

RPA Design and Development

v4.0





Lesson 5 : Implementation Methodology

Implementation Methodology – Exam Topics

- ☐ Describe the project implementation stages
- ☐ Interpret PDDs and SDDs
- ☐ Perform automation project peer review

Learning Objectives

1

Describe the UiPath implementation methodology and explain its benefits.

2

Explain the stages involved in the implementation methodology

3

Describe the roles and responsibilities of the people involved throughout the implementation process from both the UiPath and Client team sides

4

Explain how you can use the UiPath templates to document processes and every other important aspect of an implementation

5

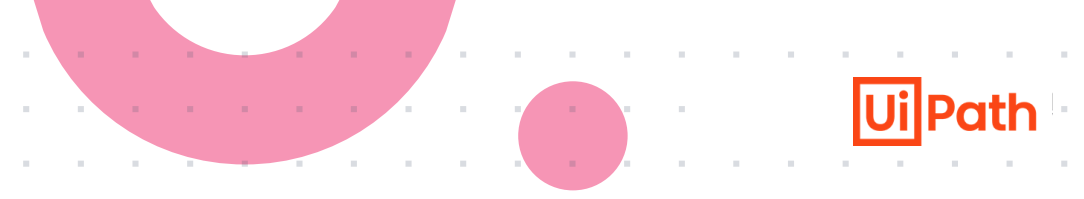
Identify solutions to some of the most common challenges faced throughout the automation implementation process

6

Use the knowledge and tools acquired throughout the course to solve issues related to business-specific requirements



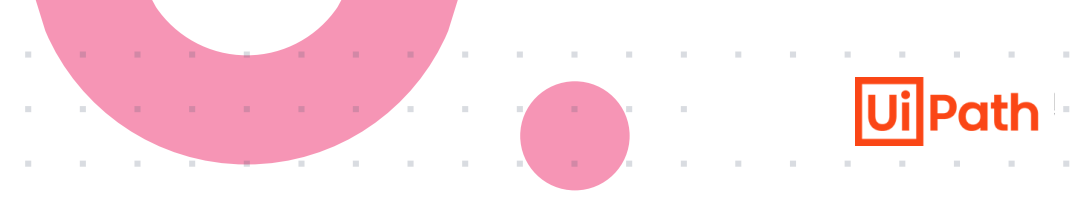
Implementation Methodology



The UiPath Automation Implementation Methodology was devised by UiPath based on thousands of hours of working on automation projects and shared best practices from partners, customers and seasoned professionals.

UiPath recommends this versatile methodology to streamline the implementation process and have consistent implementation standards across the globe.

Implementation Methodology



UiPath Professional Services is a team that helps clients and UiPath partners deliver their automation projects successfully. They work towards client and partner enablement and increase UiPath product adoption.

Some of the **most common challenges** in an automation project are

- expectation setting
- scope creep
- unorganized User Acceptance Testing phase
- access delays
- customer availability

UiPath devised the implementation methodology to provide a **common roadmap** for implementation teams across the globe.

Introducing the Business Scenario

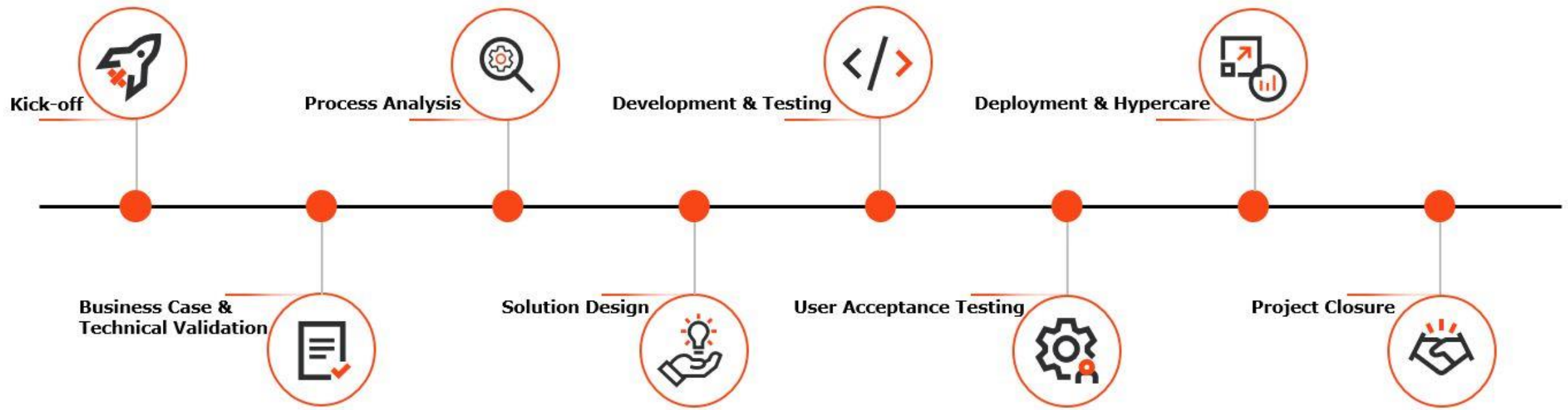




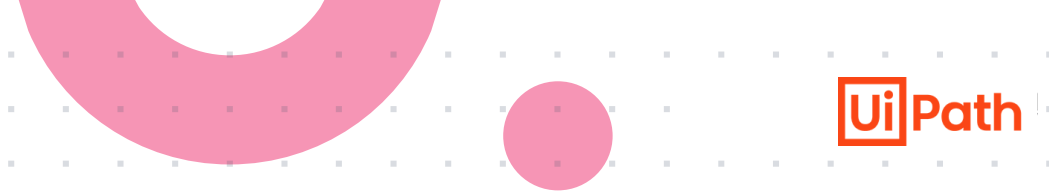
Topic	Link
Start your automation journey	https://www.uipath.com/rpa/journey

UiPath Implementation Model

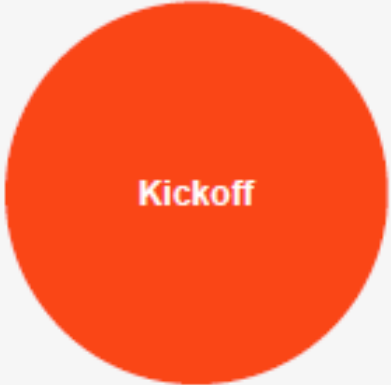
The **UiPath Implementation Methodology model** is a structured approach to implementing UiPath automation solutions. It is a step-by-step model that guides organizations through the entire automation process. The model consists of **eight stages**, starting with **Kick-off** and ending with **Project Closure**.



