***<****HangOut****>***

**RISK MANAGEMENT PLAN**

Version *<1.0>*

*<24/09/2021>*

**VERSION HISTORY**

| **Version #** | **Implemented**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** |
| --- | --- | --- | --- | --- | --- |
| 1.0 | *Alicia Chua* | *24/09/21* | *Jethro Phuah* | *30/09/21* | Initial Risk Management Plan draft |

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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. A negative risk involves a potential problem which may occur in the future and affect the project’s success. A positive risk, on the other hand, refers to a potential opportunity which brings about benefits to the project. Risk Management is the process of identifying, assessing, responding to, monitoring, and reporting risks. This Risk Management Plan defines how risks associated with the *Hangout* 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 goal of this document is to minimize the negative risks, and maximize the positive risks.

The Risk Management Plan is created by the project manager in the Planning Phase of the CDC Unified Process 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 working with the project team and sponsors will ensure that risks are actively identified, analyzed, monitored and managed throughout the life of the project. To minimize impact to the project, risks will be identified as early in the project as possible once requirements elicitation is completed. Contingency and fallback plans will be created to ensure the project team is well equipped to handle any risk. The steps for accomplishing this are outlined in the following sections. The project manager, Jethro Phuah, will serve as the Risk Manager for this project.

## **RISK IDENTIFICATION**

Risk identification is the process of understanding what potential events might hurt or enhance the project. It involves the project team, stakeholders (company liaisons, higher management and client), 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.

Our team has decided to make use of the Delphi Technique to identify potential risks. The Delphi Technique involves collecting views and opinions from a group of experts through several rounds of questioning and discussion. After each round, a summary report of all experts’ views will be provided. The experts will review the report for that round and each of them will share on whether he/she is agreeable to everything written. The process repeats until a common consensus is reached and there are no more disagreements. Given that our team consists of professionals who have been in the industry for a long period of time, this method will be robust in ensuring we cover all potential risks, and ensures that everyone is on the same page.

Thereafter, a Risk Management Log (also known as a Risk Register) containing information on the identified potential risks will be generated and updated as needed and will be stored electronically in the project library located at Lab 3 → Risk Register / Risk Management Log.

## **RISK ANALYSIS**

All identified risks will be assessed to determine the range of possible project outcomes. Risks will be prioritised according to professional opinions and data gathered from past projects. High priority risks will be pursued and responded to. The team will have mitigation and contingency plans put in place to ensure that such risks are minimized and even if they do occur, their impact will be minimal to the project. Low priority risks will be monitored as well, albeit to a smaller extent.

### **Qualitative Risk Analysis**

The probability and level of impact for each identified risk will be assessed by the project manager and the team. By doing so, the team can focus on the high severity risks and ensure proper mitigation plans have been crafted. The team will also be more aware and sensitive to the triggers of such risks.

The following approach to classify the probability and severity of impact has been taken:

| **Level** | **Probability (p)** | **Impact** |
| --- | --- | --- |
| High | > 70% probability of occurrence | Potential to **greatly** impact project cost, schedule or performance |
| Medium | 40% ≤ *p* ≤ 70% probability of occurrence | Potential to **slightly** impact project cost, schedule or performance |
| Low | < 40% probability of occurrence | Relatively **little** impact on project cost, schedule or performance |

Possible combinations:

|  | | **Probability** | | |
| --- | --- | --- | --- | --- |
| **L** | **M** | **H** |
| **Impact** | **H** |  |  |  |
| **M** |  |  |  |
| **L** |  |  |  |

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. Green zones are generally safe and only require slight attention.

Our qualitative risk analysis can be found in our Risk Register under columns J (Probability) and K (Impact). It is located at Lab 3 → Risk Register / Risk Management Log.

### **Quantitative Risk Analysis**

After analysis and prioritisation of risk events using the qualitative risk analysis process, a numerical rating will be applied to each risk based on this analysis. The team will rank the risks according to past data and their effects on the project. A numerical rating of 1 in the risk register shows the most severe and highest priority risk.

