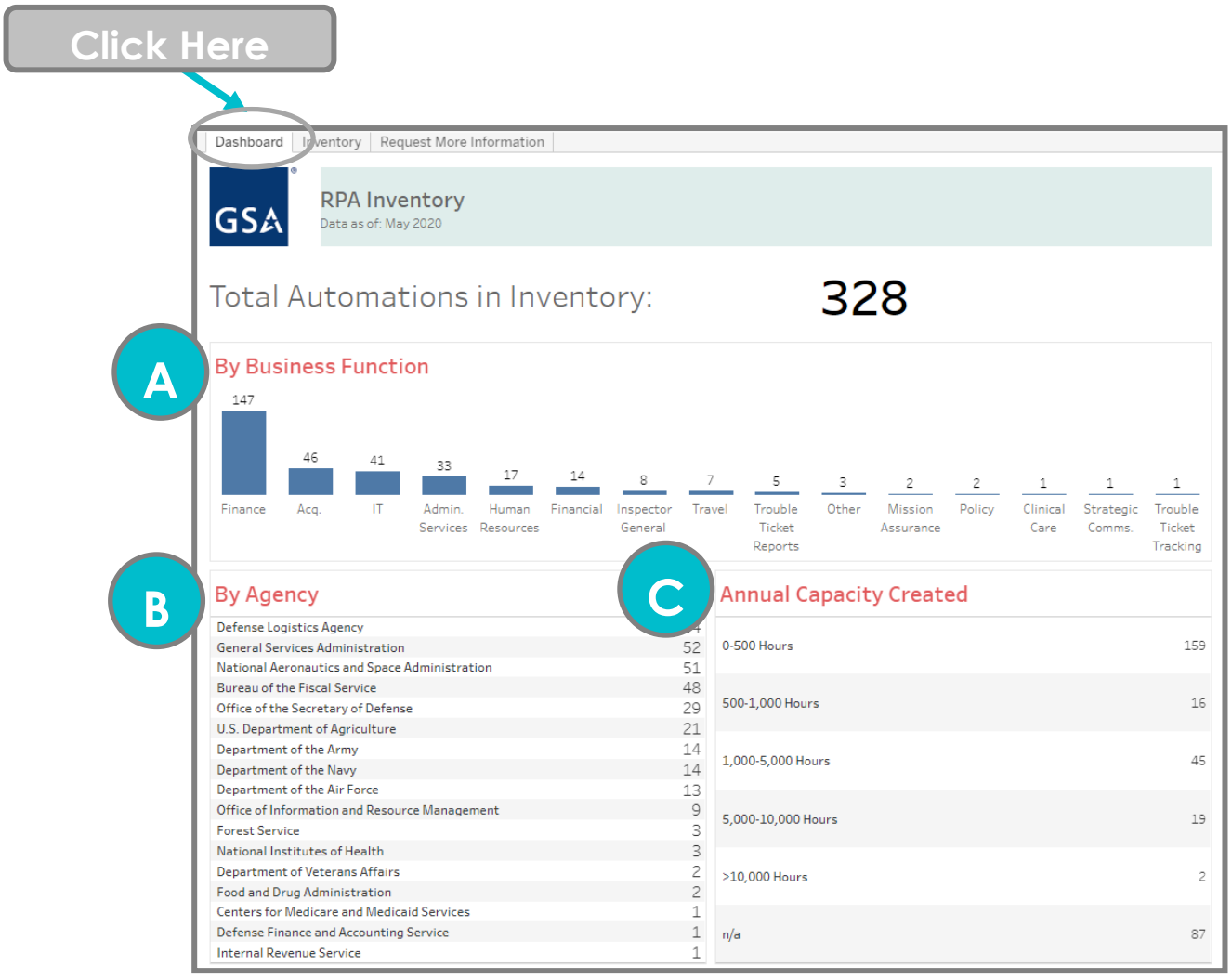
NAVIGATE THE FEDERAL USE CASE INVENTORY

Use Case Inventory

Within D2D, the Use Case Inventory is accessible at both a high-level via the 'Dashboard' interface and at a more granular level via the 'Inventory' interface. The 'Dashboard' interface provides users a macro-level view of the automations within the inventory, while the 'Inventory' interface provides users with a detailed look at each automation.

