



 Improve | Innovate | Digitise

Status Draft / Issued

Monday, 2 March 2020

Business Analysis (BAPL)

Test Strategy Document

<<Project Name>>

 Improve | Innovate | Digitise

**Document Controls**

**Project Information**

|  |  |
| --- | --- |
| Organisation | << Organisation Name >> |
| **Project Sponsor** | << Project Sponsor >> |
| **Project Name** | << Project Name >> |
| **Project Number** | << Project ID >> |

**Contact for Enquires and Proposed Changes**

If you have any questions regarding the information in this document or suggestions for improving the document, please forward details to Business Analysis (BAPL) at the following contact point:

Email: info@business-analysis.com.au

Website: [www.business-analysis.com.au](http://www.business-analysis.com.au)

Phone: 1300 33 11 64

**Version History**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Nature of Amendment | Changed By |
|  |  |  |  |
|  |  |  |  |

**Contributors, Reviewers and Signatories**

The following people were involved in finalising the document:

* Contribute – had input into the creation of the document
* Distribute – receives the document as a courtesy/for information only
* Review – receives the document in order to review and provide feedback
* Endorse – responsible for endorsing/approving the document

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name & Role | Contribute | Distribute | Review | Endorse |
|   |  |  |  |  |
|   |  |  |  |  |
|   |  |  |  |  |

**Stakeholder Review**

The content of this document has been reviewed by:

|  |  |  |  |
| --- | --- | --- | --- |
| Name & Role | Title/Designation | Approval Signature | Date |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Sign-off/Acceptance**

The following people are responsible for signing off on the content of the document. Signatures may be physical, via an email attached to the document or saved in an electronic format and referenced in the table below.

**Signatures constitute an acceptance and agreement of the document’s content.**

|  |  |  |  |
| --- | --- | --- | --- |
| Name & Role | Title/Designation | Approval Signature | Date |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Copyright © Business Analysts Pty Ltd 2020**

Copyright © Business Analysts Pty Ltd 2020. Copyright protects this publication. Except for purposes permitted by the Copyright Act, reproduction by whatever means is prohibited without the prior registration and written permission of Business Analysts Pty Ltd. Inquiries should be addressed to info@business-analysis.com.au Do not remove this copyright statement.

Copyright © This document has been licensed to <<Organisation Name>>. It must not be copied or reproduced in any way whatsoever outside of <<Organisation Name>> without the authority of Business Analysts Pty Ltd. This document is uncontrolled when printed. An electronic database manages and stores the controlled version.

**Disclaimer**

Business Analysis (BAPL) does not guarantee or warrants the results obtained while using this document and conducting business analysis activities. Usage of this document is strictly under the proviso that the user takes all responsibility for the document outcomes.

Table of Contents

[1. Introduction 5](#_Toc29903927)

[1.1. Purpose 5](#_Toc29903928)

[1.2. Glossary of Terms 5](#_Toc29903929)

[2. Test Items 6](#_Toc29903930)

[2.1. Features to be tested 6](#_Toc29903931)

[2.2. Features not to be tested 6](#_Toc29903932)

[3. Testing Approach 7](#_Toc29903933)

[3.1. Entry Criteria 7](#_Toc29903934)

[3.2. Exit Criteria 8](#_Toc29903935)

[3.3. Measures and Metrices 8](#_Toc29903936)

[4. Pass/Fail Criteria 9](#_Toc29903937)

[5. Suspension Criteria and Resumption Requirements 10](#_Toc29903938)

[6. Test Deliverables 11](#_Toc29903939)

[7. Test Types 12](#_Toc29903940)

[8. Environmental and Infrastructural Needs 13](#_Toc29903941)

[9. Responsibility Matrix 14](#_Toc29903942)

[10. Schedules and Resource Plans 15](#_Toc29903943)

[11. Risks and Contingencies 16](#_Toc29903944)

[12. Approvals 17](#_Toc29903945)

***Template Usage Guidelines***

***The text mentioned below is to be used as a reference guide while completing this document. Remove this section/page after completing/before-publishing this document.***

