



EX-SELL

Risk Management

Version 1.0 approved

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1.Introduction

1.1. Project Description

Ex-Sell is envisioned, to integrate and provide a convenient online shop where everyone is able buy and sell product from an organisation/school. Ex-sell aims to provide a platform where students and staff can sell past and current university resources, such as textbooks and previously used hall items. Ex-sell aims to provide a platform for students who are interested in Entrepreneurship to start off a small business using the platform we provide.

With these considerations in mind, Ex-Sell with be developed to accommodate every user and provide a convenient platform for them to access. In addition, Ex-sell can be moved further onward by providing the same service to different organisation and schools through different domains.

1.2. Purpose

This Risk Management Plan provides the Ex-Sell E-Commerce project a consistent method to manage risks to ensure success.

Risk management is the processes for identification, analysis, planning and monitoring of the project's risks. It drives the choices that influence the development of the business capability and the management of the project.

1.3. Objectives

Objectives of this Ex-Sell E-Commerce Project's Risk Management Plan include:

- Ensure risks impacting scope, schedule and budget are proactively identified, communicated and mitigated in a timely manner so that to minimize the impact of unplanned incidents on the project before significant negative consequences occur.
- Facilitate attention to critical risks impacting the project.
- Produce meaningful information with effective coordination of effort that allows project management to focus efforts on the high likelihood and high impact risks.
- Record an audit trail of discussions and mitigation of project risks.

1.4. Scope & Context

The Ex-Sell E-Commerce Risk Management Plan consists of the process for identifying and managing risks, mitigation actions required, monitoring and managing the risks throughout the entire lifecycle.

1.5. Guiding Principles

- The risk manager is responsible for making an overall risk assessment and reviewing it with the team.
- Risk management process should involve the stakeholders at each and every step of decision making so that they are aware of even the smallest decision made.
- Work and effectively communicate progress on most severe risks first.
- Set realistic due dates and work to meet the dates.
- Document the planned risk mitigation history and actual mitigation of a risk.
- This documentation serves as a key input to root cause analysis, key learning, metrics, and risk analysis.
- For high impact risks, a rapid decision turnaround may be required, as determined by the Project Manager.
- Decisions should be made on best available information.

2. Risk Management Organization

2.1. Process Responsibility

The Ex-Sell E-Commerce Project Risk Manager is Zhenni.

The Risk Manager is responsible for the Risk Management Plan, its effective implementation throughout the project, trends and metric analysis, and training project personnel on risk management. The Risk Manager is also responsible for creating and maintaining the Risk Register.

2.1.1. Risk Management Team

The Risk Manager has overall facilitative responsibility for the risk management process. The Risk Management Team is comprised of the Risk Manager and the Risk Management staff. Specific responsibilities may include the following activities.

- Develop and implement the Risk Mitigation Plan.

- Maintain the Risk Management Plan in line with configuration management procedures.
- Generate risk reports, including trends and metric analysis, for risk meetings and ad-hoc requests.
- Clarify, consolidate and document risks.
- Maintain and monitor data in the risk register.
- Communicate status to risk owners.
- Escalate communication if expected mitigation action deadlines are not met.
- Execute the risk closure process.

3. Risk Management Process

The Risk Management Process will be broken down into four different stages, namely, risk identification, risk analysis, risk response planning and risk monitoring, controlling and reporting procedures. The risk management team will actively look out for early signs of risks using these methods and proceed to mitigate them as early as possible. The following sections will present the different stages in more detail.

3.1. Risk Identification

Risks identification can be done by the project team and the appropriate stakeholders. It is a continuous process that will last throughout the course of the project. They will be identified based on a list of factors that includes environmental, organization culture and project management.

Risks identified will be recorded in the Risk Register (Section 4).

The Risk Register will include the following for each risk recorded:

- A Unique identifier and its Category
- Its description and how it could affect the project
- Assessment of the likelihood of occurrence and impact
- Risk Scoring Matrix score
- Proposed strategies to mitigate risk.

Regardless of the development stage of the project, identified risks can be sounded off and escalated to the risk management team to be logged and recorded in the risk register.

3.2. Risk Analysis

For every risk identified, qualitative and quantitative analysis will be done to evaluate the overall level of impact that it could bring onto the project.

3.2.1. Qualitative Risk Analysis

For this analysis, the impact of a risk identified will be scored based on a risk scoring matrix, which is made up of the expected level of impact and expected level of occurrence. Refer to Figure 1 below for an example

Impact	Very High				
	High				
	Medium				
	Low				
		Low	Medium	High	Very High
	Probability				

Figure 1 Risk Scoring Matrix

Probability

- Very High - Risk may occur greater than 90% of the time
- High - Risk may occur greater than 60% to 90% of the time
- Medium - Risk may occur greater than 30% to 60% of the time
- Low - Risk may occur below 30% of the time

Impact

- Very High - Risk has potential to detrimentally impact the overall schedule and performance of the project
- High - Risk has potential to heavily impact the cost, overall schedule, and team performance of the project
- Medium - Risk has potential to slightly impact the cost, overall schedule, and team performance of the project
- Low - Risk has little to no impact on the cost, overall schedule, and team performance of the project

Risks identified are first classified into its respective impact and probabilities of occurrence categories. Based on the risk scoring matrix, the risk identified will be given an overall rating of mild (Green), fair (yellow) and severe (red).

