

A dramatic photograph of a space shuttle launching from a launchpad. The shuttle is ascending vertically, leaving a massive, bright white and orange plume of fire and smoke behind it. The launchpad's service structure is visible to the left of the shuttle. The sky is a hazy, golden-brown color, suggesting either dawn or dusk. The overall scene conveys a sense of power, achievement, and upward movement.

Training Academy

UiPath StudioX
and Planning
Your Automation



Course Path

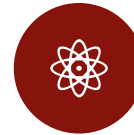
Introduction
to Intelligent
Automation and
UiPath Overview



User Interface
Automation
and Project
Notebook



Microsoft Office
Automation



Automation
Bootcamp and
Intelligent
Automaton Demo



StudioX and
Planning Your
Automation



Decisions,
Iterations and
Scenarios with
StudioX



Error Handling
and Automation
Lifecycle

Agenda

1. Recap of Module 1
2. How Do Organizations Uncover Automation Opportunities?
3. Get Started with StudioX
4. How to Plan and Map Automation Builds?
5. Automate with StudioX: Find Your Unicorn Name
6. Automate with StudioX: Currency Converter
7. Enable Successful Automation Programs
8. Homework: RobotPath – Enter a New Supplier



Topic

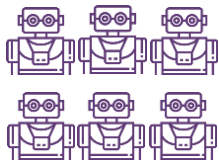
1

Recap of Module 1



What is Robotic Process Automation?

Robotic Process Automation (RPA), is the technology that enables computer software to perform actions typically done by humans interacting with digital systems.



Virtual Workforce

Simple, easy-to-use 'Virtual Workforce' managed and optimized by the business



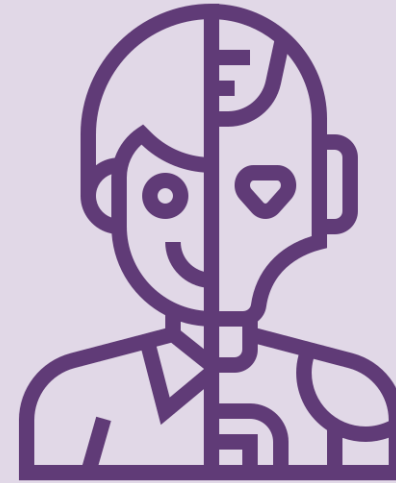
Mimic Human Users

Software that emulates user execution of repetitive processes with existing applications



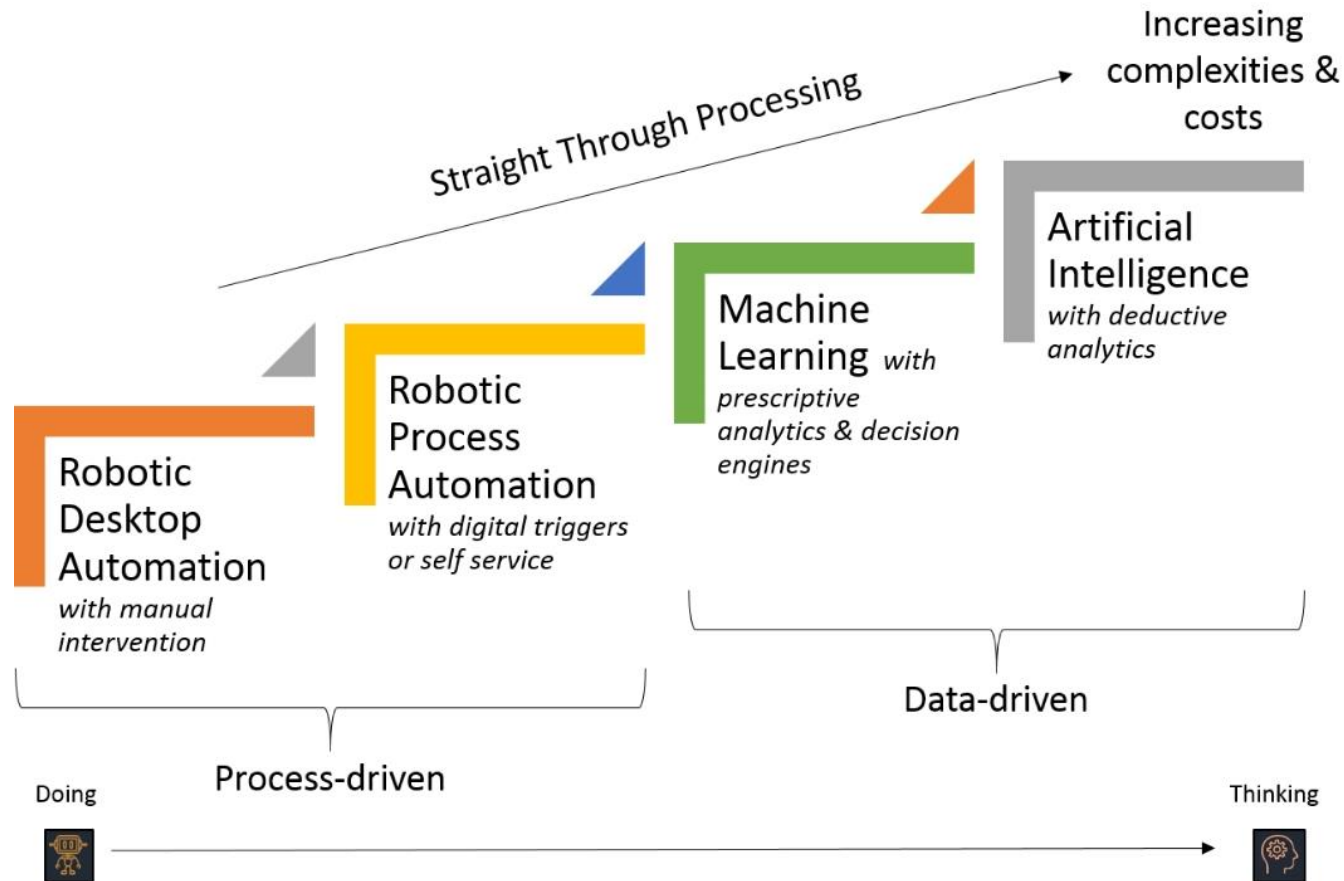
Interact with Applications and Systems

Software that Interacts with any application or system through the user interface using non-invasive techniques





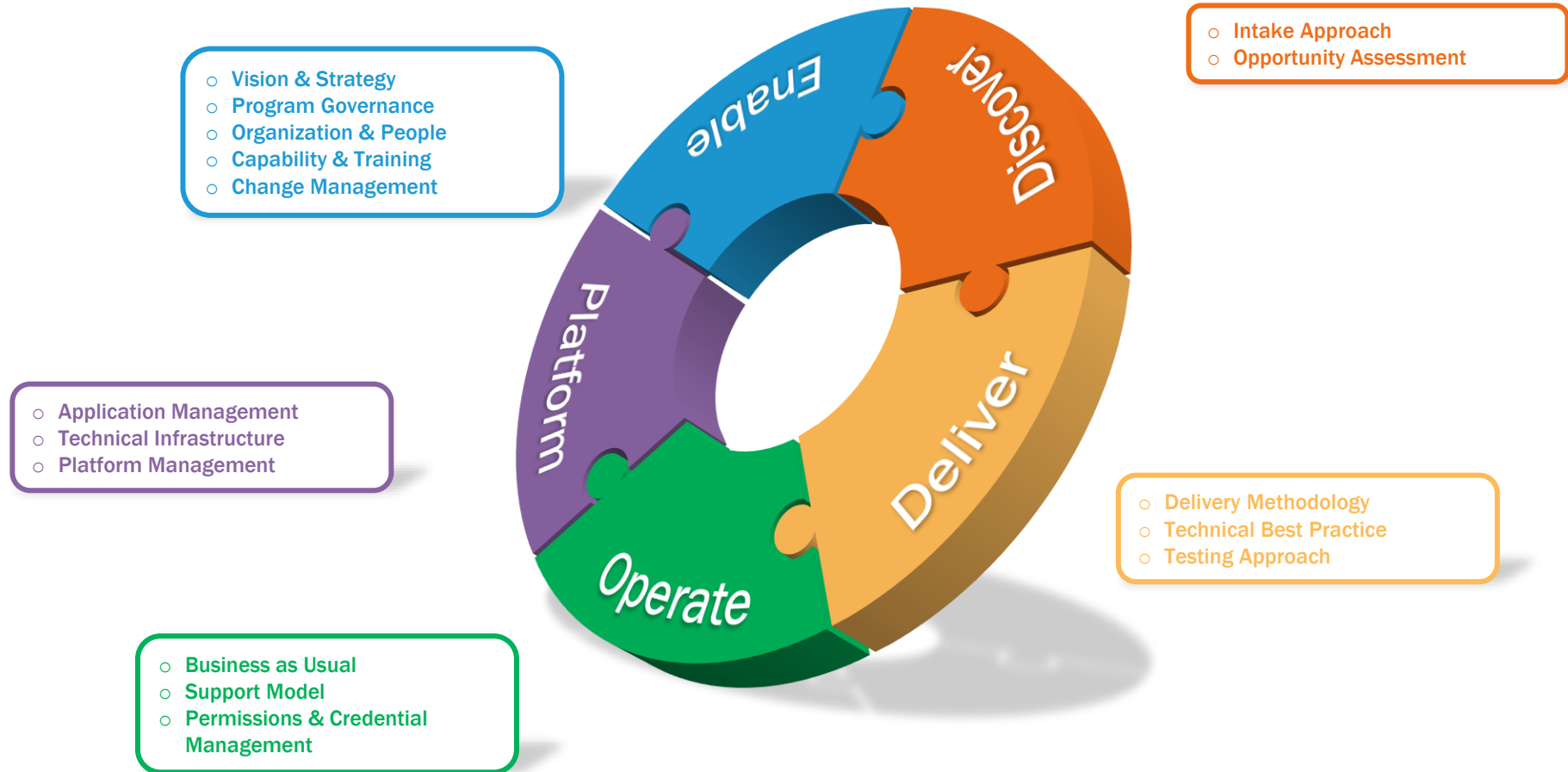
RPA and AI are different ends of a continuum known as *Intelligent Automation*