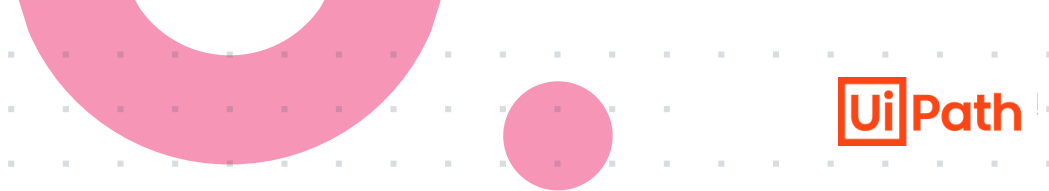
UiPath Implementation Model



There are **eight stages** in the UiPath implementation model: **Stage 1 - Kickoff**

Stage	Role Involved	Key Task	Output
	<ul style="list-style-type: none">• Solution Architect• Project Manager• Infrastructure Engineer	<ul style="list-style-type: none">• Set up the overall expectations of the project• Early RPA readiness discussions about:<ul style="list-style-type: none">– Client’s environment and infrastructure– Test and dev environments– Test data/test cases	<ul style="list-style-type: none">• Reviewing the SOW• Setting up communication cadence• Completing the customer readiness checklist• Initiating the Issue Tracker

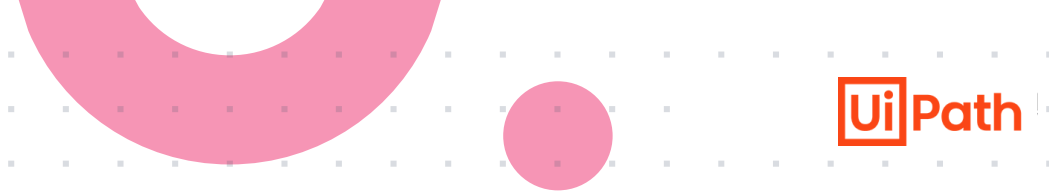
UiPath Implementation Model



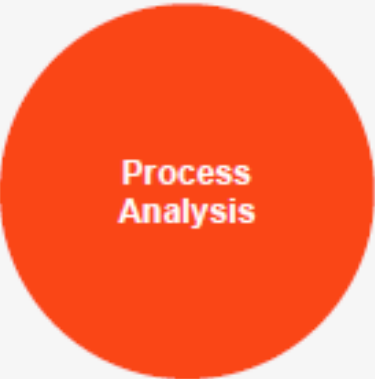
There are **eight stages** in the UiPath implementation model: **Stage 2 - Business Case and Technical Validation**

Stage	Role Involved	Key Task	Output
<div>Business Case and Technical Validation</div>	<ul style="list-style-type: none">Solution ArchitectProject ManagerBusiness Analyst	<ul style="list-style-type: none">Assess potential automations for their complexity and feasibilityValidate the estimated timelines and efforts required for successful deliveryValidate the Business Case for the selected use cases and the Cost Benefit part of itIdentify the key complexity, technical dependencies, and access to key applications	<ul style="list-style-type: none">Verifying the automation use caseConfirming use case alignment with contract expectations

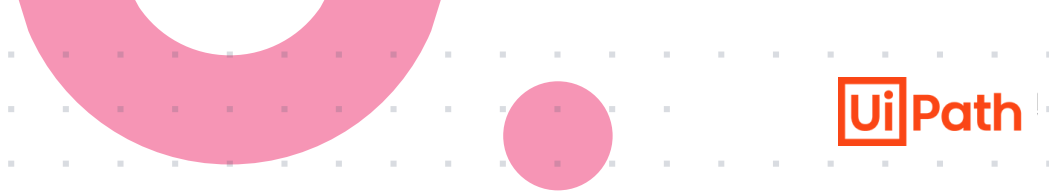
UiPath Implementation Model




There are **eight stages** in the UiPath implementation model: **Stage 3 - Process Analysis**

Stage	Role Involved	Key Task	Output
	<ul style="list-style-type: none">• Solution Architect• Project Manager• Business Analyst	<ul style="list-style-type: none">• Analyze the chosen process in its as-is state and start the PDD• Identify the degree of automation• Streamline the business flow to the 'to-be' process• Fill the PDD with the as-is and to-be processes	<ul style="list-style-type: none">• Defining and finalizing the "to-be" process• Completing and approving the PDD• Creating and approving the UAT plan

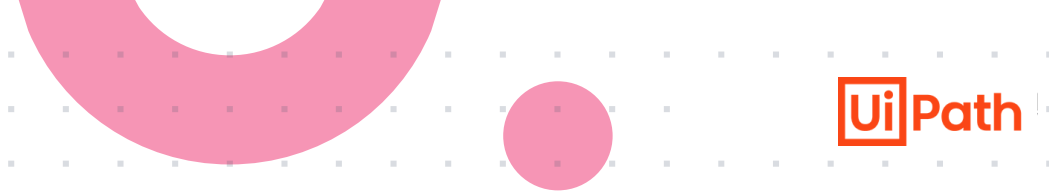
UiPath Implementation Model



There are **eight stages** in the UiPath implementation model: **Stage 4 – Solution Design**

Stage	Role Involved	Key Task	Output
	<ul style="list-style-type: none">• Business Analyst• Solution Architect• Project Manager• Automation Developers	<ul style="list-style-type: none">• Design a future state flow and maps out modules for automation development• Use Application Tracker to record access required by the developer to build and run automation UAT and Production• Prepare the Technical Testing plan encompassing UAT scenarios, functional testing, and system integration testing	<ul style="list-style-type: none">• Completing the SDD document• Completing the Application Tracker• Completing the Technical Testing Plan

UiPath Implementation Model



There are **eight stages** in the UiPath implementation model: **Stage 5 – Development & Testing**

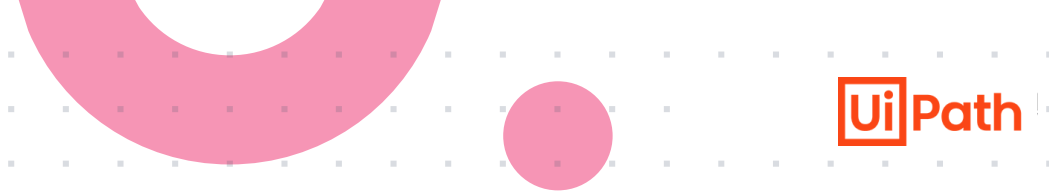
Stage	Role Involved	Key Task	Output
<div>Development and Testing</div>	<ul style="list-style-type: none">• Solution Architect• Project Manager• Automation Developers	<ul style="list-style-type: none">• Create the modules outlined in the design whiteboard using the PDD and SDD• Review and make necessary changes to the code• Test and run the modules individually in controlled settings• Execute the Technical Testing plan after Development and Unit Testing• Create automated tests for functional testing to confirm large functions work independently• Complete end-to-end test for system integration testing• Run all UAT test scenarios	<ul style="list-style-type: none">• Building automation• Completing Unit and Integration Testing• Completing code review• Executing Technical Testing plan

UiPath Implementation Model


There are **eight stages** in the UiPath implementation model: **Stage 6 – User Acceptance Testing (UAT)**

Stage	Role Involved	Key Task	Output
<div>User Acceptance Testing (UAT)</div>	<ul style="list-style-type: none">Solution ArchitectBusiness AnalystProject ManagerAutomation Developers	<ul style="list-style-type: none">Conduct UAT in coordination with the implementation teamRun all the potential happy-path and business exception scenariosEnsure all agreed-upon scenarios are testedLog any deviations and fix that with the help of the Automation TeamCreate a Runbook document template with the following details:<ul style="list-style-type: none">System architectureProduction environmentsOperating instructions for automationInstructions to the operations, IT, and automation implementation teamDocument the Runbook template for every automation	<ul style="list-style-type: none">Executing UAT Test CasesSigning off client business team test executionCompleting the Runbook document

