*SMARTLIB*

**RISK MANAGEMENT PLAN**

Version *2.0*

*02/24/2021*

**VERSION HISTORY**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** |
| 1.0 | Boon Shuan | 02/20/21 | Kenny Voo | 01/21/21 | Initial Risk Management Plan draft |
| 1.1 | Boon Shuan | 02/24/21 | Kenny Voo | 02/24/21 | Introduction added  Risk Management Organization added  Risk Identification added  Risk Analysis added  Risk Planning added  Risk Monitoring and Control added  Risk Log added |
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**UP Template Version**: 11/30/06

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# **INTRODUCTION**

## **PURPOSE OF THE RISK MANAGEMENT PLAN**

A risk is an event or condition that, if it occurs, could have a positive or negative effect on a project’s objectives. Risk Management is the process of identifying, assessing, responding to, monitoring, and reporting risks. This Risk Management Plan defines how risks associated with the SmartLib project will be identified, analyzed, and managed. It outlines how risk management activities will be performed, recorded, and monitored throughout the lifecycle of the project and provides templates and practices for recording and prioritizing risks.

The Risk Management Plan is created by the project manager in the Planning Phase and is monitored and updated throughout the project.

The intended audience of this document is the project team, project sponsor and management.

# **RISK MANAGEMENT PROCEDURE**

## **PROCESS**

The project manager, ***Kenny Voo*** working with the project team and project sponsors will ensure that risks are actively identified, analyzed, and managed throughout the life of the project. Risks will be identified as early as possible in the project so as to minimize their impact. The steps for accomplishing this are outlined in the following sections. The QA manager, ***Teo Boon Shuan*** will serve as the Risk Manager for this project.

## **RISK IDENTIFICATION**

Risk identification will involve the project team, appropriate stakeholders, and will include an evaluation of environmental factors, organizational culture and the project management plan including the project scope. Careful attention will be given to the project deliverables, assumptions, constraints, WBS, cost/effort estimates, resource plan, and other key project documents.

A Risk Management Log will be generated and updated as needed and will be stored electronically in the project library located at Risk\_log.csv.

## **RISK ANALYSIS**

All risks identified will be assessed to identify the range of possible project outcomes. Qualification will be used to determine which risks are the top risks to pursue and respond to and which risks can be ignored.

### **Qualitative Risk Analysis**

The probability and impact of occurrence for each identified risk will be assessed by the project manager, with input from the project team using the following approach:

**Probability**

* High – Greater than 80% probability of occurrence
* Medium – Between 20% and 80% probability of occurrence
* Low – Below 20% probability of occurrence

**Impact**

* High – Risk that has the potential to greatly impact project cost, project schedule or performance
* Medium – Risk that has the potential to slightly impact project cost, project schedule or performance
* Low – Risk that has relatively little impact on cost, schedule or performance

**Risk Type**

* Schedule Risks – time related risks or project delivery related planning risks.
* Budget Risks – monetary related risks mainly it occurs due to budget overruns
* Operational Risks – procedural related risks means these are the risks which happen in day-to-day operational
* Technical Risks – functional related risk or performance related risk
* Programmatic Risks – external related risks which are unavoidable in nature. These risks come from outside and it is out of control of programs.

**Zone Type**

* RED zone - High severity
* YELLOW zone - Medium Severity
* GREEN zone - Low severity

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Impact | High |  |  |  |
| Medium |  |  |  |
| Low |  |  |  |
|  | Low | Medium | High |
|  | Probability | | | |

Risks that fall within the RED and YELLOW zones will have risk response planning which may include both a risk mitigation and a risk contingency plan.

### **Quantitative Risk Analysis**

Analysis of risk events that have been prioritized using the qualitative risk analysis process and their effect on project activities will be estimated, a numerical rating applied to each risk based on this analysis, and then documented in this section of the risk management plan.

## **RISK RESPONSE PLANNING**

Each major risk (those falling in the Red & Yellow zones) will be assigned to a project team member for monitoring purposes to ensure that the risk will not “fall through the cracks”.

For each major risk, one of the following approaches will be selected to address it:

* **Avoid** – Eliminate the threat by eliminating the cause
* **Mitigate** – Identify ways to reduce the probability or the impact of the risk
* **Accept** – Nothing will be done
* **Transfer** – Make another party responsible for the risk (buy insurance, outsourcing, etc.)

For each risk that will be mitigated, the project team will identify ways to prevent the risk from occurring or reduce its impact or probability of occurring. This may include prototyping, adding tasks to the project schedule, adding resources, etc.

For each major risk that is to be mitigated or that is accepted, a course of action will be outlined for the event that the risk does materialize in order to minimize its impact.

## **RISK MONITORING, CONTROLLING, AND REPORTING**

The level of risk on a project will be tracked, monitored and reported throughout the project lifecycle.

A risk register will be maintained by the project team and will be reported as a component of the project status reporting process for this project.

All project change requests will be analyzed for their possible impact to the project risks.

Management will be notified of important changes to risk status as a component to the Executive Project Status Report.

# **TOOLS AND PRACTICES**

A Risk Log will be maintained by the QA manager and will be reviewed as a standing agenda item for project team meetings.

The Risk Management Team meeting will be conducted bi-weekly to present, discuss and provide updates on new and existing risk.

The meeting will be conducted by the Risk Manager, ***Teo Boon Shuan***, attendees should include:

* ***Kenny Voo*** – Project manager
* ***Wilson Tai*** – Technical Lead

RISK MANAGEMENT PLAN APPROVAL

The undersigned acknowledge they have reviewed the **Risk Management Plan** for the SmartLib project. Changes to this Risk Management Plan will be coordinated with and approved by the undersigned or their designated representatives.

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: | 24/02/21 |
| Print Name: | Kenny Voo |  |  |
| Title: | Mr |  |  |
| Role: | Project Manager |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: | 24/02/21 |
| Print Name: | Teo Boon Shuan |  |  |
| Title: | Mr |  |  |
| Role: | Risk Manager |  |  |

**APPENDIX A: REFERENCES**

The following table summarizes the documents referenced in this document.

|  |  |  |
| --- | --- | --- |
| **Document Name and Version** | **Description** | **Location** |
| Risk Register | A logs of risks | https://docs.google.com/spreadsheets/d/1Ic8XRzz-2UllyLQRq\_DpdYwFDNJ4pQbu4M1mrXewI-8/edit?usp=sharing |

**APPENDIX B: KEY TERMS**

The following table provides definitions for terms relevant to the Risk Management Plan.

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Risk Log | A log file containing all the risk |
|  |  |
|  |  |