

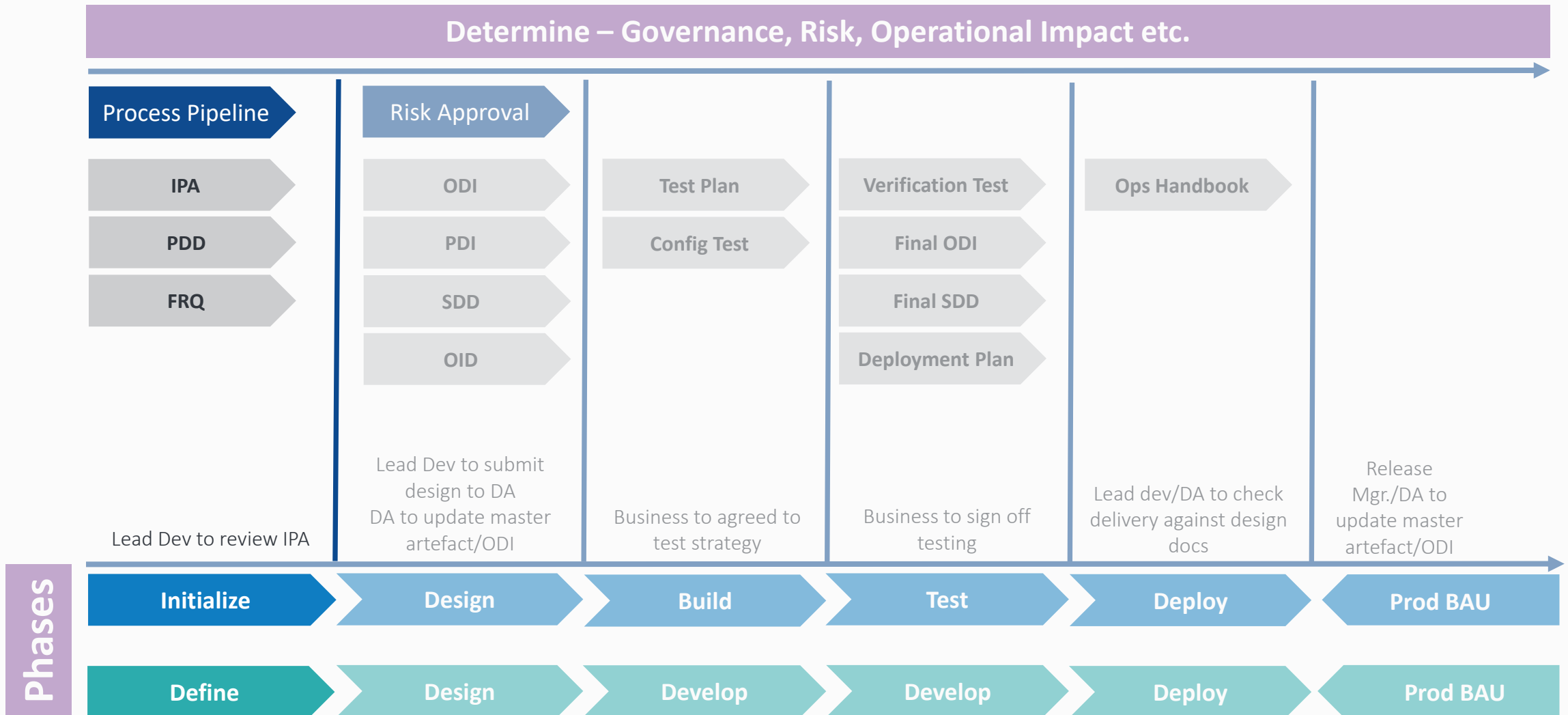
Blue Prism Delivery Methodology

Process Definition Phase

Creating a Process Definition Document

The anchor to the process solution and test analysis. Creating a clear and comprehensive PDD is critical to delivery success