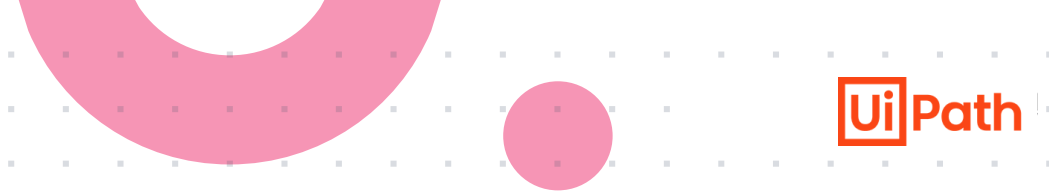
UiPath Implementation Model




There are **eight stages** in the UiPath implementation model: **Stage 7 – Deployment & Hypercare**

Stage	Role Involved	Key Task	Output
	<ul style="list-style-type: none">• Solution Architect• Project Manager• Automation Developers	<ul style="list-style-type: none">• Migrate the final process packages, libraries, and assets to the production Orchestrator• Identify and address issues quickly using hypercare• Run and review production cases using hypercare• Fix issues promptly and re-push to production• Initiate knowledge transfer during hypercare	<ul style="list-style-type: none">• Revising the Runbook document• Completing production bug fixes

UiPath Implementation Model



There are **eight stages** in the UiPath implementation model: **Stage 8 Project Closure**

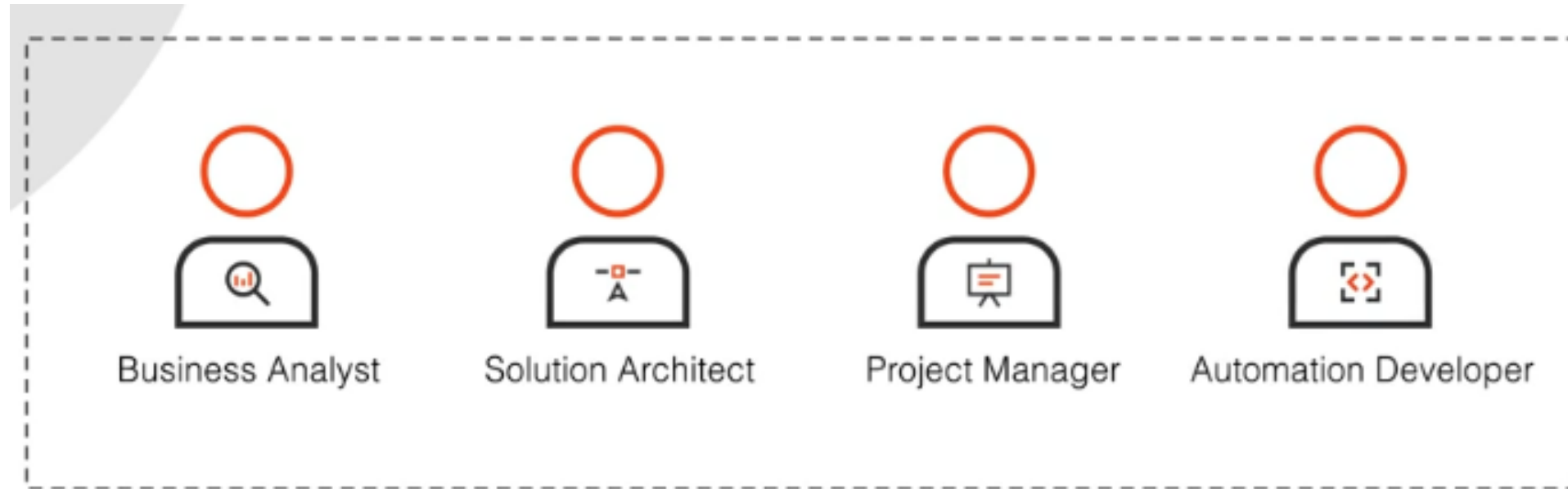
Stage	Role Involved	Key Task	Output
	<ul style="list-style-type: none">• Solution Architect• Project Manager• Business Analyst• Automation Developers• Business Team	<ul style="list-style-type: none">• Confirm conformance of all services are made as per the contract• Carry out the handover process for long-term support of the developed automations• Check and close financial loops	<ul style="list-style-type: none">• Checking and signing off contract completion by the client• Initiating knowledge transfer and document handover

The Implementation Methodology Model



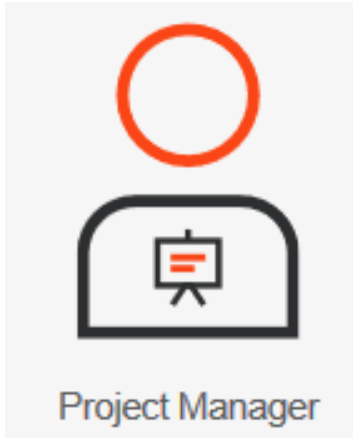
UiPath Implementation Model Team

In general, the implementation team consists of Solution Architects, Project Managers, Business Analysts, and Automation Developers.



UiPath Team : Roles & Responsibilities

Project Manager - Business Analyst - Solution Architect - Automation Developer -Infrastructure Engineer



Stages Involved

All Stages

Project Manager

- ☐ Manages the overall implementation
- ☐ Coordinates the UiPath and client teams for successful project completion
- ☐ Manages issues, risks, changes, and escalations in the project
- ☐ Creates and maintains comprehensive project documentation
- ☐ Ensures that the Statement of Work (SOW) is communicated and followed
- ☐ Assesses client delivery readiness
- ☐ Works with stakeholders to coordinate project personnel
- ☐ Manages engagement setup, milestone tracking, status reporting, timesheet reviewing, and financial forecasting
- ☐ Creates a project plan, staffing plan and communicate requirements
- ☐ Sets up internal and client project meetings
- ☐ Obtains approval for project documentation
- ☐ Helps to coordinate and forecast the need for a Change Request
- ☐ Performs project close actions

UiPath Team : Roles & Responsibilities

Project Manager - **Business Analyst** - Solution Architect - Automation Developer - Infrastructure Engineer



Business Analyst

Stages Involved

- Business Case & Technical Validation
- Process Analysis
- UAT
- Solution Design
- Project Closure

Business Analyst

- ☐ Becomes knowledgeable of the business process to be automated based on the organization's goals
- ☐ Is knowledgeable of general business process theory, techniques, frameworks, and automation capabilities
- ☐ Gathers process requirements
- ☐ Clarifies the inputs and expected outputs
- ☐ Creates the required documentation
- ☐ Documents the high-level requirements
- ☐ Assesses business case potential
- ☐ Creates a high-level work breakdown for the 'TO-BE' process state
- ☐ Makes recommendations and runs the suitability and viability study
- ☐ Creates and updates business cases
- ☐ Creates a Process Definition Document (PDD) and documents the process at a keystroke level
- ☐ Creates a User Acceptance Testing (UAT) plan
- ☐ Defines success criteria such as understanding functional and non-functional requirements
- ☐ Ensures the automation output is in line with the signed-off requirements
- ☐ Validates any change requests
- ☐ Starts the Change Request management cycle and updates the PDD after approval
- ☐ Works on the engagement retrospective analysis