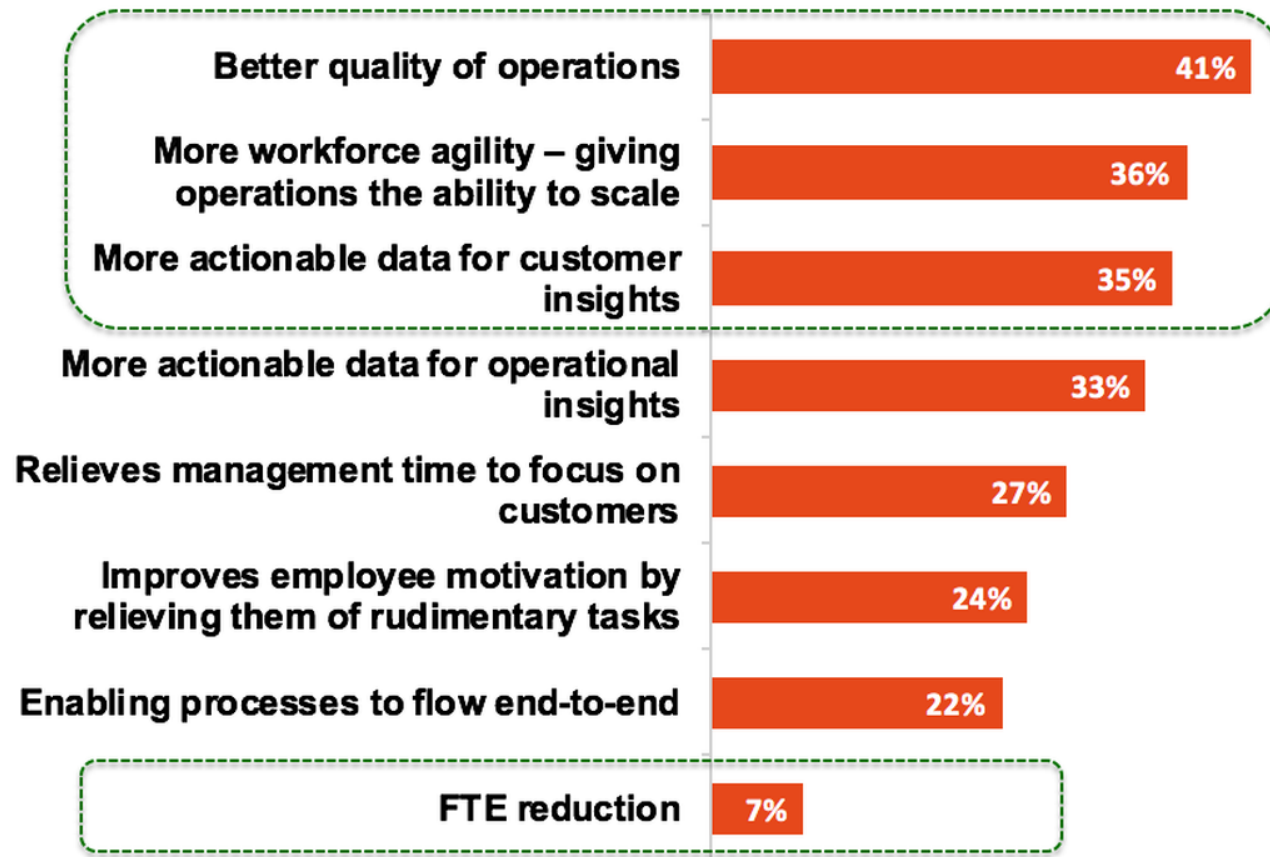
The Blueprint for Scale (BfS) covers the five capability components required for a successful and scalable automation program

Blueprint for Scale





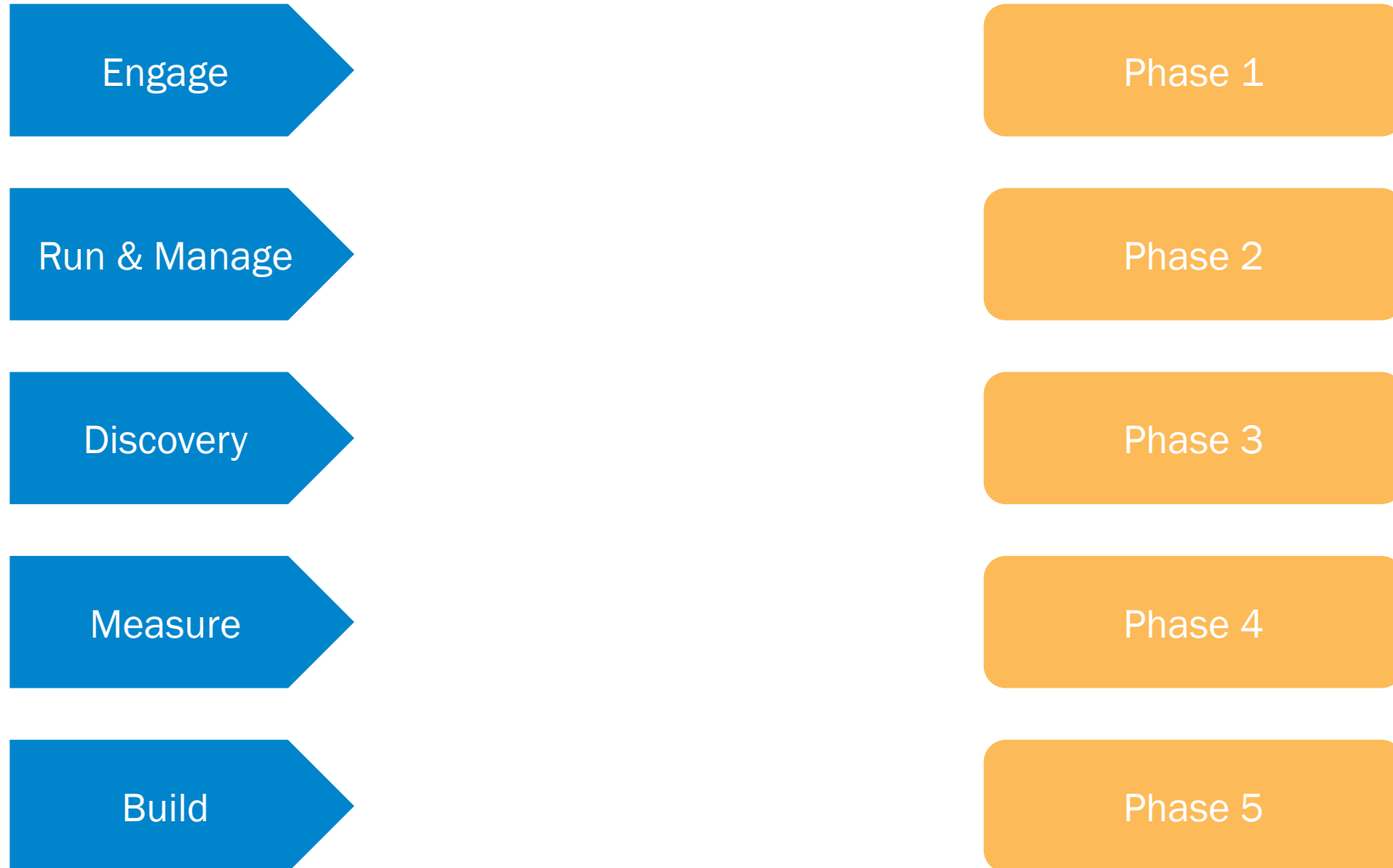
RPA is firmly focused on augmenting labour, not replacing it