Blue Prism – Define Phase

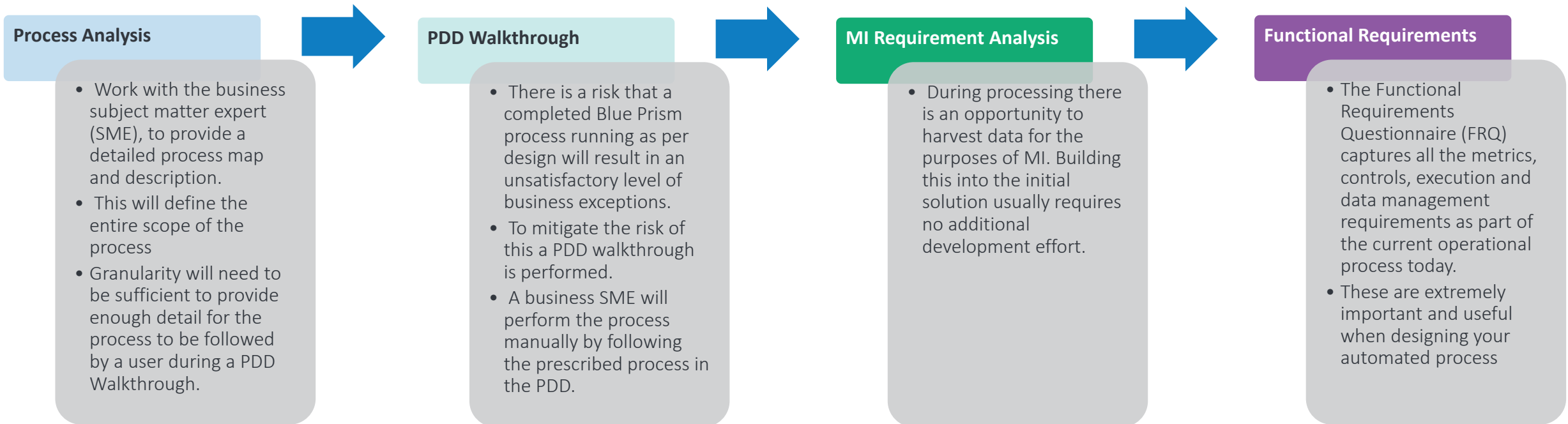


Methodology - Definition

Defining a Process Correctly

The define stage will examine the process prior to a solution design and the commencement of the configuration stage.

In addition to allowing all risks to be identified, a thorough analysis will expose the scope of the complete process resulting in a comprehensive design and more economic configuration phase.



Definition Phase

Capturing the process requirements

Process Definition Document

Process Definition Document (PDD)

The **Process Definition Document (PDD)** is the most important element of the Define phase in a Blue Prism Project.

It provides the foundation upon which important decision are made, and upon which a Blue Prism automation is developed.

In this session, we will be looking at the following:

- **What is a Process Definition Document?**
- **Where to gather information from for a PDD?**
- **What makes a good PDD?**
- **Common PDD mistakes and issues**
- **Testing the Process Definition with a “PDD Walkthrough”**



Process Definition Document

What is a Process Definition Document?

The PDD is a document that details the business process that is to be automated using the Blue Prism product.

The PDD is effectively an instruction manual which must be accurate and detailed enough to train Blue Prism robots to perform a business process unaided, without the ability to confer with colleagues or mentors for help (like a manual trainee would be able to!)

The PDD must be:

Clear	With a good PDD the reader can quickly gain an understanding of the process
Accurate	To ensure the robots are trained to work the process correctly
Detailed	So the robots knows which keys and buttons to press on every screen
Explicit	Defining exactly what information is read and used at all steps in the process
Thorough	So the robots knows what to do in different scenarios

Why do we need a PDD?

A PDD is needed for the following:

- **To help estimate the work involved in automating a process.** A PDD is used to analyse the complexity of a process, and evaluate what interface “components” are required. A poor PDD may lead to an incorrect estimate of the development costs.
- **To enable a Blue Prism developer to build the automation.** With an unclear PDD with the incorrect level of detail, there will be an increased requirement for Subject Matter Experts (SME’s) during development. With a PDD that is inaccurate an incorrect solution could be built, leading to prolonged testing and live roll-out phases as the process is corrected.
- **To base Verification and UAT test plans upon.** The test plans that are created as part of the Blue Prism Methodology are based upon the process requirements as set out in the PDD.