Use Case Inventory - Dashboard Interface

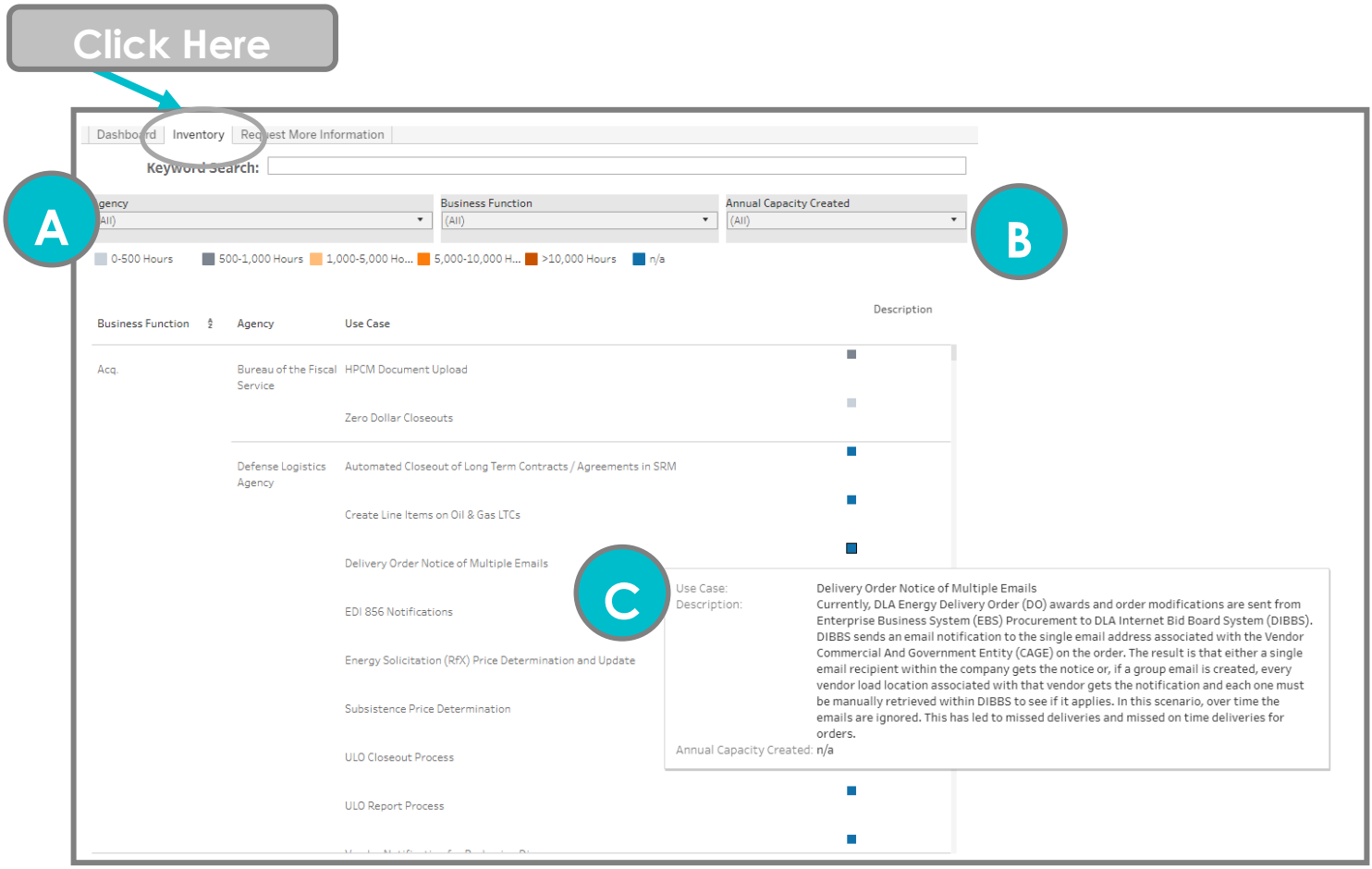
The Use Case Inventory's 'Dashboard' interface is a high-level view of deployed Federal automations that is sortable by key data fields. The image below shows the 'Dashboard' in three parts with emphasis added to the business function, the agency, and the annualized capacity (hours) created by the automations, respectively. Label A displays automation counts by business function; Label B shows the number of automations that have been submitted by participating agencies; and Label C denotes the annual capacity created by the automations submitted.