Source: HFS Study 2018 (381 C-suite leaders sampled)

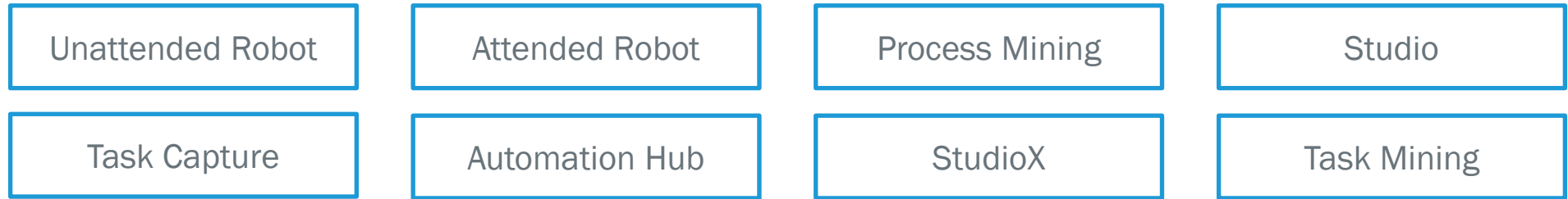


Knowledge check: Identify Phases of an RPA adoption





Knowledge check: Let's go in depth with the first 3 stages



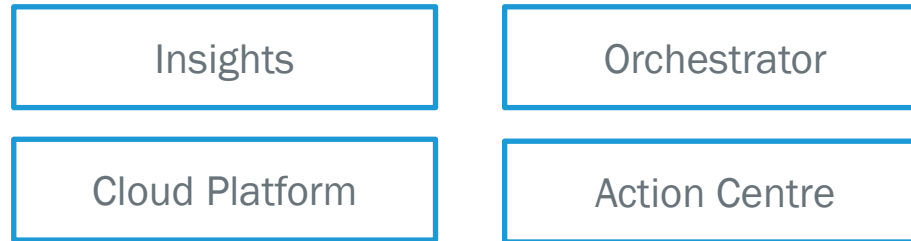
Discovery

Build

Run



Knowledge check: Let's do the same with the last 3 stages



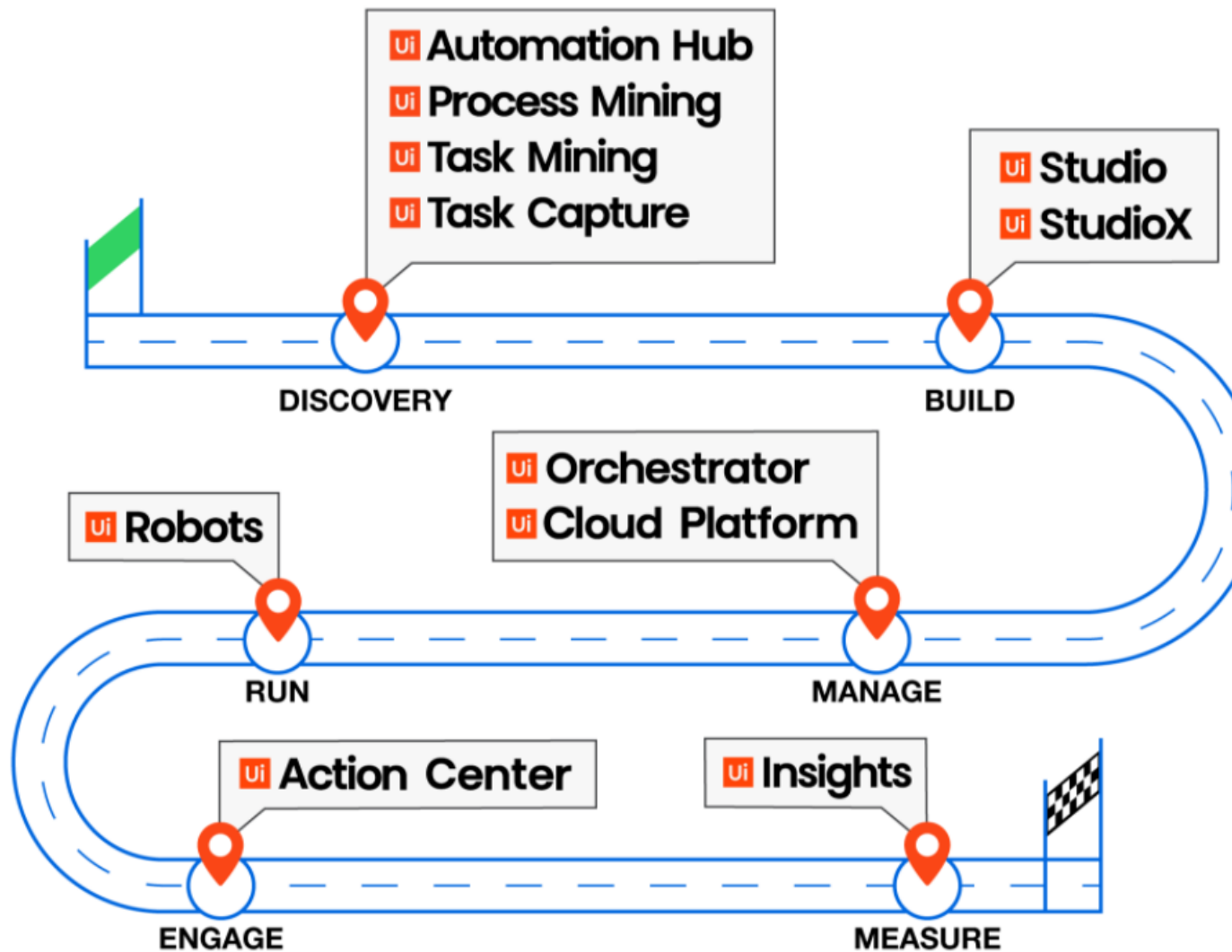
Manage

Engage

Measure



Typical Automation Journey





Topic

2

How Do Organizations Uncover
Automation Opportunities?



Automation Discovery: Overview



**Follow the people ... where are they
spending their time?**

- High volume, repetitive tasks
- Scenarios where we are performing data entry, particularly between the company and third-party systems
- Tasks that work from, or write into a template
- Tasks that involve reading a standardized report/email and performing an action such as data entry or sending an email
- Preparing documents using standard forms



How Do Organizations discover Automation Opportunities?

Discovery is an automation Lifecycle stage that enables the RPA Center of Excellence to identify processes (i.e. a predictable, repeatable, series of identifiable actions) that employees engage in.

Discovery can take three forms:

- 1 The Scientific Process Discovery** - data-driven automation suggestions based on computer and system logs
- 2 The Crowdsourced Process Discovery** - employees capture and document the process they have expertise in or submit automation ideas
- 3 Operational Diagnostics** - rigorous approach where no stone is left unturned via strategic manual review where list of processes to be assessed is exhaustive and quickly identifies processes with automation potential



UiPath's Discovery Suite

Ui Task Mining

UiPath Task Mining collects data about the day-to-day procedures in your organization and presents its findings in the form of scientific process maps indicating the best automation ideas. It's set up and managed from UiPath Orchestrator, the platform component for managing RPA.

The Center of Excellence (CoE) Leaders use Task Mining to analyze employee procedures in order to gain the data-driven automation suggestions

Ui Automation Hub

UiPath Automation Hub creates a unique space where Business Users, Subject Matter Experts, and the CoE come together to discover, prioritize and track automation opportunities submitted by the employees.

Automation Hub offers to **the Center of Excellence (CoE)**, the **C-Suite** and Business users a space to come together and drive automation opportunities.

Ui Process Mining

UiPath Process Mining brings together your data from multiple IT systems, databases or flat files and seamlessly transforms them into end-to-end process visualizations. You can get a complete visibility of all the activities in your organization and understand their true impact on the company performance

The Center of Excellence (CoE) Leaders and **Business Analysts** use Process Mining to uncover automation opportunities using the IT systems and application data.

Ui Task Capture

UiPath Task Capture integrates with UiPath Automation Hub to collect the process insights and support the employee-driven approach to automation. At the same time, it can be used together with Task Mining and Process Mining to access expert knowledge on processes identified as automation opportunities.

The Center of Excellence (CoE) Leaders and **Subject Matter Experts (SME)** use Task Capture to turn individual expertise into organizational wisdom and accelerate automation.