UiPath Team : Roles & Responsibilities



Project Manager - Business Analyst - **Solution Architect** - Automation Developer - Infrastructure Engineer



Stages Involved

All Stages

Solution Architect

- ☐ Acts as a lead and advisor of the development team
- ☐ Defines the architecture of automation solutions
- ☐ Oversees the design and implementation of the project
- ☐ Recommends the appropriate set of tools and features
- ☐ Creates an initial license estimate
- ☐ Updates the license estimate
- ☐ Performs code reviews
- ☐ Ensures that the technical best practices are followed
- ☐ Works with developers to create the
- ☐ Solution Design Document (SDD) and the
- ☐ Technical Testing Plan (TTP)

UiPath Team : Roles & Responsibilities

Project Manager - Business Analyst - Solution Architect - **Automation Developer** - Infrastructure Engineer



Automation Developer

Stages Involved

- Solution Design
- Development & Testing
- UAT
- Deployment and Hypercare
- Project Closure

Automation Developer

- ☐ Builds automations following best practices and coding standards specific to business requirements
- ☐ Makes changes to the automation during the development, testing, and hypercare phases
- ☐ Communicates the changes to the Project Manager or Stakeholders
- ☐ Conducts knowledge transfer sessions with the client's team
- ☐ Assists in creating and reviewing the SDD
- ☐ Reviews project documents, such as the PDD
- ☐ Maintains code repositories
- ☐ Builds solutions
- ☐ Executes the TTP
- ☐ Executes UAT including logging and fixing defects
- ☐ Runs test cases

UiPath Team : Roles & Responsibilities



Project Manager - Business Analyst - Solution Architect - Automation Developer - **Infrastructure Engineer**



Stages Involved

Kickoff

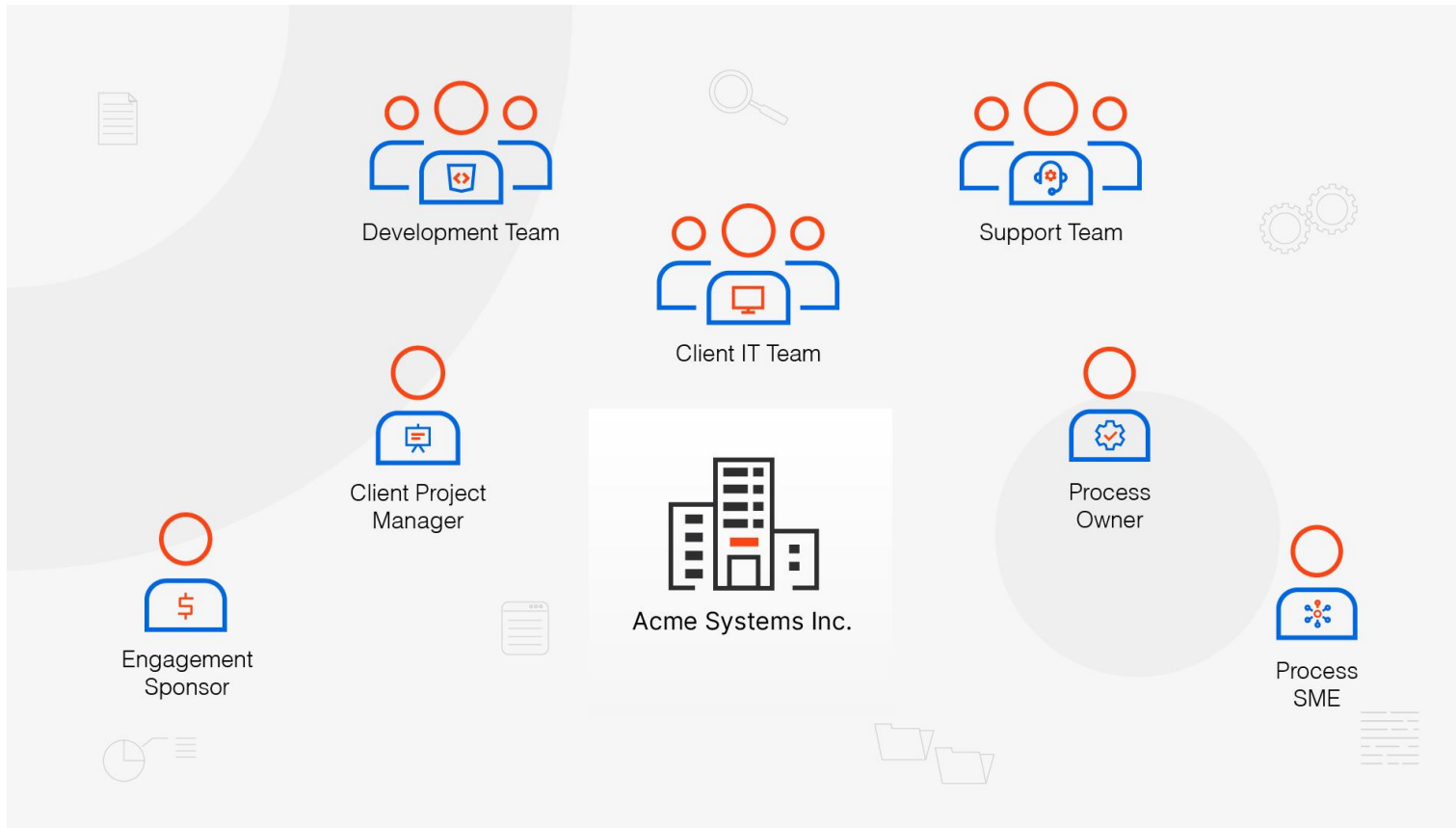
Infrastructure Engineer

- ☐ Is well-versed in the UiPath Platform infrastructure
- ☐ Assists in technical infrastructure-related issues
- ☐ Works with the client's infrastructure and applications teams to integrate the UiPath Platform into their business
- ☐ Reviews project requirements, hardware, and software requirements
- ☐ Analyzes the client's existing infrastructure
- ☐ Designs and deploys infrastructure and applications
- ☐ Assists in maintenance and upgrades

Roles and Responsibilities: UiPath Team



Client Team : Roles & Responsibilities



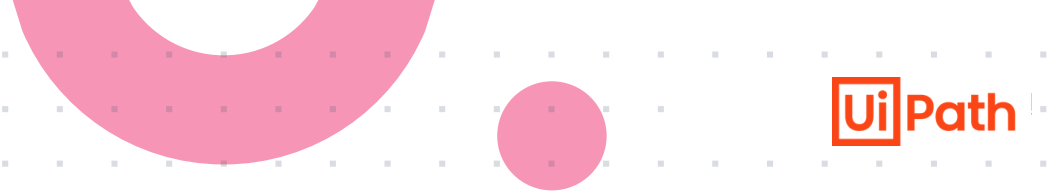
The Client Team

The Client team usually has a dedicated team of professionals, such as the Engagement Sponsor, Client Project Manager, Process Owner, Process SME, Client IT Team, Development Team, and Support Team.