## **RISK RESPONSE PLANNING**

Each major risk (those in the red and yellow zones in section [2.3.1 Qualitative Analysis](#_heading=h.ga4c2b2nyl3h)) will be assigned to a project team member for monitoring purposes. This is to ensure that no risk will go unnoticed and the team is able to apply the proper mitigation steps (if necessary) to avoid it from being realised.

For each major risk, the team will select one of the following approaches to address it:

* Avoid - Eliminate the threat totally by eliminating the cause
* Mitigate - Identify ways to reduce the probability or impact of the risk
* Accept - Nothing will be done to the risk
* Transfer - Outsource this risk to a third party. This third party will be responsible for this risk

For each risk that will be mitigated or accepted, the project team will come up with ways and methods to prevent the risk from realising. If that is not possible, the team will have proper plans and steps in place to reduce its impact and probability of occurring. Plans may include, but not limited to prototyping, adding tasks to the project schedule and adding resources.

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

The project’s risks will be tracked, monitored and reported throughout the project lifecycle.

The project team will maintain a list of all risks in the risk register. The top 10 risks in the risk register will be given more focus, maintained and reported as a component of the project status reporting process for this project.

All change requests will be analysed first for their possible impact to the project risks. Next, management will be notified of important and significant changes to the risk status as a component to the Executive Project Status Report.

# **TOOLS AND PRACTICES**

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

# RISK MANAGEMENT PLAN APPROVAL

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

| Signature: | Martin | Date: | 25 September |
| --- | --- | --- | --- |
| Print Name: | Martin Lee |  |  |
| Title: | Director |  |  |
| Role: |  |  |  |

| Signature: | R Harrison | Date: | 25 September |
| --- | --- | --- | --- |
| Print Name: | Robert Harrison |  |  |
| Title: | Project Sponsor |  |  |
| Role: |  |  |  |

| Signature: | JPHUAH | Date: | 25 September |
| --- | --- | --- | --- |
| Print Name: | Jethro Phuah |  |  |
| Title: | Project Manager |  |  |
| Role: |  |  |  |

# **APPENDIX A: REFERENCES**

The following table summarizes the documents referenced in this document.

| **Document Name and Version** | **Description** | **Location** |
| --- | --- | --- |
| *Risk Management Log / Risk Register* | *This document contains all the potential risks the team has identified and their mitigation plans, as well as statuses* | [*https://docs.google.com/spreadsheets/d/1tHA4ZmPaPJgzh0MK0v-1bgOJyQ-pl5ZrcrgOy5h\_YJ8/edit?usp=sharing*](https://docs.google.com/spreadsheets/d/1tHA4ZmPaPJgzh0MK0v-1bgOJyQ-pl5ZrcrgOy5h_YJ8/edit?usp=sharing) |

# A**PPENDIX B: KEY TERMS**

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

| **Term** | **Definition** |
| --- | --- |
| Change request | A request to expand or reduce the project scope, modify policies, processes, plans, or procedures, modify costs or budgets, or revise schedules. Requests for a change can be direct or indirect, externally or internally initiated, and legally or contractually mandated or optional. Only formally documented requested changes are processed and only approved change requests are implemented. |
| Contingency plan | A documented, organized, planned, and coordinated course of action to be followed if an identified risk escalates into a project issue. |
| Project | A project is a temporary planned endeavor funded by an approved investment; thus achieving a specific goal and creating a unique product, service, or result. A project has a defined start and end point with specific objectives that, when attained signify completion. |
| Project manager | The person assigned by the performing organization 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. |
| Project team | The group that is performing the work of the project. |
| Quantitative Analysis | Quantitative analysis is often performed on risks that have been prioritised by the Qualitative Risk Analysis process. It analyzes the effect of those risk events and assigns a numerical rating to those risks. When complete, it also presents a quantitative approach to decision making when uncertainty arises. |
| Qualitative Analysis | It assesses priority identified by using the probability of occurring, corresponding impact on project’s objectives, as well as other factors such as the time frame and risk tolerance of the project constraints of cost, schedule, scope and quality. |
| Stakeholder | The people or groups that have a vested interest in the outcome of the project. |