Discover Pipeline Generation - Reveal Group's approach for ensuring a continuous pipeline of automation opportunities follows four key steps

1 CREATE AN ENTERPRISE HEAT MAP

- **Map** the organizational structure and relative team **sizes**
- **Assign** the **probability** of automation/improvement to each team
- **Assess** the results and use them as a **guide** for undertaking a more detailed assessment of the business

2 CAPTURE A HEALTHY PIPELINE OF OPPORTUNITIES

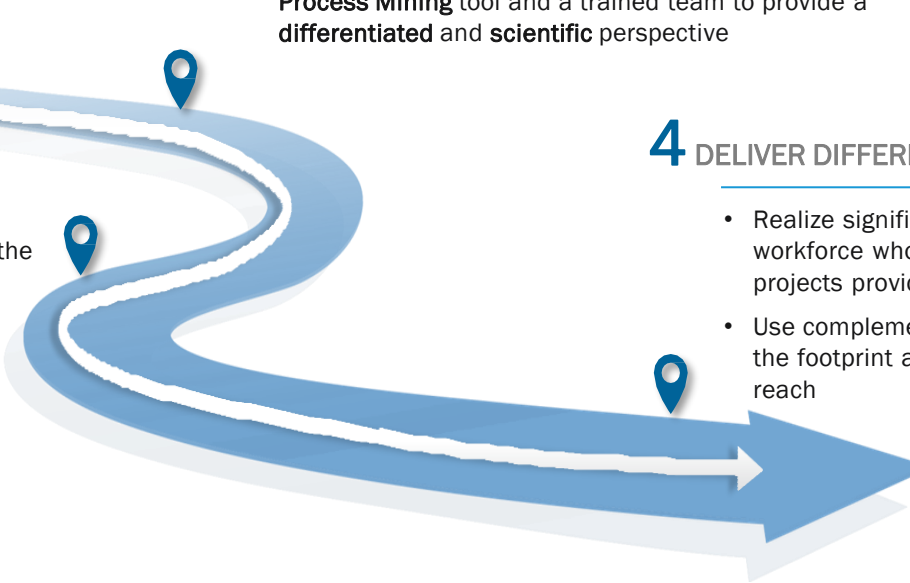
- Use “**crowd sourcing**” to quickly identify opportunities from known areas
- Undertake a structured **Operational Diagnostic** to methodically assess a department with a team of **trained analysts**
- Perform an **Operational Diagnostic** with a specialized **Process Mining** tool and a trained team to provide a **differentiated** and **scientific** perspective

3 ASSESS, PRIORITIZE & SCHEDULE

- **Assess** the opportunities identified and improvement method proposed against the program success criteria
- **Prioritize** the candidates which provide acceptable ROI
- **Schedule** the candidates to be delivered

4 DELIVER DIFFERENTIATED PERFORMANCE

- Realize significant **value enabled** by a workforce who **methodically** delivers the projects provided through the pipeline
- Use complementary technologies to **extend** the footprint and **accelerate** the automation reach





Each step of the Operational Diagnostic involves collaboration with the business

Operational Diagnostic Participation

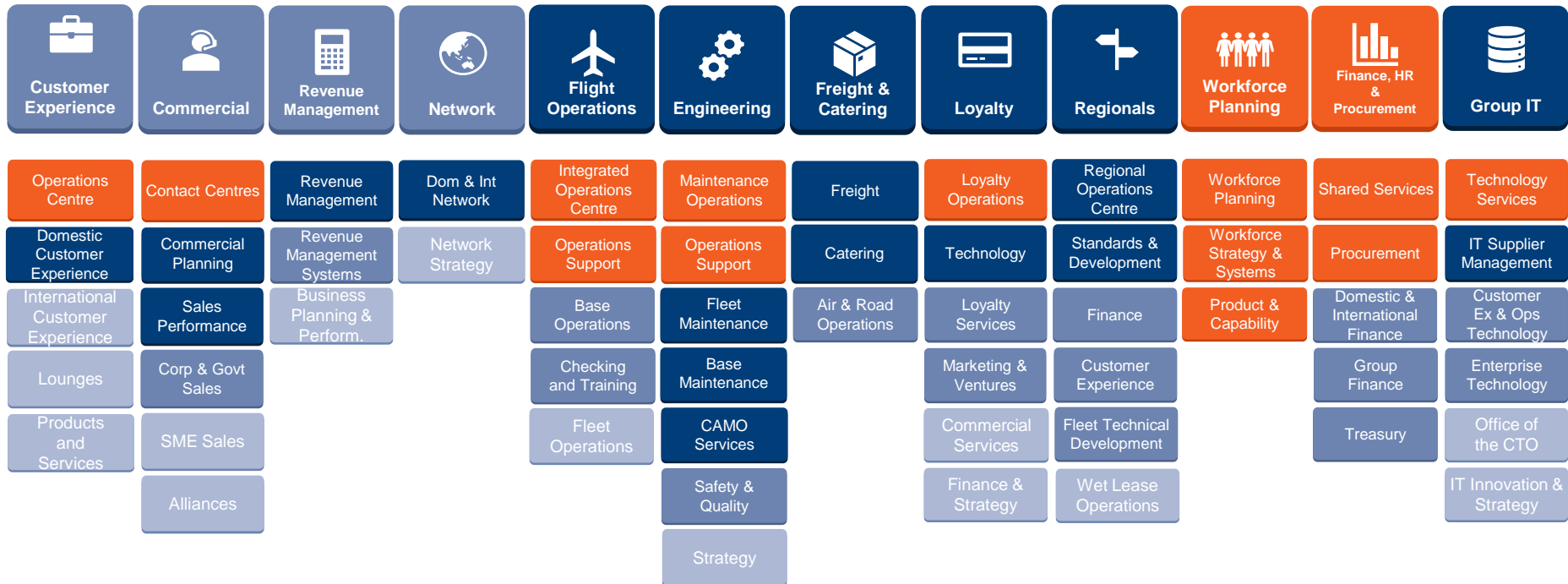




The Scientific Process Discovery: Operational Diagnostics Example

AIRLINE OPERATIONS

Indicative



Highest Potential (80%+)

Digitized system-driven processing executed against clear business rules

Good Potential (40-80%)

Mostly digitized and rules based. Non-digital processes (i.e. phone calls to customer) have potential to re-channel for digitization.

Some Potential (10-40%)

Some digital, rules-based tasks mixed with human-insight based processing

Low Potential (<10%)

Primarily physical (non-digital) tasks which cannot be automated



Ensure candidate processes are suitable for automation by assessing them against key technical and efficiency criteria

Process Selection Criteria



MANUAL

Substantial keyboard activity, mouse clicks, and data entry.



MATURE

Mature process, standardized rules-based, documentation.



REPETITIVE

High volume, numerous data elements, monotonous.



IMPACTFUL

Large resource commitment, impactful transformation.

Process selection is the most critical component for ensuring an automation program's ongoing success



What's the difference between a step, task and a process?

Steps

- A step is an action which is required to accomplish a specific, clearly defined purpose.

E.g. Downloading an Excel file attachment from an email.

Tasks

- A task can be described as a series of steps.
- It is performed by a single operator, be it a human or a machine.
- It can be either automated or manual (i.e. human operated).

E.g. Merging data from two different Excel files and saving the final file in a local folder.

Processes

- Multiple, interrelated tasks form a process, which aims to deliver a larger objective.
- A process can group together both automated and non-automated tasks.

E.g. An order-to-cash process which needs to work with multiple systems and requires human validation of the output.



Typical repetitive tasks that have a high automation potential

- 1** Extract data from an internal desktop application or add content into a document or Excel report file. For example, you might be extracting data for a large number of entries/entities from a report and adding them to a CRM application
- 2** Download attachments from a multitude of received email messages or compose messages with attachments. You might be receiving tens or hundreds of emails containing contracts or receipts that need to be filtered, downloaded and sorted locally.
- 3** Combine, organize or modify data in a predefined template. Sometimes data is received through two or more distinct channels and needs to be centralized in one place. You might want to extract a list of clients and associate the data found in a different system or form into one Excel report.
- 4** Combine, organize or rename files and folders. You might be working with multiple files daily that you need to neatly store in specific folders locally. You might also need to rename them with, for example, today's date.

Discovery is the starting point and helps an organization identify automation opportunities either using a scientific approach or by crowdsourcing ideas from the employees.



Topic

3

Get Started with StudioX



StudioX Interface: Activities

The diagram illustrates the StudioX interface activities and their corresponding resources and actions. Three activities are highlighted with red boxes and orange arrows pointing to their respective sections:

- Use Excel File**: This activity is shown with a red box. It includes fields for "Excel file" (My Documents\Unicorn Name.xlsx) and "Reference as" (Unicorn_Name_Data). A checkbox for "Template file" is also present.
- Use Browser Chrome: www.rpasamples.com/unicornname**: This activity is shown with a red box. It includes a "Browser URL" field with the value http://www.rpasamples.com/unicornname.
- Type Into 'What is your name?'**: This activity is shown with a red box. It includes a "Type this" field with the value [Unicorn_Name_Data] Sheet1!A2.

