



HELPME

RISK MANAGEMENT PLAN

Version *1.0*
10/06/2022

Team Think2

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Version History

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	Tanya Banerjee	09/27/22	Quek Xuan Hao	09/28/22	Initial Risk Management Plan draft

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1 INTRODUCTION

1.1 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 HelpMe project will be identified, analysed, 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 prioritising risks.

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

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

Some benefits of a risk management plan:

- Provides protection from events that can be detrimental to the project
- Increases the stability of business operations
- Allows the team to be prepared in advance so that the number of unexpected events is minimised

2 RISK MANAGEMENT PROCEDURE

2.1 PROCESS

The project manager working with the project team and project sponsors will ensure that risks are actively identified, analysed, and managed throughout the life of the project. Risks will be identified as early as possible in the project so as to minimise their impact. The steps for accomplishing this are outlined in the following sections. The project manager will serve as the Risk Manager for this project.

2.2 RISK IDENTIFICATION

Risk identification will involve the project team, appropriate stakeholders, and will include an evaluation of the project management plan including the project scope. Careful attention will be given to the project deliverables, assumptions, constraints, cost/effort estimates, resource plan, and other key project documents. We will be looking for legal risks, market risks, regulatory risks and more.

2.3 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.

2.3.1 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:

Impact			
Impact	H	<ul style="list-style-type: none"> Server crash Non-scalable deployment servers Inefficient code Underestimation of project size 	<ul style="list-style-type: none"> Reused software component issues High rate of bugs and issues
	M	<ul style="list-style-type: none"> Database limits Developer management conflict Undermined motivation Project restructure Inadequate domain knowledge Under/over estimation of user base 	<ul style="list-style-type: none"> Insufficient Firebase storage Requirements changes New use cases Unwell project teammates Time underestimation Heavy workload of teammates
	L	<ul style="list-style-type: none"> Project management restructure 	<ul style="list-style-type: none"> Course structure revamp
		L	M
		Probability	
			H

Fig. 1 Impact-Probability Matrix for HelpMe application

Probability

- High – Greater than 70% probability of occurrence
- Medium – Between 30% and 70% probability of occurrence
- Low – Below 30% 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

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.

2.3.2 Quantitative Risk Analysis

Analysis of risk events that have been prioritised 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.

Area of Risk	Severity	Likelihood	Level of Control	Significance
Technology	3	2	2	7

People	3	2	2	7
Organisational	2	1	2	5
Tools	2	1	2	5
Requirement Changes	3	3	1	7
Estimation	2	3	2	7

Fig. 2 Quantitative Risk Analysis for HelpMe

2.4 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 materialise in order to minimise its impact.

2.5 RISK MONITORING, CONTROLLING, AND REPORTING

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

A “Top 10 Risk List” 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 analysed 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.

3 TOOLS AND PRACTICES

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

Constant monitoring of each risk on a weekly basis will be done and checked by the project manager.

RISK MANAGEMENT PLAN APPROVAL

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

Signature:	<u>[Digitally signed]</u>	Date:	<u>5/10/2022</u>
Print Name:	<u>Quek Xuan Hao</u>		
Role:	<u>Project Manager</u>		

Signature:	<u>[Digitally signed]</u>	Date:	<u>5/10/2022</u>
Print Name:	<u>Tanya Banerjee</u>		
Role:	<u>Quality Engineer</u>		

Signature:	<u>[Digitally signed]</u>	Date:	<u>5/10/2022</u>
Print Name:	<u>Siti Nur Umm'aira Phang</u>		
Role:	<u>Quality Manager</u>		

APPENDIX A: REFERENCES

The following table summarises the documents referenced in this document.

Document Name and Version	Description	Location
HelpMe System Requirement Specification	Details the operational, functional, input, process and output, hardware and software requirements of the system, including constraints	http://155.69.100.27/3002S12223_TS6Think2/index.php/Software_Requirements_Specification
HelpMe Software Quality Assurance Plan	Describes the QA management protocols	http://155.69.100.27/3002S12223_TS6Think2/index.php/Quality_Plan
HelpMe Project Plan Version 1.0	Lays out the flow of the project including the project organisation, process definition, schedule and project estimates	http://155.69.100.27/3002S12223_TS6Think2/index.php/Project_Plan

APPENDIX B: KEY TERMS

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

Term	Definition
Functional requirements	Functional requirements specify Business Product features and what the Business Product must do. They are directly derived from the objectives defined in the Project Management Plan. A functional requirement is a tangible service, or function, that the Business Product must provide and is a non-technical requirement.
Meeting minutes	Meeting minutes are a written record of what transpired during a meeting. Meeting minutes provide the purpose of a meeting, list of attendees, topics discussed, decisions made, the status of actions from the previous meeting, new action items and the individuals assigned responsibility for the actions.
Project Manager (PM)	The person assigned by the performing organisation to achieve the project objectives. The Project Manager is responsible for project performance in relation to approved cost, schedule and performance baselines. The PM maintains information project status, control, performance, risk, corrective action and outlook. This person is accountable to the Business Owner for meeting business requirements and to IT governance for meeting IT project management requirements. The PM shall develop the business case in conjunction with the Business Owner to clearly define and capture business need requirements, conduct project planning to adequately define and execute the tasks required to meet approved cost, schedule and performance baselines and conform to HHS policies that apply to IT projects. Project Managers shall be responsible for timely reporting of significant variances from approved baselines and providing corrective action plans or rebaselining proposals as appropriate.