Where to gather information from for a PDD?

Existing Documentation

Existing process documentation is always the first place to start when creating a PDD. If existing documentation is of a high enough quality and at a low enough level of details it may already be good enough to be used for a Blue Prism project. Potential sources of documentation include: training manuals, procedural guides, how-to handouts.

Potential Issues with Existing Documentation:

Outdated	The business process may have changed since the document was created
Discrepancies	Is the documentation actually how staff are working the process? If not, which is correct, the documentation or the staff?
Level of detail	Existing documentation is often not at the level of detail and clarity required for a robotic automation project
Ease of Use	Some existing process documentation can be difficult to read and understand

Because of these potential issues, it is always good practice to sit through the process with manual staff, even if existing documentation seem to be good quality.

Where to gather information from for a PDD?

Subject Matter Experts (SME's) – Process Walkthroughs

The best place to find out about a Business Process is from the staff currently manually working that process. **Simply sitting and watching the process being performed** gives you the opportunity to:

Document the process	In the low level of granularity that is required for an automated project
Take screenshots	To include in the PDD as the SME works the process
Question the process	<p>To ensure your understanding is clear and correct. Kind of questions to ask the SME might include:</p> <ul style="list-style-type: none">- Do you always do these exact steps for every case?- Do you do anything different for other customer types/account types?- Are there any exceptions to the rule? Are there any types of cases that you don't work or pass onto another team?- Is there any rare scenarios, how differently are they worked? How often do they occur?- Do the systems ever stop you from taking these steps? Are there any system pop ups or error messages that sometimes occur?

Blue Prism strongly recommends sitting with multiple SME's when documenting a process. Different people might work the same process differently, and just using one SME raises the risk of documenting someone doing the work incorrectly

Where to gather information from for a PDD?

Business Decision and Sign Off

Process Documentation should be agreed and signed off by the business owners to ensure it has been documented correctly.

- **Why:**
 - Ensure the documented process is correct
 - Different documentation sources and staff may have provided different ways of doing the process, the business will need to decide which way is correct.
 - Documenting the process often leads to a re-evaluation of the best way to do it.

- **Why:**
 - **Subject Matter Experts:** confirm that their actions were documented correctly
 - **Business Analyst:** Any internal staff with the expertise to ensure a process is correct
 - **Business Process Owners:** Team leader and operational managers

What makes a good PDD?

PDD Contents and Structure

Blue Prism provide a PDD Template and an Example PDD upon which you may base your document

A PDD should be easily understood, even by someone with limited or no previous knowledge of the business process or the applications that it uses.

Descriptions should be clear and without any possible ambiguity. Where the PDD describes entering information into a screen or using it within a formula, the source of that information should be clear.

A PDD should not try to document the potential automated solution. It should define the “as-is” manual process that is within the scope for automation. Documenting the future automated solution will be done in a later design phase.

The following three slides outline the needs for the business process to be documented at individual keystroke level, and recommend the use of a flow diagrams and screenshots.

What makes a good PDD?

Keystroke Level Mapping

The Blue Prism product needs to be trained to perform every key press and button click that a user would do. **The PDD therefore needs to document every low level step of the process.**

- **If a PDD is not documented down to the key stroke level the Blue Prism developer will not know:**
 - How to navigate to the required screens
 - Exactly what the information to enter or select, and what buttons to press
 - What messages (confirmation, warning, errors, etc..) might occur.
- **The side effects of not having a PDD Available with keystroke mapping may include:**
 - Far greater use of SME time will be required during development
 - Development will take longer, with more questions needing answering and potential delays waiting responses
 - More time will be required for the testing phases, to ensure any presumptions made due to a lack of PDD detail are correct.