NAVIGATE THE FEDERAL USE CASE INVENTORY

Use Case Inventory - Inventory Interface

The image below details the display of the 'Inventory' interface - where use cases are depicted at the individual automation level. This interface allows for the user to search for specific use cases and to filter using specified criteria. Label A shows the keyword search box which allows the user to filter by agency name, use case name, or a word in the description. Label B depicts the Dropdown Filters that allow the user to filter the inventory results based on selected filter options, and Label C displays the use case description in detail; the user must hover their cursor over the square in the last column to the right.



Data Limitations and Caveats

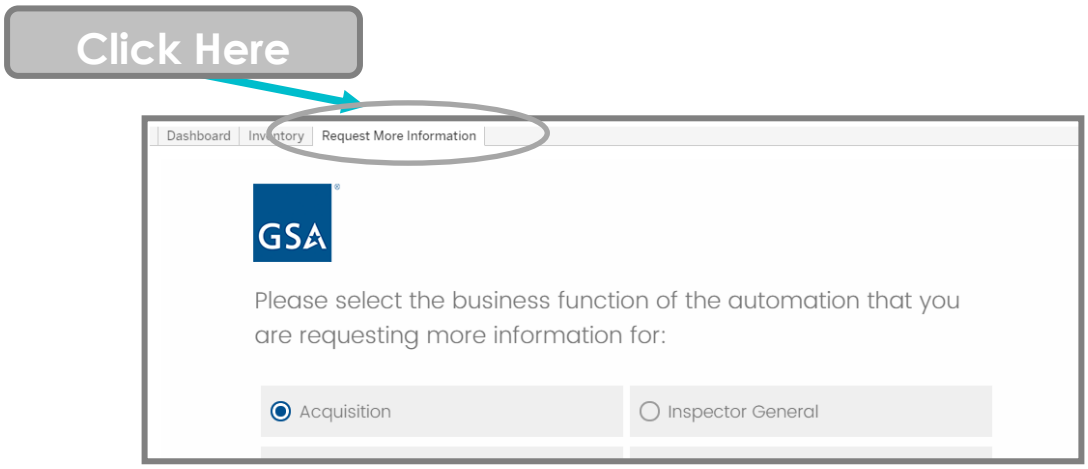
Although the UCI is a beneficial resource for emerging or scaling RPA programs, it is not exhaustive in the number of automations that have been deployed across the federal government. Use cases have been provided on a voluntary basis, and the CoP does not guarantee accuracy of descriptions. To ease the burden of knowledge sharing and protect the privacy of contributors, the RPA CoP has deliberately excluded data fields such as the automation code, vendor information, and cost-to-build.

Data Limitations and Caveats (continued)

Additionally, the RPA use cases that are listed within the UCI have descriptions specific to agencies' processes, RPA tools, and practices. However, RPA is a versatile and malleable tool; if the process has been automated successfully in one agency, the use case can likely be adopted by partner agencies seeking to tackle similar business or operational challenges.

Obtain Additional Information on Use Cases

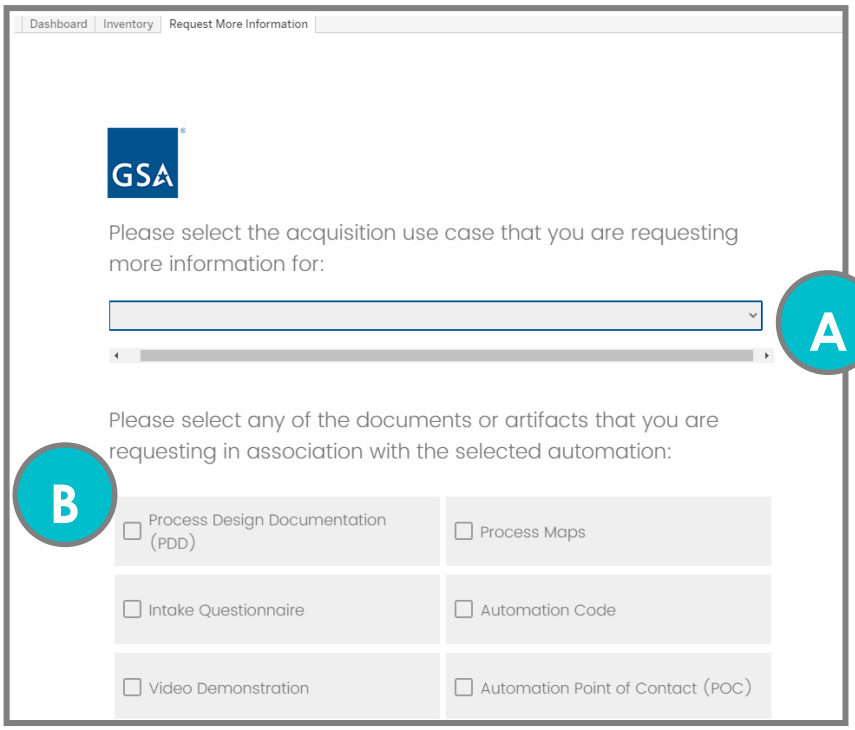
For any questions or to request additional information on the automations housed within the UCI, please submit a request for more information via the **'Request More Information'** tab. Once navigating to the tab, the automations can then be found by selecting the business function that the automation was developed to support.