Resources

- Use Application/Browser**: Opens a desktop application or web browser page to use in your automation.
- Use Excel File**: Open or create an Excel file to use in your automation.
- Use Outlook Account**: Select the Outlook account to automate.
- Use Word File**: Open a Word document and provide a scope for other Word activities.

Actions

- Add Picture**: Adds a picture at the end of a specified Word document.
- Append Line**: Adds the specified text to a file after the existing content. If it does not already exist, it creates the file.
- Append Range**: Copies the data in a table, range, or sheet and pastes it after existing data in another file.
- Append Text**: Write text in a document at current caret position.
- Append to CSV**: Copies an Excel range, table, or sheet, or table data saved for later, and pastes it into a CSV file.



StudioX Interface: How to Use Activities

The screenshot displays the StudioX interface with a workflow titled "UiPath.Core.Activities.CopyFile". The workflow consists of the following activities:

- Use Excel File:** The robot opens the registration.xlsx file...
- Excel For Each Row:** ... and it iterates through the "data" table.
 - For each:**.CurrentRow
 - In range:** [Excel] data
 - ☒ Has headers ☐ Save after each row
- Copy File:** Since the templates are named as days, the robot selects the day from the Excel file, copies and renames them using the names of the participants and the day of the workshop.
 - From:** [CurrentRow] <Day>.docx
 - To:** Emails [CurrentRow] <First Name> [CurrentRow] <Day>
 - ☒ Overwrite
- Use Word File:** The robot edits the newly created Word file (in the action above) and starts replacing the placeholder text to match the participant's data.
 - Word file:** Emails [CurrentRow] <First Name> [CurrentRow] <Day>
- Replace Text:**
 - Search for:** [Excel] data[A1]
 - Replace with:** [CurrentRow] <Day>

The right sidebar shows the Properties panel for the "Copy File" activity, with the following settings:

- Common:** ContinueOnError: Select a...; DisplayName: Copy File
- From:** Path: <[Current...]
- Misc:** Private: ☐
- Options:** Overwrite: ☒
- To:** Destination: Emails <[...]



Recap of StudioX Interface

- You need to use a Resource in order for the robot to know which file or app or email account to use in the automation.
- All actions require a Resource, except for the Common and File actions.
- Actions are Application-specific, except for the Common action.
- Values cannot travel outside a Resource. In order to pass a value from an Excel file to a Word file, for example, you need to nest the Resource activities one inside the other.



Topic

4

How to Plan and Map Automation
Builds?



HumanPath to RobotPath

The Discovery tools are intended to help organizations find automation opportunities and then, with the help of the CoE, automate them. For business users, there is a framework in place, to help understand and document tasks before automation. It's called Human Path to Robot Path.

HumanPath to RobotPath is a framework that helps you think your task through in a visual way. It also helps translate your task as you know it today into "robot language".

- The **HumanPath** is a high-level view of your task put into a sequential manner.
- The **RobotPath** is a detailed view of your task - it's designing the steps the Robot takes to automate your task.

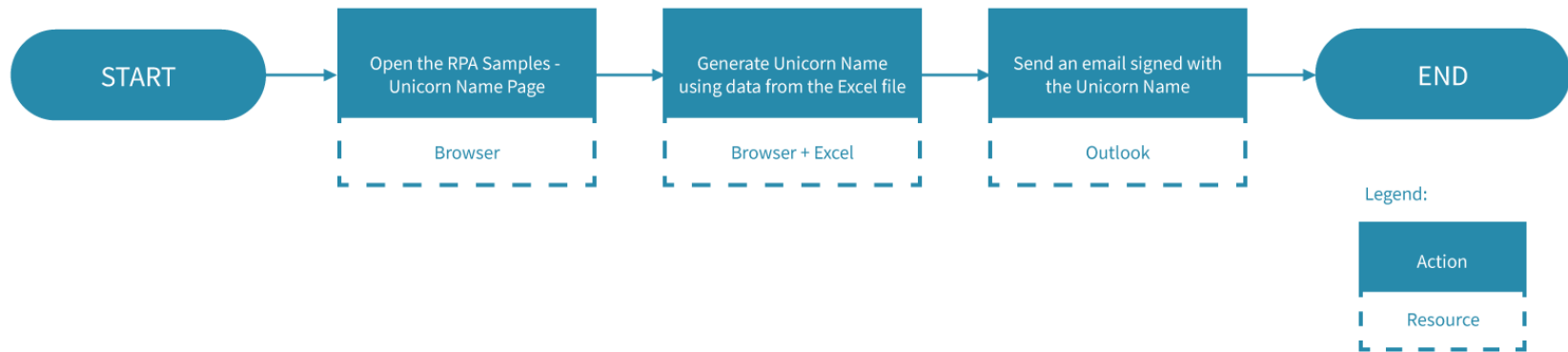
Here are some highlights of what makes the HumanPath to RobotPath framework important in your development process:

- Breaks down your process into visual, logical steps;
- Helps you carve out the scope of what you want to build;
- Outlines key decision points and task automation scenarios;
- Serves as your guide while you build your Robot.



HumanPath

The HumanPath is just a high-level overview of the task's steps. Let's take a look at the HumanPath of this task automation.



Notice how there is a Start and an End, and only three steps in between. Each step is descriptive enough for an outsider to understand the task and the applications used:

1. You open the RPA Samples Unicorn Name website using the browser of choice.
2. Using the information from the Excel file, you generate the Unicorn Name.
3. You send out an email, signing it with the Unicorn Name,



RobotPath Example

Use Excel File

Excel file

My Documents\Unicorn Name.xlsx

Reference as

Unicorn_Name_Data

☐ Template file

Use Browser Chrome: www.rpasamples.com/unicornname

Browser URL

http://www.rpasamples.com/unicornname

Type Into 'What is your name?'

What is your name? Enter your name

Type this

[Unicorn_Name_Data] Sheet1!A2

Select Item 'What month'

What is your name? Enter your name

What month is your birthday?

Item to select

[Unicorn_Name_Data] Sheet1!B2

Click 'Get Name'

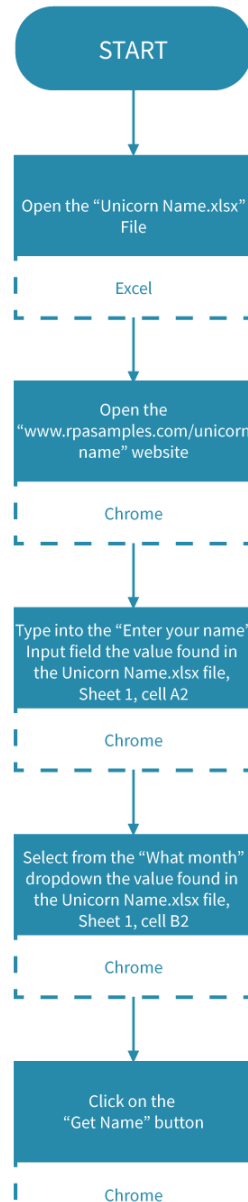
Get Name

Click type

Single

Mouse button

Left



Get Text 'Your Unicorn Name'

Your Unicorn Name

Mystic Cloud-Jumper

Save to

[Unicorn_Name_Data] Sheet1!C2

Use Outlook Account

Account

Default Email Account

Reference as

Outlook

Send Outlook Email

Account

Outlook

To

automation-first@uipath.com

Cc

Select a value

Subject

My unicorn name

Body

Text

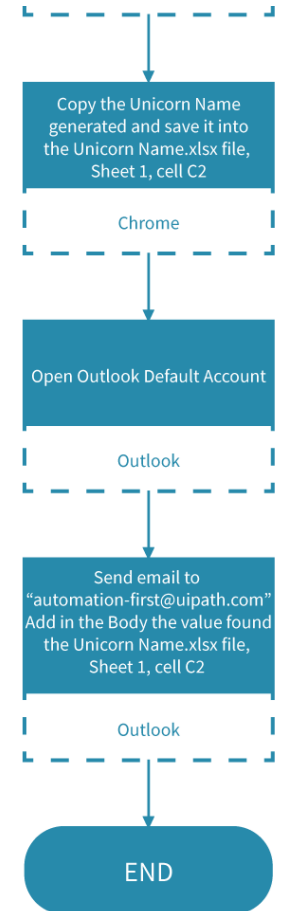
Signed, [Unicorn_Name_Data] Sheet1!C2

Attachments

Files

Folder

Select a value





RoboPath

The Robot Path is a more detailed overview of your task's steps. The objective is to have a click by click process flow. Imagine you give the Robot Path to a new hire instead of training.