Note that not every client team will or must have all of these roles.

Each role performs a dedicated set of functions that are crucial for the project to be delivered within budget, time, and scope. They also actively engage with the UiPath Team.

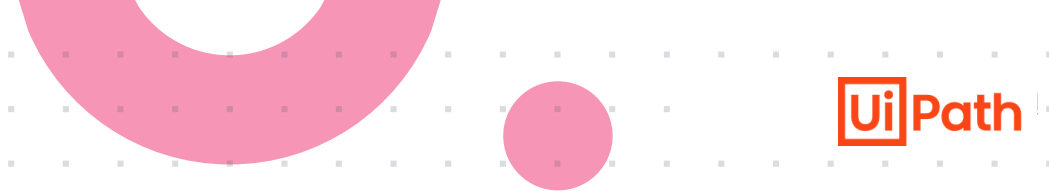
Client Team : Roles & Responsibilities



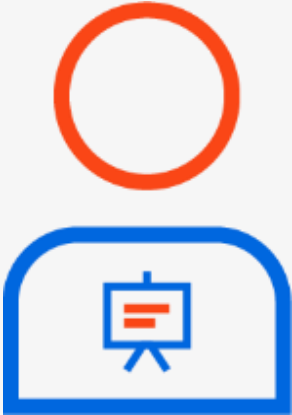
Engagement Sponsor - Client Project Manager - Process Owner - Process SME - Client IT Team - Development Team - Support Team

Role	Stages Involved	Key Task
 Engagement Sponsor	<ul style="list-style-type: none">• Kickoff• Project Closure	<ul style="list-style-type: none">• Finances implementation projects• Approves Change Requests and billing packages• Signs off completed projects

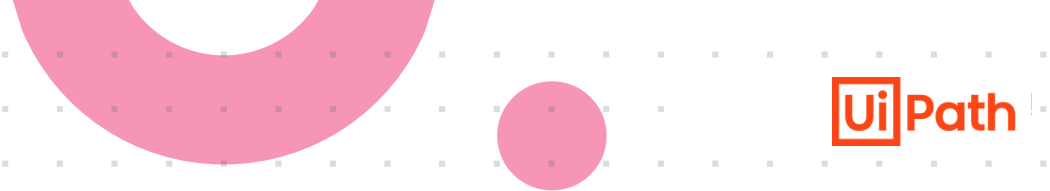
Client Team : Roles & Responsibilities



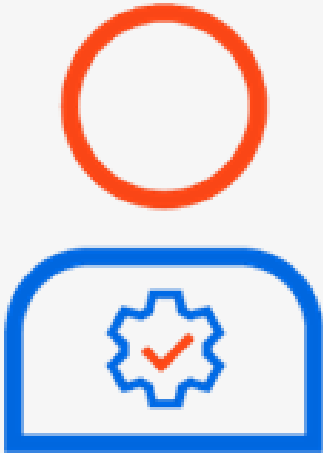
Engagement Sponsor - Client Project Manager - Process Owner - Process SME - Client IT Team - Development Team - Support Team

Role	Stages Involved	Key Task
<div></div> <div>Client Project Manager</div>	<ul style="list-style-type: none">• All implementation stages	<ul style="list-style-type: none">• Manages the overall implementation from the client team side• Coordinates with the UiPath and client team for project success• Provides all necessary resources for project success• Works with IT provision robot hardware, developer and client Subject Matter Expert or SME software, and access• Approves the selection of deliverables and updates business cases• Collaborates with UiPath Project Managers to develop hardware, software, and access requirements plans• Works with UiPath Project Managers on project-level retrospective• Manages internal processes and escalations in projects

Client Team : Roles & Responsibilities




Engagement Sponsor - Client Project Manager - Process Owner - Process SME - Client IT Team - Development Team - Support Team

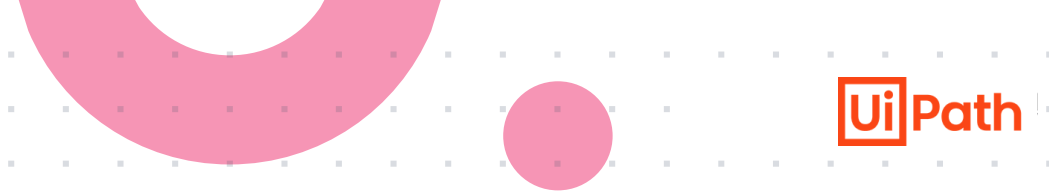
Role	Stages Involved	Key Task
<div></div> <div>Process Owner</div>	<ul style="list-style-type: none">• All implementation stages	<ul style="list-style-type: none">• Is familiar with the entire process• Is the point of contact for general information about the process• Approves the Process Definition Document (PDD) and User Acceptance Testing (UAT)• Works with the Support team and client Solution Architect to obtain Solution Design Document (SDD) approval after UAT• Approves the initial and updated business cases• Obtains the application owner's or owners' approvals of the as-is and to-be High-Level Designs• Creates a deployment plan with the Solution Architect• Creates a change ticket for production deployment

Client Team : Roles & Responsibilities


Engagement Sponsor - Client Project Manager - Process Owner - Process SME - Client IT Team - Development Team - Support Team

Role	Stages Involved	Key Task
<div><p>Process SME</p></div>	<ul style="list-style-type: none">• All implementation stages	<ul style="list-style-type: none">• Collaborates with BA and supplies documents for knowledge transfer and evaluation of the process and existing Standard Operating Procedure (SOP)• Collaborates with BA and Automation Developers to provide the test data and carry out UAT• Performs the following to identify the cause and fix defects<ul style="list-style-type: none">– Detects and logs defects– Notifies the developer– Provides additional details• Retests the scenario to verify the bugs resolved• Upon completion of the UAT:<ul style="list-style-type: none">– Provides feedback to the Process Owner to facilitate sign-off– Performs load and stress tests– Monitors hypercare– Coordinates with Process Owners for completion and signoff

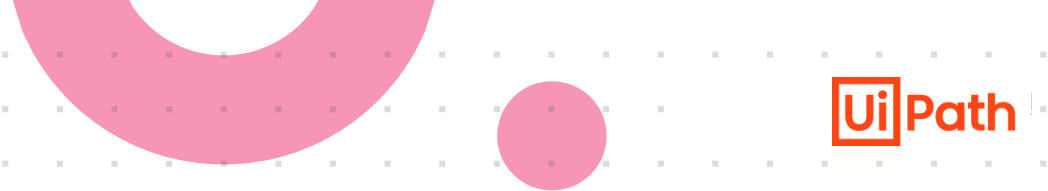
Client Team : Roles & Responsibilities




Engagement Sponsor - Client Project Manager - Process Owner - Process SME - Client IT Team - Development Team - Support Team