After selecting the business function, the user will then select the automation via the dropdown list depicted in Figure A.

Once the desired automation is selected, the user will then have the ability to select the artifacts associated with the project as depicted in Figure B.

Once the user has submitted the request for artifacts or more information, the CoP leadership will reach out to the submitter with desired information. While each project may not have all of the documents selected, the RPA CoP will provide as much as possible to the user.



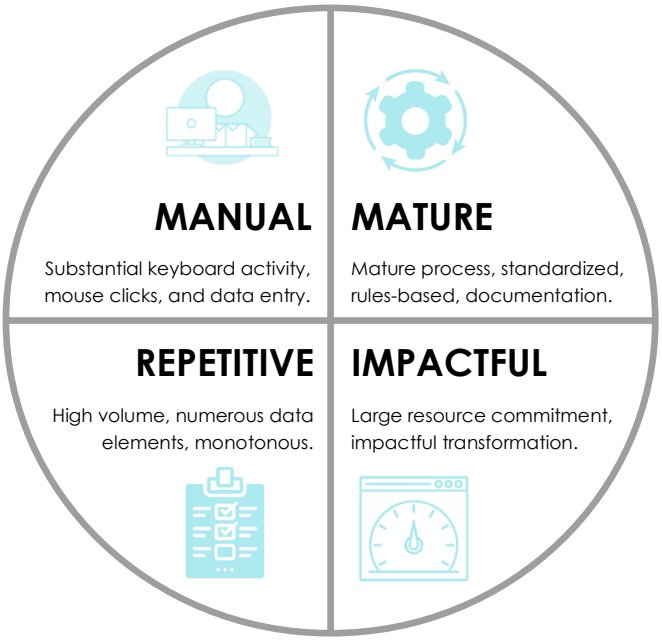
LEVERAGE USE CASE INVENTORY DATA

How to Identify an Applicable Use Case

Browsing through the UCI might be overwhelming for federal programs with limited RPA experience. As the UCI illustrates, federal agencies have introduced RPA to a myriad of business functions and applications. Some of these automations may be directly translatable, whereas some may be irrelevant. The purpose of the UCI is to provide inspiration and insight into potential RPA applications. It is up to individual federal programs to determine the relevance of individual use cases to their business processes.

In order to assess which use cases an organization will benefit from, it is imperative to deploy a set of standard criteria to judge each candidate business process. Although agency's priorities may vary, the following are important criteria to consider:

- **Highly Manual/Burdensome Process** - Does the process require employees to carry out monotonous and mundane tasks? Manual data entry can potentially create errors and consume employee time with tedious, repetitious tasks that are neither relevant to their skill set nor in need of human decision-making.
- **Repetitive/Impactful Process** - The more data that the process works with, the more time-consuming and prone to human data entry error the process is. If the process occurs frequently, then it is likely more worthwhile to commit to automation given the potential for increased employee capacity.
- **Mature Process** - A process with established, standardized, and institutionalized procedures is much more amenable to automation than a process without well-defined procedures or standardization. Look first for processes that are highly rules-based and well-documented. Since automations function off of rules and a standardized, repeatable procedure, RPA will be difficult to implement without a mature process.