Notice that the RobotPath has a Start and an End too, with more steps in between than the HumanPath. That is because sometimes one step in the HumanPath gets translated into more steps for the RobotPath.

1. The task starts with telling the Robot exactly which Excel file to use
2. Next, the Robot opens the "www.rpasamples.com/unicornname" website.
3. Notice the difference from the HumanPath where it just said the RPA Samples Unicorn Name page. A robot would not understand that hence the specificity.
4. Step 2 of the HumanPath is to "Generate the Unicorn Name using data from the Excel File".
5. In RobotPath it got transformed into 4 steps, each being specific on what information from the Excel file is needed and where exactly it needs to be entered.
6. Again, in Human Path it's just one step: "Send an email signed with the Unicorn Name". In Robot Path we have 2 steps for that, one indicates which email account it is used and the second indicated from where is the Unicorn Name retrieved and where it is used.



RoboPath Rules

There are a few rules that you should follow when building your RobotPath:

1. Like in the HumanPath, the task flow should always begin with a Start, so make sure you add one.
2. Make sure all your shapes are connected by arrows. No shape should be left independent.
3. The Robot will sometimes have to choose between two or more options, depending on the outcome of a condition verification, or repeat actions for certain items. You will learn in the Decisions, Iterations and Scenarios in StudioX course about Decisions and Iterations, both concepts that belong to the idea of RobotPath.
4. Each step must have a resource label. As you noticed, each step depicts an action that happens inside an application; whether it's Excel, Outlook, Internal app, Internet Explorer, etc. make sure it's added underneath the step card. Once you get more familiar with all the StudioX actions it will get easier to pick the right resource.
5. Break down the steps at the Click level. Every step must be precisely defined and can have one and only one meaning. "Generate Unicorn Name" is very ambiguous versus the 4 steps that define exactly what generating the Unicorn Name is.
6. The steps that make out your task must be carried out by the Robot in the specified order. Failing to do this means that the end result is likely incorrect.
7. Just as the task has a Start, it has an End too. At the end of the task flow, make sure you add an End.

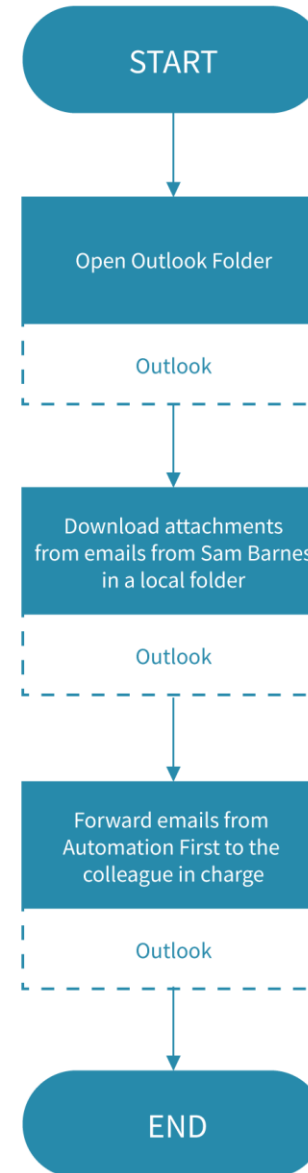
Note: See the HumanPath - RobotPath Templates –StudioX.ppt template to create your very own in PowerPoint



Knowledge Check: What is this Robot doing?

A – The bot downloads the email attachments sent by Sam Barnes and forwards the emails from Automation First

B – Nothing. This is a human path

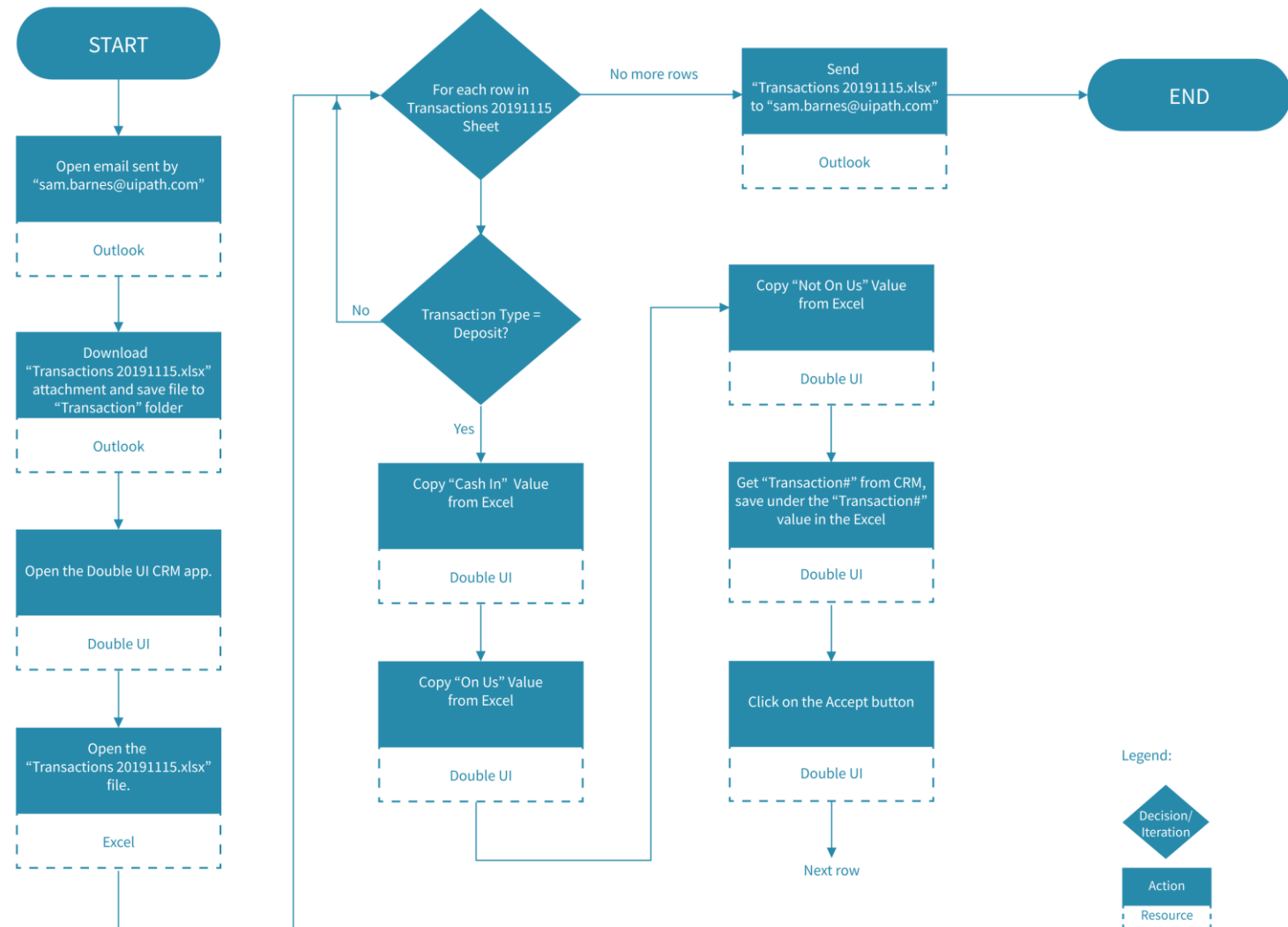




Knowledge Check: Is this a HumanPath or RoboPath?

A – This is a HumanPath

B – This is a RobotPath





Topic

5

Automate with StudioX: Find Your Unicorn Name



Automate with StudioX: Find your Unicorn Name

For this automation we are going to visit [Unicorn Name Generator site](https://www.rpasamples.com/unicornname) and find out what is your unicorn name by following the steps below:

Step 1: Open the Unicorn Name page <https://www.rpasamples.com/unicornname>

Step 2: Open the Unicorn Name Excel File

Step 3: Insert data from the Excel file into the website by entering the name and selecting the birthday month

Step 4: Generate the Unicorn Name by clicking on the “Get Name” button

Step 5: Get the Unicorn Name and write it in the excel file

The image shows a screenshot of the Unicorn Name Generator website and an Excel file. The website has two sections: "Your Info" and "Your Unicorn Name". In the "Your Info" section, there is a text input field for "What is your name?" with the placeholder "Enter your name", and a dropdown menu for "What month is your birthday?". In the "Your Unicorn Name" section, the generated name "Mystic Cloud-Jumper" is displayed, along with "Name: Alex" and "Month: June". A red box highlights the "Mystic Cloud-Jumper" text. An orange "Get Name" button is located at the bottom left of the website. The Excel file, titled "Unicorn Name.xlsx", is open in the background. It has a ribbon with tabs for File, Home, Insert, Page Layout, Formulas, Data, Review, View, Developer, and Help. The Data tab is active, showing options like Get Data, Refresh, Load, and Advanced. The Excel sheet has columns A, B, and C. Column A is labeled "Name", Column B is labeled "Birthday Month", and Column C is labeled "Unicorn Name". The data in the sheet is as follows:

Name	Birthday Month	Unicorn Name
Alex	June	Mystic Cloud-Jumper

A red arrow points from the "Mystic Cloud-Jumper" text in the website to the "Unicorn Name" cell in the Excel file.



