# **RISK MANAGEMENT PLAN**

# For CAPSTONE TEAM APERTURE

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#### 1 Introduction

## 1.1 Purpose and Objectives

The purpose of this document is to provide a means to identify and categorize any possible risks which may arise from or affect the development of PSU Capstone Team Aperture's project, Aperture VMAN (name subject to change), and to provide strategies to avoid or mitigate those risks. It also provides procedures for documenting the implementation of those strategies, and for regular status reporting to stakeholders.

Objectives of this document include managing the

## 1.2 Scope and Context

This document has been created primarily for stakeholders in Aperture VMAN, which include the project sponsor PAST&E, and upper management in the Portland State University Computer Science Capstone Consortium. Is also meant to provide guidance to the team in order to increase the chances of project success.

#### 1.3 Reference Documents

http://it.toolbox.com/blogs/enterprise-solutions/the-risk-management-plan-12038 http://www2.gsu.edu/~wwwpmo/risk\_management.html

# 2 Risk Management Approach

#### 2.1 Risk Defined

In general, risk can be defined as the product of the potential losses due to some event, and the probability of that event's occurrence. In our case, risks arise from any event which could:

- Prevent or delay the completion of project tasks.
- Prevent or delay the completion of the project as a whole.
- Result in missed deadlines or schedule creep.
- Cause an unfavorable response from any project stakeholder.
- Otherwise result in an unsatisfactory project outcome.

## 2.2 Concept of Risk Management

Risk management is generally understood to be the identification and classification of risks, and the implementation of risk control strategies to manage each risk. There are four commonly used strategies to manage risk:

- Avoidance
- Mitigation
- Transfer
- Retention

In this particular project, Transfer of risk to a third party is not available as a risk control strategy, due to the limitations imposed by PSUCSCC management. Therefore, this document will cover only avoidance, mitigation, and retention strategies, as appropriate for each risk.

## 2.3 Risk management approach for Aperture VMAN project

PSU Capstone Team Aperture will apply the following risk management approach:

- All team members will assist in identifying risk.
- Each identified risk will be analyzed in terms of its probability of occurrence and its impact.
- This analysis will be used to categorize each risk.
  - High-exposure risks will be given priority over low-exposure risks.
- All team members will assist in suggesting ways to minimize risks.
- Individual planning will be done for each identified risk, starting with high-priority risks.
  - Individual plans will consist of specific actions to be taken by specific actions in specific time frames.

• Progress will be monitored and individual plans and risk priorities will be adjusted as necessary.

# 2.4 Methodology

The risk definition stage will follow the process shown in Fig. 1. This process will be repeated periodically throughout the development of the product, or in the event that an individual risk management plan affects the priority of to other risks. The risk management stage will follow the process shown in Fig. 2.

- I. Risk Definition.
  - A. Identification
  - B. Analysis
  - C. Prioritization.
- II. Risk Management
  - A. Planning
  - B. Acting
  - C. Monitoring, Reporting, and Adjusting.

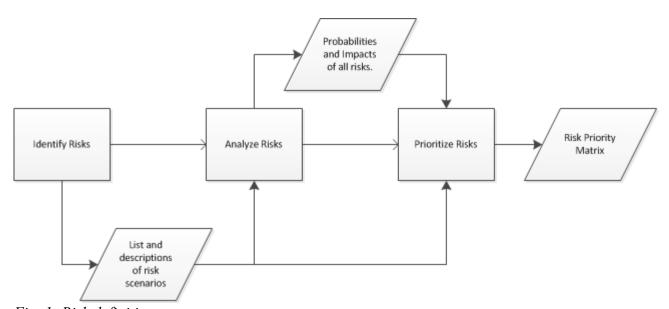


Fig. 1: Risk definition process.

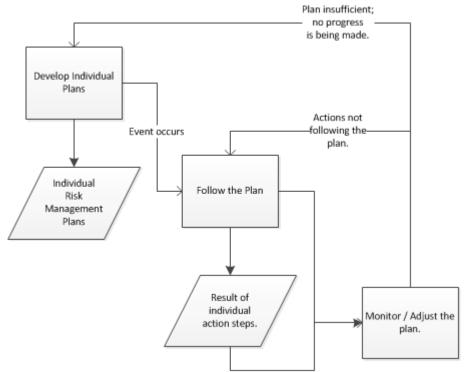


Fig. 2: Risk management process.

- 3 Defining Risks
- 3.1 Risk Identification
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- 3.1.3 Risk Identification Sheet
- 3.2 Risk Assessment and Prioritization
- 3.2.1 Risk Assessment
- 3.2.2 Risk Exposure Calculation
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- 3.2.4 Risk Priority Matrix

- 4 Managing Risks
- 4.1 Risk Management Planning
- 4.2 Individual Risk Management Plans
- 4.3 Monitoring and Adjusting Plans
- 4.3.1 Risk Management is Successful
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- 4.3.3 Plan Not Followed

# **5 Risk Reporting**

- 5.1 Status Reporting
- 5.2 Risk Management Summary

# **Appendix A - Glossary of Terms**

#### Avoidance:

A risk control strategy focused on preventing the occurrence of a risk-posing event.

#### Impact:

<define this>.

### Mitigation:

A risk control strategy focused on reducing the impact of a risk-posing event.

#### Retention:

A risk control strategy focused on being prepared to accept the impact of a risk-causing event.

#### Transfer:

A risk control strategy focused on reassigning the responsibility for a risk-posing event to a third-party.