Evaluating Use Cases

When assessing the UCI and potentially impactful automations, it is important to align agency objectives with automation candidates. The CoP has recommended three main factors to help guide evaluation and prioritization of RPA initiatives; 1) suitability; 2) strategic alignment; and 3) impact (value). Each factor is detailed in the figure below:

Evaluating Use Cases (continued)

Suitability Factor 1	Is RPA the right solution to the identified business challenge?	
Areas of Analysis	**Attributes - Manual, Repetitive, Stable** • Repetitiveness of Process • Frequency • Exception Handling • Stability of Requirements/Demand • Structure and/or Sensitivity of Data • Rules-Based Degree of Standardization	**Attribute - Complexity** • Number of Locations or Organizations Involved • Quality of Process Definition/Documentation • Number of Systems and Applications • Type of Connectivity • Number of Screens and Keystroke Steps • Operational Readiness • Subject Matter Expert Availability • System or Data Accessibility
Strategic Factor 2	Does the automation candidate align with RPA program and agency strategy?	
Areas of Analysis	**Attributes - RPA Program Alignment** • RPA Program Goals and Objectives • RPA Program Service Delivery Model and Concept of Operations • RPA Program Technology Management and Resourcing Strategies	**Attribute - Agency Strategy Alignment** • Agency Mission and Goals • Leadership Priorities and Strategies • PMA and CAP Goals • Broader Agency-Wide Deliverables, Initiatives, and Performance Metrics
Impact **Factor 3**	How impactful is the automation opportunity to stakeholders and the agency?	
Areas of Analysis	**Attributes - Quantitative Value** • Labor Hour Savings • Reduction in Cycle Time • Increase in Throughput, Process Outputs • Reduction in Error Rates	**Attribute - Qualitative Value** • Increased Compliance/Auditability • Enterprise Applicability/Scalability • Increased Accuracy • New Services/Enhanced Capabilities

Prioritizing Use Cases

To formalize the assessment of the suitability, strategic alignment, and value of RPA automation candidates, the CoP recommends the adoption of a scoring matrix to foster comparative analysis between the opportunities. As denoted in the figure below, a simple weighted prioritization table can achieve this goal. The table assigns weights to the three factors (as determined by the RPA CoP), and assigns alignment scores using 1, 3, 7, and 9 for each RPA opportunity. Each RPA Program must determine which elements are included in suitability, strategic alignment, and impact analyses, and if formal thresholds are established for each of the alignment scores.

LEVERAGE USE CASE INVENTORY DATA

Prioritizing Use Cases (continued)

RPA Opportunities	Suitability		Strategic Alignment		Impact		Total
	Weight	2	Weight	1	Weight	3	
RPA Opportunity 1	(1/3/7/9 Score)	X*2	(1/3/7/9 Score)	X*1	(1/3/7/9 Score)	X*3	
RPA Opportunity 2	(1/3/7/9 Score)	X*2	(1/3/7/9 Score)	X*1	(1/3/7/9 Score)	X*3	
RPA Opportunity 3	(1/3/7/9 Score)	X*2	(1/3/7/9 Score)	X*1	(1/3/7/9 Score)	X*3	
RPA Opportunity 4	(1/3/7/9 Score)	X*2	(1/3/7/9 Score)	X*1	(1/3/7/9 Score)	X*3	
RPA Opportunity 5	(1/3/7/9 Score)	X*2	(1/3/7/9 Score)	X*1	(1/3/7/9 Score)	X*3	

SUBMIT AN RPA USE CASE

Use Case Submission

In an effort to ensure the UCI remains robust, relevant, and accessible, the RPA Community of Practice intends to periodically update the portal with new submissions. The CoP relies on community members to submit use cases as they are deployed across the Federal Government. To assist with use case submissions, there are two separate ways to publish to the inventory:

1. **Online via Digital.gov** - This method is recommended when submitting less than 5 use cases and allows the CoP managers to quickly vet and publish use cases. The online submission portal can be found at www.digital.gov/communities/rpa by clicking on the 'Submit an RPA Use Case' icon.
2. **Excel template** - This method is ideal for bulk use case submission. The Excel Use Case Template can be downloaded on the D2D homepage by navigating to 'Featured Content' and clicking on 'RPA Use Case Submission Template'. **Once completed, the Excel template should be emailed to RPA_COP@gsa.gov.**

Additional Information on the RPA CoP

For any questions or to request additional information on the Federal RPA CoP please email: **RPA_COP@gsa.gov.**