Role	Stages Involved	Key Task
<div><p>Client Team</p></div>	<ul style="list-style-type: none">• All implementation stages	<ul style="list-style-type: none">• Are knowledgeable about the organization’s technical setup• Assists the UiPath Automation Implementation Team to:<ul style="list-style-type: none">– Integrate with the client’s systems– Access applications– Provision robots– Deploy automation• Supports technical setup details and deployment when consulted

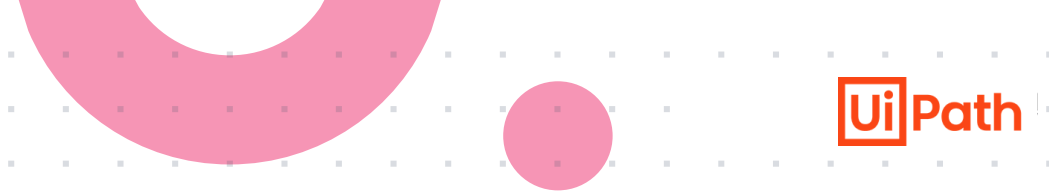
Client Team : Roles & Responsibilities




Engagement Sponsor - Client Project Manager - Process Owner - Process SME - Client IT Team - Development Team - Support Team

Role	Stages Involved	Key Task
<div></div> <div>Development Team</div>	<ul style="list-style-type: none">• All implementation stages	<ul style="list-style-type: none">• Performs similar roles to their respective UiPath Automation Team counterparts• Supports the business development need• Informs the team about project development• Works with the UiPath Automation Implementation Team and supplies formal knowledge transfer to support resources

Client Team : Roles & Responsibilities



Engagement Sponsor - Client Project Manager - Process Owner - Process SME - Client IT Team - Development Team - Support Team

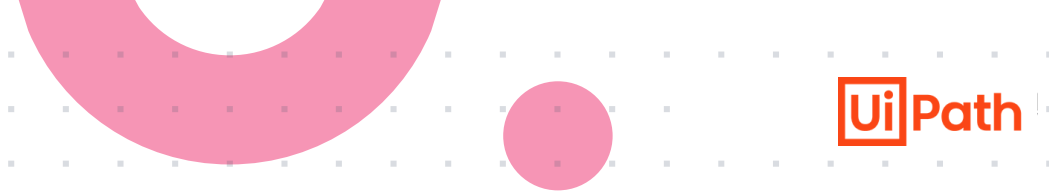
Role	Stages Involved	Key Task
 Support Team	<ul style="list-style-type: none">• UAT	<ul style="list-style-type: none">• Receives the documentation, and the knowledge transfer takes place from the development team during and after UAT• Handles long-term support of automation after project closure• Supports in three levels:<ul style="list-style-type: none">– At level 1, figures out the root cause and assists with simple issues, and escalates if needed– At level 2, assists with more complex issues, makes small code changes to resolve issues, redeploys the automation, and escalates if needed– At level 3, makes large edits and changes to resolve issues and redeploys the automation• Approves change requests and go-live• Sets up Production Orchestrator and robot machines• Deploys the automation to production• Collaborates with the UiPath or Client Solution Architect and Developers to:<ul style="list-style-type: none">– Review code– Create, review, and approve the Runbook• Collaborates with the Solution Architect and Developers to define support and knowledge transfer requirements• Engages in knowledge transfer• Works with UiPath Product Support on issues unrelated to the specific process

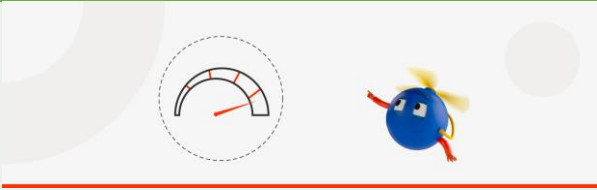
Roles and Responsibilities: Business Team



Solving Common Challenges :

Expectation setting



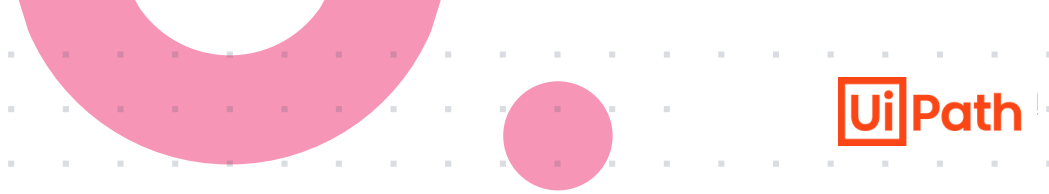
What it is?	High client satisfaction by setting expectations early <ul style="list-style-type: none">the deliverables the client should expectwhen they will be delivered	
What stage?	The Kickoff stage <ul style="list-style-type: none">reiterate the key points present in the SOWsetting specific expectations around the process itself will happen at the Business Case and Technical Validation and Process Analysis stages	
How to solve?	Understanding the customer's expectations <ul style="list-style-type: none">gather information from the contractconfirm the customer's expectations and deliverables by having a conversation with themexplain what you already know about their expectationsUse the Project Kickoff template to set expectations & document them <p>During the course of the engagement, you should have a weekly project status meeting to ensure short-term and long-term expectations are aligned between the customer and the implementation team. We can use the Weekly Project Status Update deck for this purpose</p>	
Resources?	<ul style="list-style-type: none">Project Kickoff templateWeekly Status Report template	

Solving Common Challenges :

Scope creep

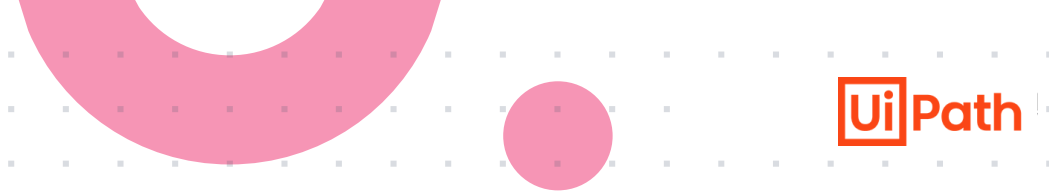
What it is?	Scope is determined early and should be reiterated often to keep everyone on the same page about what is being built
What stage?	<ul style="list-style-type: none">• The Kickoff stage• Process Analysis stage<ul style="list-style-type: none">- the scope for a specific process or automation is finalized with the approval of the PDD, which defines the scope in detail
How to solve?	Need a Statement of Work (SOW) <ul style="list-style-type: none">• reconfirming the SOW scope during the Kickoff call• explain how any changes to that scope will have to follow the Change Request process• Anything that might affect the scope will also be addressed during the Weekly Project Updates.
Resources?	<ul style="list-style-type: none">• Statement of Work (SOW)• Project Kickoff template• Weekly Status Report template• Change Request template• Process Design Document (PDD)