What makes a good PDD?

High Level Flow Diagrams

Flow diagrams can make a PDD easier to read and understand:

- They enable initial high level discussions and evaluation of the process
- They allow non- developer members of an automation project to gain an understanding of the process without needing to go into the low level key strokes
- Flow diagrams join together the component parts of the business process: the system keystrokes, the rules and decisions, the process inputs and outputs. This gives a view of the entire scope of the process.
- Flow diagrams help to ensure the entire process has been documented. If a high level flow diagram cannot be created then there are probably some elements of the process that are unknown or missing.

What makes a good PDD?

Screenshots

Screenshots capturing the system screens that the process uses can greatly help to make a PDD easier to understand. Using screenshots has the following advantages:

- **They help the PDD to be understood** even when the applications being automated are not available
- **They can make it easier to estimate** the development effort required. The number of screens and their complexity can be easily visualized.
- Screenshots alongside keystroke mapping can **reduce the need for SME knowledge** during development for clarification
- Screenshots help the author of a PDD to remember and communicate their SME process walkthrough notes
- **They remove any possible ambiguity** from the key stroke mapping, especially on complex screens or screens with similarly named field

When using screenshots it is important to ensure they are ammonized, with any customer or user specific information removed,

Difficulties documenting a Business Process

Sometimes it can be difficult to document a process. Reasons for this difficulty may include some of the following:

Problem:

- The process is very large and complete, taking an extremely long time to document

Solution:

- **Break up a large process into smaller processes**
 - Can the large process be broken down into smaller sub-processes for automation? Breaking up a process for automation often makes it easier to document, develop and test.

Difficulties documenting a Business Process

Sometimes it can be difficult to document a process. Reasons for this difficulty may include some of the following:

Problem:

- You are constantly finding out about new scenarios every time you watch the process being manually performed. There seems to be a never ending number of scenarios and it feels like you are documenting a moving target?

Solution:

- **Use the 80/20 Rule**
 - It is often found the majority of cases to be worked in a business process (approximately 80%) fit into the minority of scenarios to work (approximately 20%)
 - Scoping an automation project to automate the most common scenarios will make a complete process far easier to document, developer and test.
 - Make it clear in your PDD how to identify the scenarios that are within scope for automation.

Difficulties documenting a Business Process

Sometimes it can be difficult to document a process. Reasons for this difficulty may include some of the following:

Problem:

- The SME is finding it difficult to describe the reasoning behind some of their actions and/or I am finding it difficult to define the rules being used.

Solution:

- **Use Assisted Automation where subjective decisions are required**
 - Sometimes parts of a business process needs to be done by a person. In such circumstances the automated solution can be built with hand offs to and from manual staff that will continue to make the subjective decisions
 - Make it clear within your PDD where a subjective decision is required.

Common PDD Mistakes and Issues

Below are some common PDD mistakes:

- **Generalized, high level Instructions.** Where one line in a PDD may actually signify multiple steps.
- **Vague references to other documents or lookups.** Make sure it is clear where referenced documented are found, their format, the version to use and who owns them
- **Vague or unclear instructions** that could be interpreted in multiple ways
- **Instructions that include solutioning** the automation rather than simply documenting the current “as-is” manual process
- **Missing process steps** because of a presumption of knowledge, For example; how to start and log into an application and exactly how to navigate to specific screens
- **Only documenting the most common routes through the process** often called the “happy paths”. Less common scenarios and problem or “exceptions” cases are often excluded.

Testing the Process Definition with a “PDD Walkthrough”

The PDD Walkthrough

A PDD Walkthrough is a method of testing the PDD is correct and includes all the steps required to be able to work the business process.