3.2.2. Quantitative Risk Analysis

After assessing the qualitative risk analysis of all the risks identified, all risks will be reviewed by the project manager and risk management team, after which each risk is given a numerical rating to signify its priority and importance as compared to other risks. This value will be recorded in the risk register as well.

3.3. Risk Response Planning

Every risk identified will be monitored actively by the risk management team to ensure that occurrences of the risk event do not go unnoticed. For every risk identified, one of the following approaches can be used to address it:

Approaches	Description
Avoid	The risk will be eliminated by removing the problem at its root.
Transfer	Transfer the risk to a third party, such as insurance against business theft or environmental disasters.
Reduce	Develop methods to lower the probability or impact of a risk.
Accept	Risk identified will be accepted due to low impact on overall project.

On top of the approaches listed above, each risk will also contain a contingency plan which will be listed in the risk register. The purpose of introducing a contingency plan is to ensure that the development team and project staff will know what to do when a particular risk event occurs.

3.4. Risk Monitoring, Controlling and Reporting

The Risk Monitoring, Controlling and Reporting stage standardise the identifying, analysing, and planning of newfound risks. It also concerns the monitoring of previously identified risks, and evaluation of existing risks

strategies proposed to verify its effectiveness in tackling the respective risk events. The procedures developed in this stage will be part of a standard protocol that all project staff will utilise to notify and assess risks.

These are a list of activities that will be conducted to monitor, control and report new risks

- Weekly meeting to update on the status of the project development
- Monthly Review of current and potential risks based on risk analysis done in section 3.2
- Provide feedback forms for employees and staff to raise alert upon discovery of risk
- Ensure that all previously recorded risks are properly documented
- Ensure that all previously recorded risks have effective contingency plans
- Ensure that all employees and staff are familiar with risk response plans and reporting procedures.

3.4.1. Risk Escalation Procedures

Risks can be escalated to the risk management team through feedback forms. Physical forms will be provided and there will be a google form created that only the project staff are allowed to peruse. After reporting the risk events, the risk management team will inspect the validity of the risk and verify its impact. Upon successful verification, the risk will be logged in the risk register and every team leader will be notified subsequently.

At the end of each month, the risk management team will produce a Top 10 risk report which details the risks with the most impact to the project. This report will be presented during the Risk Management Team Meeting.

3.4.2. Risk Management Team Meeting

The Risk Management Team meeting will be conducted monthly and led by the Risk Manager, Zhenni. Meeting participants should include:

- Hong Sum (Project Manager)
- Soong Jie Ming (Quality Assurance Manager)
- Yan Jun (Lead Developer)
- Aaron (Release Manager)

The agenda of the Risk Management Team meeting will be touching on current and new risks encountered. The risk manager will provide an update on the Top 10 list of risks that are the most likely and impactful to occur to provide an update for all the personnel present. Meeting participants would also present any new risk updates and provide the necessary details that have been reported by their respective team members.

4.Risk Register

ID	Risk	Risk Category	Potential Cause(s)	Potential Response(s)	Probability of Occurring	Impact on Objectives	Grade	Risk Response Strategy
1	Cost Overrun	Financial	Purchasing Servers with more storage	Remove unnecessary expenses	Medium, as the database BWR currently has may not support the sheer data required to be stored for the implementation of the project.	Medium, the budget may prove to be more than sufficient in covering the costs of the extra purchases.	High	Mitigate Remove unnecessary expenses
2	Hardware not up to standard	Hardware	Vendor supplies faulty hardware	Get a replacement from the vendor	High, the hardware is bought from an external vendor, so we are unable to check the quality till hardware is received	High, it may lead to schedule overrun as hardware cannot be used.	High	Accept Get a replacement from the vendor in the fastest available timeframe
3	System not meeting the requirements	Communication	Requirements not fully understood	Re-clarify the requirements	Medium, there may be misinterpretation of the requirements	High, it will lead to schedule overrun if it is found out at a later stage (Eg. User Testing)	High	Mitigate Re-clarify the requirements

4	Unable to receive the hardware on time	Hardware	Hardware is unavailable	Outsource to other suppliers	Low, delays may occur in special cases (weather conditions, natural disasters)	Medium, it will delay the integration of the hardware with the system.	Moderate	Transfer Outsource to other suppliers
5	Staff unavailability	Resource	Staffs are already in other projects	Hire additional external staff	Low, staff availability should be checked before accepting the project	Medium, the external staffs may not have the require skills to perform his/ her job (Eg. Designing)	High	Transfer Get at least 2 members working on the same item so that the other can cover or know what is going on for easier handover