Solving Common Challenges : UAT



What it is?	Unorganized UAT can happen if UAT tasks and responsibilities haven't been clearly explained beforehand about who is responsible for various steps. The UAT Plan outlines the tests to be performed, the logistics for how end user testing will occur after development, such as details on user availability, test data preparation & cleanup. Clients are responsible for completing the UAT plan, but the Business Analyst may need to assist, depending on their level of experience	
What stage?	<ul style="list-style-type: none">• Kickoff stage• Process Analysis stage• Solution Design stage	
How to solve?	<p>During Kickoff,</p> <ul style="list-style-type: none">• the UiPath team can go through the RACI Matrix & explain how the UAT phase should happen• estimate the effort needed from the UAT participants on customer's side <p>Process Analysis</p> <ul style="list-style-type: none">• once PDD is approved, client determines the success criteria & creates the UAT Plan with BA• Solution Architect will be consulted on the UAT Plan, to validate the feasibility of the requirements <p>Solution Design stage</p> <ul style="list-style-type: none">• Solution Architect and Automation Developers work together to prepare the Technical Testing plan, which should encompass UAT scenarios, functional testing, and system integration testing	
Resources?	<ul style="list-style-type: none">• Project Kickoff template• PDD template	<ul style="list-style-type: none">• UAT Plan template• Technical Testing Plan template

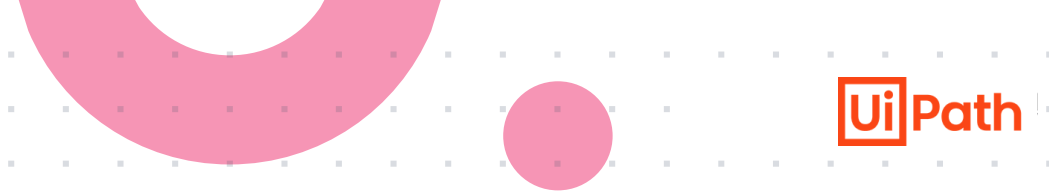
Solving Common Challenges : Access Delays



What it is?	Development, testing, and production execution is dependent on having access to systems. Any ambiguity or missed application can halt those phases completely and impact expected timelines. It's crucial to identify what access is needed early in the engagement so you can request it for the relevant team members.	
What stage?	<ul style="list-style-type: none">Kickoff stage , Business Case and Technical Validation stage , Solution Design stage	
How to solve?	Kickoff Stage <ul style="list-style-type: none">Issue tracker can be used for environment access issues, development roadblocks, UAT failures, or anything else that's impacting the progress of the implementationAnything that's impacting progress must be discussed with the customer during the weekly project update meeting (Weekly Status Report template used) Business Case and Technical Validation Stage <ul style="list-style-type: none">Solution Architects are responsible for identifying the key Complexity, technical dependencies, accesses needed for themselves, the developers, and the robots. This includes any application used in the process, access to Studio and Orchestrator for developers Solution Design Stage <ul style="list-style-type: none">Application Tracker is used to record accesses required by the developer to build the automation and for the automation to be run in UAT and Production. As a best practice, use the Application Tracker as early as the Kickoff stage to record access requirements	
Resources?	<ul style="list-style-type: none">Weekly Status Report templateApplication Access Tracker template	<ul style="list-style-type: none">Technology Checklist templateIssue Tracker template

Solving Common Challenges :

Customer availability



What it is?	The unavailability of the customer’s process Subject Matter Expert (SME) or Process Owner is a common challenge encountered in projects and is the cause for significant project delays
What stage?	<ul style="list-style-type: none">• Kickoff stage• Process Analysis stage• UAT stage• Business Case and Technical Validation stage
How to solve?	<p>Early in the engagement</p> <ul style="list-style-type: none">• decide with the customer on the number of SMEs required per stage, especially for UAT• estimate the number of hours required for each
Resources?	<ul style="list-style-type: none">• Project Kickoff template• UAT Plan template

Solving Issues – During Kickoff

The project sponsor has not provided clear objectives and requirements for the project.

How can this issue be resolved?



Solving Issues – During Kickoff

The project sponsor has not provided clear objectives and requirements for the project.

Solution

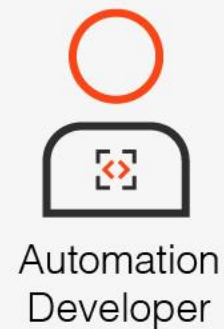
- the first step is for the Project Manager to identify the stakeholders then
- setup meetings to gather requirements and use cases
- the Business Analyst along with the Project Manager should be the ones to lead the discussions and clarify the objectives and requirements for the automation project
- the Solution Architect may also participate in the discussions and provide input & can then document these requirements in a document and share it with the project sponsor for review and approval



Solving Issues – During Business Case and Technical Validation phase

The Automation Developer has identified that a web application has changed to using Captcha Verification.

What should the Developer's next steps be?



Solving Issues – During Business Case and Technical Validation phase

- Always check the Terms and Conditions of the application. Sometimes, robots are not allowed, and there can be legal implications for the customer.
- Only after getting the Legal approval, we should move forward and search for a solution
- After receiving **approval from the Legal team**, the Automation Developer should work with the Business Analyst and Solution Architect to identify alternate solutions

One solution could be to **use a third-party service provider that provides Captcha solving services**.

Another solution could be **to manually enter the Captcha verification code**, which can be done by a human operator or an attended robot. The Developer should estimate the effort to automate the Captcha.

If the estimate is the same time as the original effort, the developer will attempt the solution. If no progress has been made by the halfway point, they should reach out to the Solution Architect and the Business Analyst.

If the estimate is greater than the original scope. Reach out to the SA and the BA.

If the Solution Architect and Business Analyst are reached out to, their job is to verify and/or identify the additional effort and raise the scope change to the Project Manager.

The Project Manager will determine the impact of the scope change and communicate that impact to the customer.

Example: If originally the estimate was 1 hour, and the developer believes they can automate the Captcha in 1 hour. They attempt it. If at 30 minutes, no progress has been made, they reach out to the Solution Architect and Business Analyst.

Solving Issues – During Process Analysis Phase

The Business Analyst has identified that the existing process has a 20% rate of exceptions and variations.

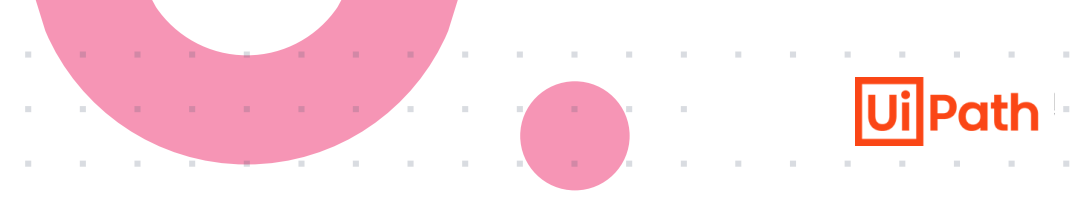
How can this issue be resolved?

Acceptable rate: 10-20%

High rate: 80-90%



Solving Issues – During Process Analysis Phase



The Business Analyst should work with the SME or Process Owner to first identify the volumes and impact for each exception and variation.

Once this is available, the BA will work with the Solution Architect to propose a plan.

They must determine the impact on scope and the estimated effort to handle the exceptions and variations.

Once scope impact has been determined. They must communicate that scope impact to the Project Manager to determine if the project needs changes to account for the impact.

In some cases, the variations and exceptions can be siloed into separate automations or extensions of the initial automation.