To perform a PDD Walkthrough **sit with an SME** and do the following; use the PDD as the guide, **instructing the SME on how to work the business process by reading from the PDD**

- **A PDD Walkthrough will help you to identify the following:**
 - **Any sections of the PDD that are difficult to understand or vague.** It may take an extended conversation with the SME to understand what the PDD is instructing
 - **Incorrect or unconfirmed procedures.** Where the PDD says to do one thing but the SME does something else. This will need confirming by the Business Process Owner as to which is correct
 - **Missing steps,** where the PDD says to do something and the SME does multiple actions instead

Testing the Process Definition with a “PDD Walkthrough”

The PDD Walkthrough

A PDD Walkthrough is a method of testing the PDD is correct and includes all the steps required to be able to work the business process.

To perform a PDD Walkthrough **sit with an SME** and do the following; use the PDD as the guide, **instructing the SME on how to work the business process by reading from the PDD**

- **A PDD Walkthrough might be performed by any of the following:**
 - **Anyone who creates a PDD**, to ensure the PDD is correct
 - **Anyone assessing a process for automation**, evaluating the quality of the PDD as part of an opportunity assessment
 - **Blue Prism developers**, to bring the PDD to life and ensure it is adequate for them to use for development

Process Definition Document

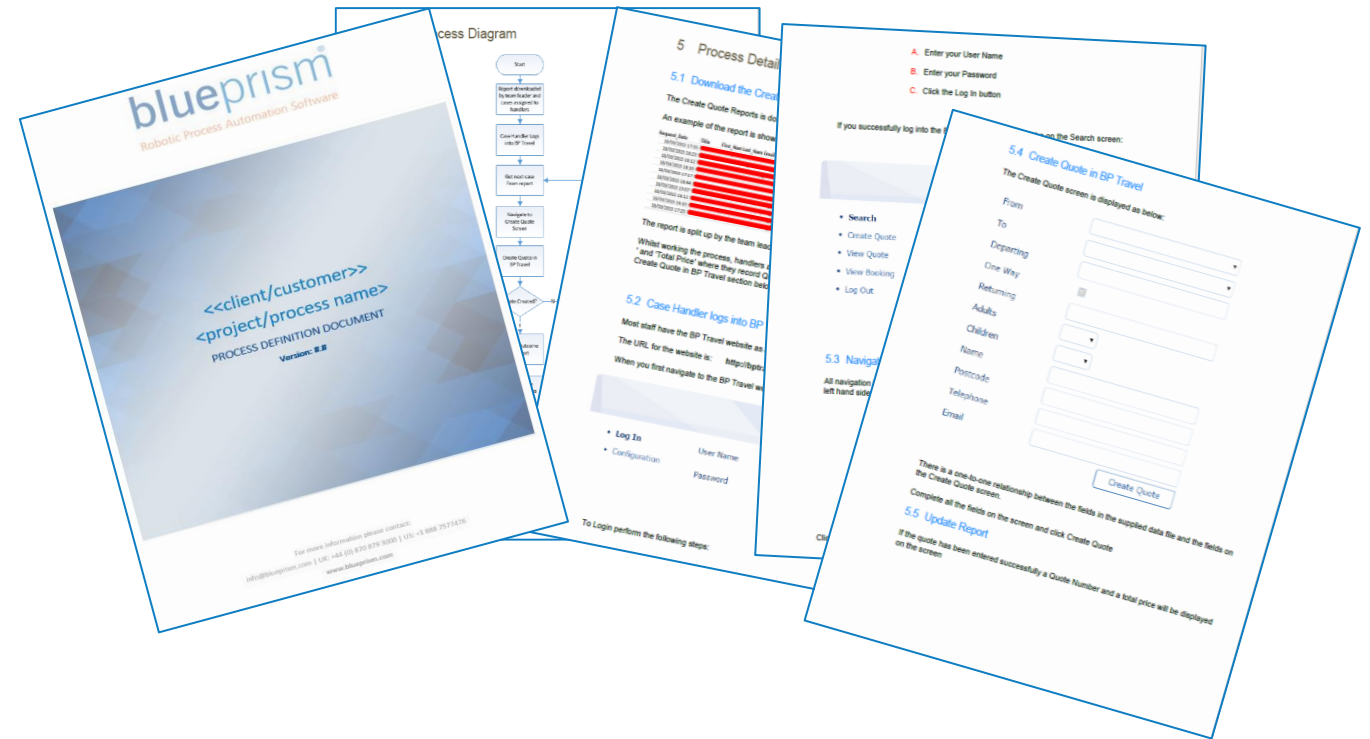
Recap

The Process Definition Document (PDD) captures the flow of a business process to be developed within Blue Prism.