Automate with StudioX: Find your Unicorn Name

In order to build this Robot you will use:

- a **Use Excel File** resource, to indicate the Excel file;
- a **Use Application/Browser** resource, to indicate the browser window and provide the URL, <https://www.rpasamples.com/unicornname>;

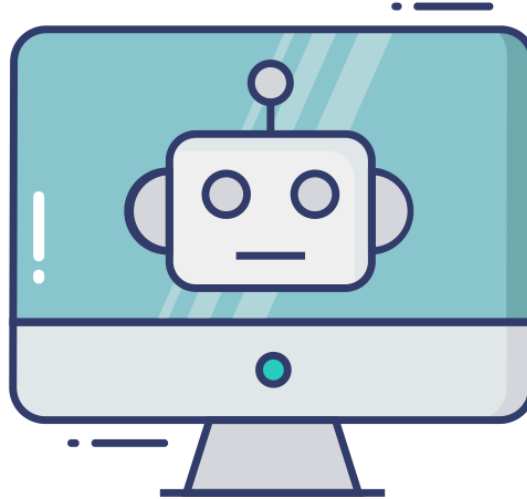
NOTE: Before proceeding, make sure you have the UiPath browser extension and the Excel Add-In installed. You can find them in **Home>Tools**.

- a **Type Into** activity, to insert the name;
- a **Click** activity, to select the Get Name button and generate the unicorn name.
- a **Get Text** activity to retrieve the Unicorn Name generated and save it back in the Excel file
- **Run your automation!**



Congratulations on our First Automation! Share your Thoughts!

You've built your first robot today! How about you contribute to a collective brainstorm now?



Think about the top 3 automation examples that would either help you right now in your learning process or would just save a lot of time in your work! Below are some examples to get you started:

- Sending an automatic email to a group when someone contributes a new forum post.
- Emailing a supervisor a report that was downloaded and processed.
- Cleaning up your local folders.



Knowledge Check: Some is not right here...

A - Forgot to fill out all the information in the Copy Paste Range action

B - Trying to use an Excel action on a Word Resource

The screenshot shows two overlapping configuration windows in a software interface. The top window is titled 'Use Word File' and contains a 'Word file' section with a text input field containing 'Desktop\Word template.docx'. The bottom window is titled 'Copy Paste Range' and contains the following fields: 'Source range' with a dropdown menu showing '[Notes] File', 'Destination range' with a dropdown menu showing 'Select a value', 'What to copy' with a dropdown menu showing 'Formulas', and a 'Transpose' checkbox which is currently unchecked. Both windows have a red exclamation mark icon in the top right corner, indicating an error or warning.

Knowledge Check: What is happening here?

A – You are searching on Google for “[Dummy-Data]Sheet1!A2 Ab Enter”

B – You are searching on Google the value from the A2 cell from the sheet 1, document Dummy-Data. And then you can press Enter!

The screenshot displays a workflow editor with three steps:

- Use Excel File**:
 - Excel file: Desktop \Dummy_Data.xlsx
 - Reference as: Dummy_Data
 - ☐ Template file
- Use Browser Chrome: Google**:
 - Browser URL: <https://www.google.com/>
- Type Into '.A8SBwf(position:relati...'** (highlighted with an orange border):
 - Type this: [Dummy_Data] Sheet1!A2 [Ab] enter

Knowledge Check: Are there any values passed between Chrome and Outlook?

A – Yes, you are Googling “Unicorn Name” and then use it as an Email Subject and Body Text

B – Nope. No values are passed

The screenshot shows a workflow step titled "Use Browser Chrome: Google". It contains a "Browser URL" field with the value "https://www.google.com/". Below this is a "Type Into" activity with a selector ".A8SBwf(position:relati...". The "Type this" field in the "Type Into" activity contains the text "Unicorn Name" followed by a tab key and an enter key.

The screenshot shows two workflow steps. The first step is "Use Outlook Account", which has a dropdown for "Default Email Account" set to "Outlook" and a "Reference as" field set to "Outlook". The second step is "Send Outlook Email". It has fields for "Account" (Outlook), "To" (automation-first@uipath.com), "Cc" (Select a value), "Subject" (Unicorn Name), "Body" (Text, Signed, Unicorn Name), and "Attachments" (Files, Select a value). The "Body" field is selected with the radio button.



Automate with StudioX: Send an Email with your Unicorn Name

For this automation we are going to visit [Unicorn Name Generator site](https://www.rpasamples.com/unicornname) and find out what is your unicorn name by following the steps below:

Step 1: Open the Unicorn Name page <https://www.rpasamples.com/unicornname>

Step 2: Open the Unicorn Name Excel File

Step 3: Insert data from the Excel file into the website by entering the name and selecting the birthday month

Step 4: Generate the Unicorn Name by clicking on the “Get Name” button

Step 5: Get the Unicorn Name and write it in the excel file

Step 6: Send an Email signed with the Unicorn Name

	A	B	C
1	Name	Birthday Month	Unicorn Name
2	Alex	June	Mystic Cloud-Jumper
3			
4			

Subject: My Unicorn Name

Hi there,
Just wanted to let you know I changed my name!

Cheers,
Mystic Cloud-Jumper



Automate with StudioX: Send an Email with your Unicorn Name

In order to build this Robot you will use:

- a **Use Excel File** resource, to indicate the Excel file;
- a **Use Application/Browser** resource, to indicate the browser window and provide the URL, <https://www.rpasamples.com/unicornname;>

NOTE: Before proceeding, make sure you have the UiPath browser extension and the Excel Add-In installed. You can find them in **Home>Tools**.

- a **Type Into** activity, to insert the name;
- a **Click** activity, to select the Get Name button and generate the unicorn name.
- a **Get Text** activity to retrieve the Unicorn Name generated and save it back in the Excel file
- a **Use Outlook account** resource, added inside the Use Excel file, to indicate the email account;
- a **Send Outlook Email** action in which details such as the recipient's email address, Subject, the email message must be entered, as well as your Unicorn Name Excel location!
- **Save and Run** your automation!



Topic

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Automate with StudioX: Currency
Converter



Design Time and Run Time

- **Design Time** is building your automation project: placing activities and configuring them.
- **Run Time** is when the automation is actually running, whether it is a test run, to see if everything works as it should, or the automation project is published and performed by a Robot.

If your automation works with information provided at runtime, StudioX provides a few tools...



Using a Template File

X Use Excel File - Reconciliation File

X Excel file

ReconciliationFile > FullName

Reference as

ReconciliationFile

☒ Template file

export_total_template.xlsx

If your automation involves using a file that gets downloaded at Run Time and it is further used in the automation, you will need to work with a template at Design Time.

Why?

The Use Excel Resource uses the Full Name (Full Path) of a previously downloaded file. That file can have different names at the run time, and it's the reason why we cannot provide the exact file name.

What we can do, is to provide a template file. A file that has the exact structure as the file that gets downloaded and build the automation based on the template file's structure. At runtime, the correct file will be used.

How do I create a template file?

The easiest way is to manually download the file before building the automation project and add to its name "_template" for a better project organization. The option to work with Template files at Design Time is available for the Use Excel File and Use Word File resources.



Automate with StudioX: Currency Converter

StudioX was created for task automation. Today we will look at the work of a Sales Support Specialist with the task of processing some data with Excel and preparing an executive report.

In order to follow along download the files within the Currency Converter folder

You will also need:

- An internet connection
- Office Excel Installed
- The UiPath browser extension enabled



Automation Project - Currency Converter

Ui StudioX



No-Coding



RPA Robots

This automation interacts with
3 of the most used
applications





Context: Currency Converter Automation

Sales Support Specialist works for a retailer that has stores across the world



One of the tasks is to send a report to the manager with total sales amount converted in USD split per country. In order to do this:

- At 4pm the Sales Support Specialist checks a shared drive where the daily report is uploaded by another department.
- Each amount is converted to USD using the exchange rate of the day
- Run a pivot table to calculate the amount in USD corresponding to each country
- The resulted amount are then sent via email



Let's see how RPA can help building an automation...