1. *The dark blue text represents help/instructional text in the template – please remove it from the final version and/or before publishing the document.*
2. *This template is designed to capture Test Strategy information only.*
3. *Please do not remove any section(s) from this document unless otherwise specified.*
4. *Please do not leave any section blank.*
5. *Please ensure not to describe any System Design element(s) in this document.*
6. *Do not forget to update the table of contents figures and caption tables (Reference tab in MSWord) once the document is complete.*
7. *Introduce naming conventions as required for traceability purposes.*

1. Introduction

*Provide a brief introduction to the product or service offering. Consider including product history, reasons for introduction or changes, expected outcome of the changes, who might use it and the benefits of them using the new or enhanced product.*

* 1. Purpose

*State the purpose of the Test Strategy. Include reference to the key objectives, the scope of the testing, and any key timeframes.*

*I.e. The purpose of this Test Strategy is to define the overall approach that will be taken by the Test Team when delivering testing services to all of the projects within the business.*

* 1. Glossary of Terms

*Add the Glossary for definitions of company/project specific terminology.*

1. Test Items

*State how the Test Items will be generated.*

*I.e. For each Release the Test Engineer will create a table of Test Items that will be in scope of the testing being planned. These will be identified from the Scope Items in a given Release and include interrelated modules and components of the service that will be affected by the Scope Items.*

*In addition, the Test Engineer will record any Test Items that cannot be tested by the test team. The Test Plan will contain Test Items that are In-Scope and Out-of-Scope.*

* 1. Features to be tested

*The Test Engineer will record all of the features to be tested for each of the Test Items in scope.*

*The Test Breakdowns will include details of the Test Scenarios from which the Test Cases will be derived.*

* 1. Features not to be tested

*The Test Engineer will record all of the features that will not be tested in the testing phase for which the strategy is written*

1. Testing Approach

*<Narrative description of the high-level Strategy>*

*<A description of the test methodology that will be followed>*

*<Include a diagram where possible – V-Model, Scrum, Waterfall – see example below>*

*<Touch on risks, discuss the use of test equipment or data, etc. – use this paragraph to tone-down the formality of the rest of the document and set the scene for the rest of the plan, look to add value for the audience in the approach and their support of it. Touch on anything that has no clear area for inclusion in the Test Plan>*

*Example diagram – Software Testing Lifecycle*



[*https://www.360logica.com/software\_testing\_cycle\_small/*](https://www.360logica.com/software_testing_cycle_small/)

* 1. Entry Criteria

*Before Test Items are made available for the Test Team to test it’s expected that:*

* *All test tools and test infrastructure are available for use during testing*
* *All Test Items are development complete*
* *The correct versions of the code have been deployed to the correct test environments*
* *Sanity and Unit tests have been completed successfully to demonstrate readiness for test*

*\*Note – It should be tailored as per the project needs.*

* 1. Exit Criteria

*For the Test Items to exit testing the following conditions will have to be met:*

* *The Test Summary Report will be completed.*
* *All planned testing activities has been completed to agreed levels.*
* *All high priority bugs have been fixed, retested and passed.*
* *No defects must be left in an open unresolved status.*

*\*Note – It should be tailored as per the project needs.*

* 1. Measures and Metrices

*At the Initiation Phase of the project the Test Team will publish a set of measures and metrics related to the test activities of their Planning & Analysis and Execution phases. The Test Plan also defines the milestone dates for key deliverables such as the Test Plan and these are metrics captured for ongoing statistical process analysis across successive projects.*

