

EPIC RESOURCE PLANNER **RISK MANAGEMENT PLAN**

Version 1.2

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Concordia University

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VERSION HISTORY

| Version # | Implemented By | Revision Date | Approved By | Approval Date | Reason |
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| 1.0 | Adrien Tremblay, Camil Bouzidi, Radley Carpio | 01/25/2021 | Camil Bouzidi | 01/25/2021 | Initial Risk Management Plan draft |
| 1.1 | Camil Bouzidi | 01/31/2021 | Adrien Tremblay | 02/01/2021 | Additional precisions for Analysis, Tools, & Appendices |
| 1.2 | Camil Bouzidi | 02/23/2021 | Adrien Tremblay | 02/23/2021 | Revision |
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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 EPIC Resource Planner 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 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.

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, 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 Risk Management Committee 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 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 submitted with the Risk Management Plan.

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:

Probability

- Very High – Greater or equal than 80% probability of occurrence
- High – Between 50% and 80% probability of occurrence
- Medium – Between 20% and 50% probability of occurrence
- Low – Below 20% probability of occurrence

Impact

| Impact | VH | | | | |
|-------------|----|---|---|---|----|
| | H | | | | |
| | M | | | | |
| | L | | | | |
| | | L | M | H | VH |
| Probability | | | | | |

- Very High – Risk that has the potential to massively impact project cost, project schedule or performance. Such a risk will massively alter the course of the project (0.8).
- High - Risk that has the potential to greatly impact project cost, project schedule or performance (0.5).
- Medium – Risk that has the potential to slightly impact project cost, project schedule or performance (0.35).
- Low – Risk that has relatively little impact on cost, schedule or performance (0.2).

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. This number shall identify in which order the risks will be tackled. The formula will be as follows:

$$Rating = Probability * Impact$$

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 “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 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.

The following information shall be made available about each risk [2]:

- Description
- Date of identification
- Probability
- Impact
- Rating/Priority
- Response Strategy
 - If chosen, explanation of response and its result.
- Status: Possible, Happening, Managed
- Owner: to be defined in a later sprint.
- Updated: Date and changes made (if applicable).
 - Changes will include: Status changes and description of mitigation result.

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.
- A Risk Analysis will be performed between the end of a sprint and the beginning of another.
- Scoring and prioritization of risks will be done and maintained through a Microsoft Word Document.
- If possible, risk elicitation interviews with the product owner and other stakeholders will be performed.
- Should product owners and other stakeholders not be available for the elicitation of problem domain related risks, the identification of risks in the problem domain shall be done by the risk management team.
- Per section 4 of the EPIC Resource Planner Testing plan [1], the assignment of priorities to bugs shall impact the scoring and prioritization of risks.

RISK MANAGEMENT PLAN APPROVAL

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

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|-------------|-----------------|
| Signature: | CM |
| Print Name: | CEDRIC MARTENS |
| Title: | Developer |
| Role: | Project Manager |
| Date: | 2021-02-03 |

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|-------------|--|
| Signature: | CB |
| Print Name: | Camil Bouzidi |
| Title: | Developer |
| Role: | Risk Manager/ Risk Management Committee Member |
| Date: | 2021-02-03 |

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| Signature: | RC |
| Print Name: | Radley Carpio |
| Title: | Developer |
| Role: | Risk Manager/ Risk Management Committee Member |
| Date: | 2021-02-03 |

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| Print Name: | Adrien Tremblay |
| Title: | Developer |
| Role: | Risk Manager/ Risk Management Committee Member |
| Date: | 2021-02-03 |

APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

| Document Name and Version | Description | Location |
|------------------------------------|---|---|
| EPIC Resource Planner Test Plan | This plan explores the approach to testing that the development team will use for this project. | Available in the Sprint 1 Delivery. |
| CAST Software Risk Management Plan | This document outlines some of the information that might be useful when tracking a risk. | https://www.castsoftware.com/research-labs/software-development-risk-management-plan-with-examples |

APPENDIX B: KEY TERMS

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

| Term | Definition |
|--------------------------|---|
| EPIC Resource Planner | The product being developed by this software development team. |
| Microsoft Excel Document | A file to be used on Microsoft Excel: it allows for tabulation and analysis of numeric data. |
| Problem Domain | The real-world attributes of the situation/problem for which software must enhance or solve related problems. |
| Risk | Event or condition that, if it occurs, could have a positive or negative effect on a project's objectives. |