Recap of Resources and Actions Used : Currency Converter Automation

- We created a new **Task Automation** in StudioX, gave it a name and a description;
- We added a **Use Excel File**, browsed for the 'Report.xlsx' file and referenced it as "Template Report" for later use;
- Inside the Use Excel File, we added a **Read CSV** activity, indicated the 'Product_Export.csv' File and chose to output to the 'Report' sheet of the Template Report;
- We added a **Write Cell** activity, inputted the text “**Total Sales USD**” and indicated the F1 cell;
- We navigated to the backstage view of UiPath StudioX. We installed the **Chrome extension** from the **Tools menu**;
- We opened a **Chrome** tab and searched for "**Currency to USD**" on Google. We also confirmed that the Chrome extension has been installed by the **Ui logo** in the right upper corner;
- We used a **Use Application/Browser** resource, selected '**Indicate Application**' and indicated the Chrome browser with Google;
- We added an **Excel For Each Row** inside the Open Application/Browser resource and selected the 'Converter' sheet from Template Report;
- We used a **Type Into** activity and indicated the Google search tab in the Chrome browser. Then we used the **Text Builder** to select the **Currency** from the table and wrote "**to USD**". We added '**Enter**' as a special key;
- We used a **Get Text** activity to retrieve the conversion rate. We indicated both the **target** and a reliable **anchor** - the 'United States Dollars' drop-down field. We chose to **save** the retrieved value in the 'Conversion' column;
- We changed the '**Close**' option from the Properties panel of the **Use Application/Browser** resource to '**Always**';
- We dragged an **Excel For Each Row** activity and placed it outside the Use Application/Browser resource. We selected the '**Report**' sheet of our file and **checked** the 'Has headers' box;



Recap of Resources and Actions Used: Currency Converter Automation (continued)

- Inside the Excel For Each Row, we added a **VLookup** activity. We selected the '**Currency**' value to lookup, set the '**Converter**' range and return column **index 2**. We saved the value **For Later Use**;
- We used a **Write Cell** activity, and, with the help of the **Text Builder**, we wrote "Equal product of Quantity*Price*Value in the VLookup" in the first field. In the second field we specified the '**Total Sales USD**' cell;
- We added a **Create Pivot Table** activity outside the Excel For Each Row. We selected the entire 'Report' sheet as the **range**, added "Countries Sales Overview" as the new **table name** and the 'Pivot' sheet as **destination**. The **Pivot Fields** are Location as a **row** and Total Sales as a **Value** with the **Sum** function;
- We used a **Get File Info** activity, selected the 'Report.xlsx' and saved it **For Later Use**;
- With a **Copy File** activity, we copied the value saved for later as **Full Path** and save it in the 'Reports' folder. We added the date by using the **Project Notebook**: from the drop-down list, we selected the Project Notebook, then the **Date** as **YYMMDD**;
- We added a **Use Outlook Account** resource and a **Send Outlook Email** activity to send the renamed report;
- In the **Subject** field, we wrote "Total sales for" and today's date taken from the Project Notebook;
- In the **body** we wrote "Total sales for today are", followed by a reference to our last table from the Pivot, and USD;
- Finally, we copied the file location from the **Copy** activity and pasted it in the **Attachments** field;
- We unchecked the '**Is draft**' box in the **Send Outlook Email** activity;
- We checked the '**Overwrite**' box in the **Copy File** activity;
- We closed all the **Chrome browsers** with Google pages open and successfully ran our automation.



Topic

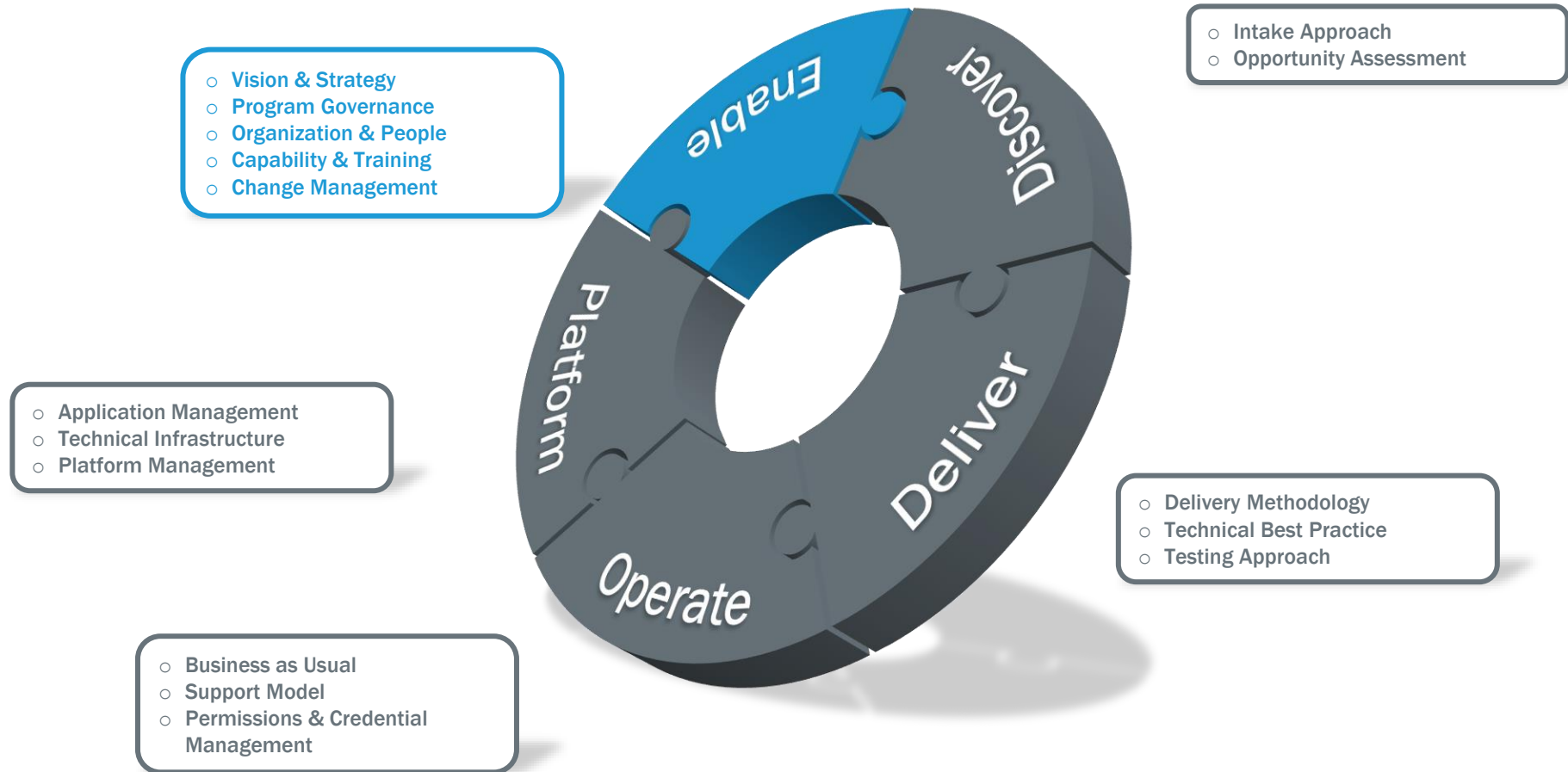
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Enable Successful Automation Programs



The Blueprint for Scale (BfS) covers the five capability components required for a successful and scalable automation program

Blueprint for Scale





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Homework: RobotPath – Enter a New Supplier



Build an Automation: Enter a New Supplier

Step 1: Open the Supplier page
<https://www.rpasamples.com/suppliers>

Step 2: Open the Supplier Excel File

Step 3: Insert the Internal and External Names using data from the Excel file the website

Step 4: After inserting the data generate a new supplier by clicking on the Save button

These are the steps you would manually perform to complete the task. Now let's see what you need to automate the task!

New Supplier

Supplier Info

Internal Name*
Energy Company

External Name
Power Inc.

Description

Account photo
Only .jpg and .png files. 500kb max file size.
Add File

Industry
Energy

No. Employees

☐ Recurrent Supplier

Date
Select a date...

Contact persons

Mary, Hooper
Job Title: CFO
Email: mhooper@mycompany.com
Phone: +0471234567
Link

Tim, Moore
Job Title: CEO
Email: tmoore@mycompany.com
Phone: +0471234567

Address Information

Address

Address 2

City State Zip

suppliers.xlsx

File Home Insert Page Layout Formulas Data Review View Developer Help

Clipboard Font Styles Cells Editing Ideas Sensitivity

Internal Name External Name Industry

Internal Name	External Name	Industry
Energy Company	Power Inc.	Energy
Engineering Firm	Acme Inc.	Engineering
RPA Provider	UIPath	Engineering

Sheet1

RobotPath: Enter a New Supplier

To pass data from the Excel file into the website you will have to nest the resources one inside of the other.

In the Enter a New Supplier Folder, you can find the Excel file you'll extract the data from and the Robot Path as a PDF file.