*Examples of metrices are mentioned below:*

***Test Preparation***

*Number of Test Scenarios v. Number of Test Cases*

*Number of Test Cases Planned v. Ready for Execution*

*Total time spent on Preparation v. Planned time*

***Test Execution and Progress***

*Number of Tests Cases Executed v. Test Cases Planned*

*Number of Test Cases Passed, Failed and Blocked*

*Total Number of Test Cases Passed by Test Item / Test Requirements*

*Total Time Spent on Execution vs Planned Time*

***Bug Analysis***

*Total Number of Bugs Raised and Closed per Test Run*

*Total Number of Bugs Closed v. Total Number of Bugs Re-Opened*

*Bug Distribution Totals by Severity per Test Run*

*Bug Distribution Totals by Test Item by Severity per Test Run*

1. Pass/Fail Criteria

*Each Test Item will be assigned a Pass or Fail state dependant on two criteria:*

* *Total number and severity of Bugs in an Open & Unresolved state within Bug Tracker tool.*
* *The level of successfully executed test requirements.*

*The Test Item can be declared as “Test Complete” when the combination of both criteria has been successful. However as this is a minimum level of quality, it’s recommended that where project timescales allow, further testing and development should be conducted to raise the overall quality level.*

***Table of Issue Severity***

|  |  |  |
| --- | --- | --- |
| *Severity* | *Definition* | *Maximum Allowable* |
| *S1* | *Crash/Legal – System crash, data loss, no workaround, legal, Ship Killer* | *0* |
| *S2* | *Major – Operational error, wrong result* | *<Set by PM>* |
| *S3* | *Minor – Minor problems* | *<Set by PM>* |
| *S4* | *Incidental – Cosmetic problems* | *<Set by PM>* |
| *S5* | *N/A – Not Applicable; used for feature requests and Development Tasks* | *Reference Only* |

*The total MAXIMUM number of issues recorded in Bug Tracker, that can remain in an Open & Unresolved state for the Test Item and be acceptable for release.*

***Table of Test Scenario Priority***

|  |  |  |
| --- | --- | --- |
| *Test Scenario* | *Definition* | *Minimum Pass Rate* |
|  *P1 – Critical* | *Essential to the Product* | *100%* |
|  *P2 – Important* | *Necessary to the Product* | *<Set by PM>* |
|  *P3 – Desirable* | *Preferred, but not essential to the Product* | *<Set by PM>* |

*The MINIMUM set of Test Scenarios that must pass before the Test Item can be considered for release.*

*Unforeseen issues arising during the Test Phase may impact the agreed ‘Pass/Fail’ Criteria for the Test Item. Issues can be managed through review with the Test Team and the project authorities.*

1. Suspension Criteria and Resumption Requirements

*Testing of Test Items will be suspended if:*

***1a) Suspension criteria:***

*A Severity 1 issue is logged and requires fixing before further testing can take place (a Blocking Issue)*

***1b) Resumption requirement:***

*The issue will need to be fixed before the Test Item is returned to the Test Team for testing.*

***2a) Suspension criteria:***

*Significant differences exist between observed behaviour of the Test Item and that is shown in Test Scenario, Test Case or as expected from the previous version of the technology.*

***2b) Resumption requirement:***

*Development, the Test Team and PM must come to a conclusion on resolving the issue and agreeing a definition of the expected behaviour.*

***3a) Suspension criteria:***

*A Test Item sent for testing fails more than 20% of Developer Unit Tests.*

***3b) Resumption requirement:***

*The Test Item must be fixed, or Unit Tests refactored if out of date and then demonstrated to pass with <20% failure rate.*

***\*Note*** *– Above mentioned criteria are dependent on project to project.*

1. Test Deliverables

*The following artefacts will be produced during the testing phase:*

* ***Test Plan***

*Used to prescribe the scope, approach, resources, and schedule of the testing activities. To identify the items being tested, the features to be tested, the testing tasks to be performed, the personnel responsible for each task, and the risks associated with this plan.*

* ***Test Schedule***

*Which describes the tasks, time, sequence, duration and assigned staff.*

* ***Test Breakdown***

*Which includes the Test Scenarios, their priority and related number of Test Cases along with the defined estimates for time to write and execute the Test Cases.*

* ***Test Cases***

*Detail the pre-conditions, test steps and expected and actual outcome of the tests. There will be positive and negative test cases.*

* *Periodic progress and metric update reports*
* *Bug Reporting*
* *Test Summary Report*