The flowchart contained within the document captures, at a high level, the business process to be automated, the target systems used within the process and any assumptions that have been taken into account.

Once agreed as the basis for the automation of the target process, the flowchart and assumptions will be used as a platform from which the automated solution will be designed.

Changes to this business process may constitute a request for change and will be subject to the agreed agility program change procedures.



Process Definition Document

Summary

- ✓ Gather process information from documentation, watching staff perform the work, and from the business process owners
- ✓ A PDD needs to contain a higher level of clarity and go to a lower level of key stroke detail than is often contained in process documentation
- ✓ Problems during a process may indicate that the scope of the Robotic Automation needs re-evaluating
- ✓ Test the usability and accuracy of process documentation by performing a PDD Walkthrough

Definition Phase

Understanding the functional requirements

Functional Requirements Questionnaire (FRQ)

Introduction

The Functional Requirements Questionnaire (FRQ) captures all the metrics, controls, execution and data management requirements as part of the current operational process today.

These are extremely important and useful when designing your automated process, i.e.

- Does your process need to be scheduled at applicable hours when the applications are available?
- Does the process require an “input trigger” to start?
- Is it best to create separate “automated” processes to utilise the robots and share the workload?

The FRQ captures the operational requirements of how the process is manually operated today and will help design how the process can be automated.



Functional Requirements Questionnaire (FRQ)

What is a Functional Requirements Questionnaire (FRQ)?

The FRQ is a document that details production information about the process and environment which may be relevant during development.

It should capture all inputs, outputs, environmental factors, schedules, SLAs, alert structures, reporting targets, and any other requirements of the business process in sufficient detail to be able to ensure that all requirements at all levels are met.

The FRQ does not repeat any of the business process logic that is captured in the Process Definition Document (PDD), it supplements that PDD document with details of the business expectations of how the process needs to perform and be managed.

Functional Requirements Questionnaire (FRQ)

An FRQ is needed for the following reasons:

- To record all technical details on all aspects of the system, especially interaction points with other systems. It acts as a reference for all development. This makes it possible to integrate with other systems and processes at all interaction points.
- To enable developers to complete development with minimal effort. Without a properly defined FRQ before development starts, both development and testing can be extended greatly before the process performs accurately and meets all expectations
- To base verification and UAT plans upon. Test plans must ensure each documented requirement is met as specified as part of the full testing process.
- To base operational planning and scheduling of the automated solution. Details from the FRQ document can be used to decide the number of resources required, how to plan for peak work times, and when to schedule the solution to run.

Where to gather information for an FRQ?

Existing Documentation

Existing functional and technical documentation must be accounted for or included in data-gathering for an FRQ. Functional and technical requirements for the process may or may not change during the BP implementation process, but they must all be mapped either to a requirement in the FRQ or an explanation of why they are no longer relevant.

Potential Issues with existing documentation:

- Outdated – the implementation of the original process may have changed or evolved over time, meaning the existing documentation is no longer 100% accurate.
- Discrepancies – Documentation may reflect an expectation different than the original implementation of the process, meaning it may not actually reflect how the process is done day-to-day.
- Level of Detail – Existing documentation may not have the full detail necessary to properly develop the Blue Prism implementation.
- Ease of Use – Documentation may be unclear, poorly written, or difficult to understand.

Because of these potential issues, it is always best practice to review all documentation with Subject Matter Experts to ensure discovered requirements are valid.

Functional Requirements Questionnaire (FRQ)

Subject Matter Experts (SME's)

The best source of information about business processes is the staff working and maintaining the process.