If this approach is taken, the estimate on timeline and expectations should be clearly communicated to the customer in a very transparent manner.

This is an acceptable approach, but ensure the customer isn't expecting full delivery and they're understanding of the approach.

Diagrams and timelines must be used.

This plan should be documented in the Process Design Document (PDD) and shared with the project team for review and approval.

The Solution Architect and Automation Developer can then use the PDD to take this into consideration when building the SDD to handle exceptions.

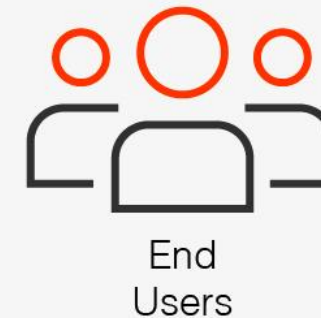
Note: If a higher rate of exceptions is encountered than expected by the sponsor, it may not be solvable by automation (may need to be processed by a human). Such a situation can negatively impact the business case and could, rightfully, end the project as not viable.

Another higher value target should be discovered.

Solving Issues – During UAT

The end-users have identified that the automation workflow is not generating correct security hash codes for certain clients.

How can this issue be resolved?



Solving Issues – During UAT

The Automation Developer should work with the Solution Architect and Business Analyst to identify the root cause of the issue. This could be due to incorrect data input or a bug in the automation workflow.

User Acceptance Testing should continue to identify all issues. Follow these steps to address the identified issue:

1. Ask for test data to reproduce the issue

While UAT is being finalized, the Developer will reproduce the issue.

2. Debug the process and identify the cause of the problem

Once the issue can be reproduced, the Developer works with the SA and BA to identify a resolution. Be aware of time, the effort to solve this problem should be communicated to the PM.

3. Create a fix and deploy (only after getting customer approval)

The customer may decide the scenario is acceptable in the current state and able to move to prod, while a solution is worked on. These decisions can depend upon the scope of the issue.

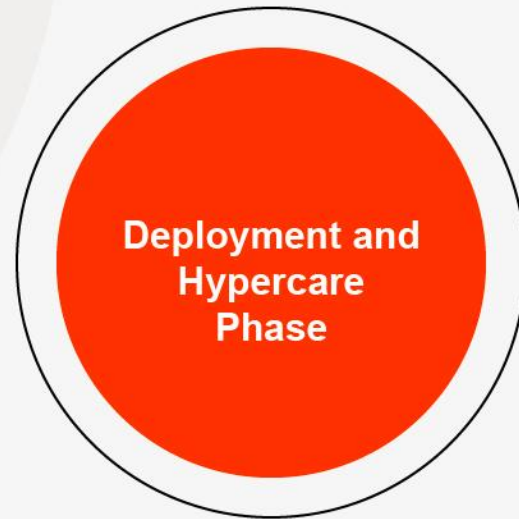
4. Re-run the test cases that failed in UAT

Once a solution is found, the Automation Developer modifies the workflow to handle the issue, pushes it to the UAT environment and confirms with the client that the process is working as expected. Lastly, the Developer moves the fixed workflow to production.

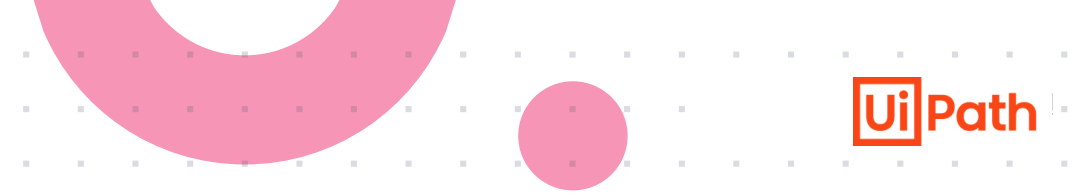
Solving Issues – During Deployment and Hypercare phase

The Solution Architect has identified that the automation workflow is causing performance issues on the server.

How can this issue be resolved?



Solving Issues – During Deployment and Hypercare phase



The Solution Architect should work with the Automation Developer to identify the root cause of the performance issue.

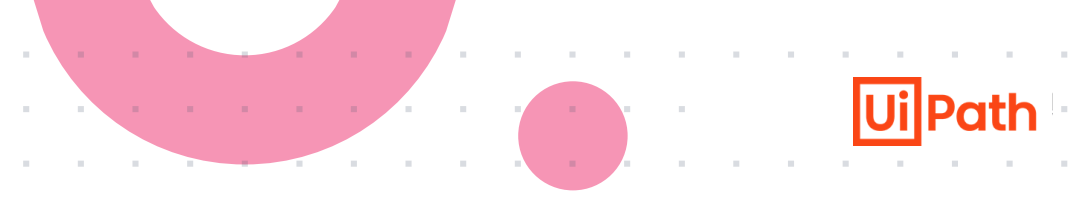
This could be due to high CPU or memory usage by the automation workflow.

The Automation Developer can then optimize the workflow to reduce resource usage or scale up the server infrastructure to handle the load. The Solution Architect can then monitor the system performance to ensure that the issue has been resolved.

Note on communication:

Understanding why the runtime is different between prod and dev should be very clearly identified and communicated to the customer

Process Definition Document



In the Process Analysis stage, the Business Analyst and the Solution Architect work together to analyze the chosen process in its As-Is state and start the Process Definition Document (PDD) creation.

The PDD is one of the most critical business analysis deliverables since it ensures the transfer of knowledge from the user group to the developers.

The UAT plan is a document outlining the tests to be performed as well as the logistics for how end-user testing will occur after development.

The As-Is process description provides a clear snapshot of exactly how the process operates within the business before the Automation implementation.

The To-Be process description aims to highlight the expected design of the business process after automation.

Process Definition Document - Creation , Sign off and Maintenance

Create PDD

Gather all the necessary information and put together a document describing the process.

1

Sign-Off PDD

Validate the document with both with the Business Owner and the development team.

2

Maintain PDD

Keep the document up to date during the development and the UAT phase. Unexpected things regarding the process might come to the surface.



Document History

- Version number of the document.
- Date when the version of the document was created.
- Name, role, function, and organization of the person doing the upgrades.
- Comments that summarize the changes for a specific version.



Document Approval Flow

- Version number of the document submitted for approval.
- Name, role, organization, and the specific responsibility of each person in the approval flow.

Process Definition Document - Table of Contents

1. Introduction

- 1.1 Purpose of the document
- 1.2 Objectives
- 1.3 Key Contacts
- 1.4 Minimum Prerequisites for Automation

2. As-Is Process Description

- 2.1 Process Overview
- 2.2 Applications Used in the Process
- 2.3 As-Is Process Map
- 2.4 Detailed As-Is Process Steps
- 2.5 Input Data Description

3. To-Be Process Description

- 3.1 To-Be Detailed Process Map
- 3.2 Parallel Initiatives / Overlap (if applicable)
- 3.3 In Scope for Automation
- 3.4 Out of Scope for Automation
- 3.5 Business Exceptions Handling
- 3.6 Application Error and Exception Handling
- 3.7 Reporting

4. Other Observations

5. Additional Sources of Process Documentation