***\*Note*** *– Test deliverables varies on project to project basis.*

1. Test Types

*Mention the testing types that are in scope of the project. For example,*

* ***Fully in Scope:*** *Functional and Regression Testing, Cross Browser Compatibility, Integration in the Large, Performance testing.*
* ***Out of Scope:*** *Automated Regression, all forms of Non-Functional, Accessibility Compliance Testing, Security Testing, User Documentation Review.*

1. Environmental and Infrastructural Needs

*Mention the environmental and infrastructure needs according to the project scope. Please refer the below example -*

*The following detail the environmental and infrastructure needs required for the testing of abc.com Test Items and execution of Regression Testing.*

***Hardware.***

* *Integration Environment:*
* *Test-A: http://.....*
* *Test-B: http://....*
* *Pre-live Staging:*

***Software***

* *<Name of Bug Tracking Tool>: http://...*
* *<Name of Test Case Management Tool>: http://*
* *<Name of Automation Tool>: http://*

***Infrastructure***

* *Network connections are available on all Test Systems as required.*

***Test Repository***

* *http://...*
1. Responsibility Matrix

*Mention the resources responsible for delivering the various testing activities. Below is the sample responsibility matrix -*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Activity*** | ***Product Manager*** | ***Development******Manager*** | ***Test Manager*** | ***Test Engineer*** |
| Provision of Technical Documents | X | X |  |  |
| Test Planning and Estimation |  |  | X | X |
| Review and Sign off Test Plan | X | X | X |  |
| Testing Documentation |  |  | X | X |
| Test Preparation and Execution |  |  |  | X |
| Test Environment Set-up |  |  |  | X |
| Change Control of Test Environments |  |  | X | X |
| Provision of Unit Tested Test Items |  | X |  |  |
| Bug fixes and return to the Test Team for re-test |  | X |  |  |
| Product Change Control | X | X | X |  |
| Ongoing Test Reporting |  |  | X | X |
| Test Summary Reporting |  |  | X |  |

1. Schedules and Resource Plans

***Team Plan.***

*The Test Team will maintain a Team Plan which records individual assignment to testing tasks against assignable days. This will also record time planned and delivered against the tasks which will be used to update relevant Project Schedules and be used in periodic reporting.*

*T****est Schedule.***

*The Test Schedule for the Release will be located within <Document Store Name> at: http://*

1. Risks and Contingencies

*Mention the risks and contingencies related to the project. Refer the below table for an example:*

|  |  |  |  |
| --- | --- | --- | --- |
|  | ***Risk*** | ***Mitigation Strategy*** | ***Impact*** |
| *1* | *Delays in delivering completed Test Items from Development would impact test timescales and final Release quality* | *Product Management and Development to advise of any delays and adjust Release Scope of Resources to allow the test activities to be performed.* | *High* |
| *2* | *Delays in the turnaround time for fixing critical bugs, which would require re-testing, could have an impact on the project dates.* | *Strong management of bug resolution would be required from Development to ensure bugs are fixed and available for re-testing in the scheduled time.* | *High* |
| *3* | *The Test Team, Development or PM teams require domain guidance from one or the other and they are not available. This would delay project activities.* | *The Test Team, Development and PM teams to ensure they are available at critical points or contactable during the project activities.* | *Medium* |
| *4* | *Features of Test Items will not be testable.* | *The Test Team will record untested features and request the PM to assess business risk in support of the release of untested features.* | *Low* |
| *5* | *Unexpected dependencies between Test Items and service components are encountered that require revision of Test Scenarios and related Test Cases.* | *Information about dependencies is updated and communicated promptly to allow timely revision of Test Scenarios and Test Cases* | *Low* |

1. Approvals

*Document the resources for the approval of the document. Refer the below table for example:*

|  |  |
| --- | --- |
| ***Approval By*** | ***Approval*** |
| *Test Manager* |  |
| *The Test Department Manager* |  |
| *Product Owner* |  |
| *Development Manager* |  |
| *Project Manager* |  |