- Document all assumptions, requirements, SLAs, and technical elements in as much detail as possible.
- Copy samples of input and output files, reports, log entries, and alert/error messages where possible to include in the FRQ.
- Question the process and explore/expand as much as possible, to ensure all information is correct and relevant to the context.
- Where possible, compare the details to the live/existing process before publishing the FRQ.

Blue Prism strongly recommends sitting with multiple SMEs when documenting a process. Different people may know different elements about a process, and working with more than one person minimizes the chance of missing critical information.

Functional Requirements Questionnaire (FRQ)

Business Decisions and Sign-Off

Process and Requirements Documentation should be agreed and signed off by the business owners to ensure it has been completed correctly.

Why:

- Ensure the automated solution meets operational requirements
- Ensure all parties are aware of the requirements, scope, and expectations.

Who:

- Subject Matter Experts: Confirm that the results of their actions are reflected correctly in the requirements.
- Business Process Owners: The process owners need to be away of the expectations of the implementation.
- Technical Staff: The technical staff who implemented the original process and work with it day-to-day will have good insight into how the requirements match reality.
- Business Analysts: BAs frequently documented the original requirements for the process and will have good insight into the correctness and completeness of a FRQ.

What makes a good FRQ?

FRQ Contents and Structure

Blue Prism provides an FRQ template in the Methodology area of the Portal and a completed example as part of the Lifecycle Orientation training. New FRQ documents can be based upon these.

An FRQ should be clear and easy to understand. Even though the details mostly apply to technical implementation, they should be clear to anyone reading the document.

The document should not try to record process or solution details, these belong in other definition and design documents. Only the inputs, outputs, SLAs, schedules, alerts, reporting targets, and other technical details that are implemented by parts of the process should be documented in an FRQ.

Difficulties documenting the Functional Requirements

Sometimes it can be difficult to capture FRQ information. Reasons for this difficulty may include some of the following:

Problem:

- Requirements differ between documentation and existing implementation, or different SMEs/staff believe requirements should hold different values.

Solution:

- Document all cases where requirements conflict, and report these to the operational process owner. Make it clear that implementation cannot be completed and testing cannot be properly planned until all discrepancies are addressed and corrected.

Difficulties documenting the Functional Requirements

Sometimes it can be difficult to capture FRQ information. Reasons for this difficulty may include some of the following:

Problem:

- If the business process to be automated is a new business process, existing knowledge may not exist about how it should be performed and managed.

Solution:

- A new business process should not be scheduled to be automated until all decisions about how it is to be performed have been finalised.

Blue Prism Portal

Blue Prism Self Learning

Blue Prism User Portal

The Blue Prism Portal facilitates access to the latest software releases, framework and methodology templates, sales support materials and supporting technical documentation.

Learning

- **Blue Prism Learning provides a range of educational products and services to support the key roles in a robotic automation program**
- **It enables Developers to quickly acquire the necessary skills and experience to deliver professional Blue Prism solutions**
- **Complimented by additional materials and learning pathways for analysts, project managers and process controllers. The Blue Prism Developer Accreditation exam provides a formal recognition of a developer's ability**

Forums

- **The forum provides an interactive, collaborative environment within which Blue Prism users can share ideas, problems, solutions and suggestions for future product functionality**

Product

- **The Releases area contains the Blue Prism releases (historical and present) subject to your site profile**
- **Includes technical, functional and operational descriptions of how the product works and how it is designed and deployed across an organization's technical infrastructure using the sections below**

Resources

- **Blue Prism Templates provide a base for starting new process solutions and process examples provide sample solutions for a variety of common processing**
- **The methodology and framework has been designed to integrate fully with our customer's incumbent change management systems thereby removing the need for additional procedural and governance obligations**

Customer Services

- **Includes information on product support hours and methods for contacting Customer Service.**
- **The User Group provides a platform to support the growing number of regular users in the Blue Prism community**
- **My Account enables you to change your password or email address and set up Subscriptions within the Portal**

Further information

For further information following, please review the Blue Prism Portal that contains a wealth of information about the Blue Prism Technology and Delivery Methodology

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