



**HACETTEPE UNIVERSITY COMPUTER SCIENCE AND
ENGINEERING DEPARTMENT
BBM384**

**DEL5
RISK MANAGEMENT REPORT (UPDATED)**

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Project Name	: PATATES
Course	: BBM384 Software Engineering Lab.
Due Date	: 15.06.2020
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Risk Management Report	Date: 12/06/2020

PATATES

Risk Management Report

1 Introduction

In simple terms, risk is the possibility of something bad happening. While building huge systems or developing comprehensive software, always there will be some risks. So, the purpose of this document is declaring or detecting risks before the happening something bad. This document will describe risks and give some details about related risks. Of course, there will some information and instructions about how to deal with these risks.

2 Description

The risks which mentioned in this document may be about security, deployment, data management, project management, third party services, integrating other software's, software technologies, team members, development process etc.

Risk management is concerned with identifying risks and drawing up plans to minimize their effect on a project. Project risks affect schedule or resources, product risks affect the quality or performance of the software being developed and business risks affect the organization developing or procuring the software.

- There can be extrem or more changes to the requirements than anticipated.
- Team may have lack of motivation, this may affect the processes.
- While designing test cases some cases may be missed.
- Requirements may not be appropriate for the purposes of the project.
- There may be change requests about all-around the system.
- Some decisions may be ambiguous or difficult to understand.
- Conflicts may be occur between team member or there may be poor relationships.
- Team may be use wrong or incompatible tools or technologies.
- Deadlines may be defined bad or team may be late to do tasks.
- People may not use the application.
- System may be contain too much items like products. This may affect performance.
- Database may be crashed or damaged.
- There may be some vulnerabilities.
- Stakeholders miss the original objectives of the project when the timing is not tailored to what is desired.

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3 Risk Management Report Specifications

a. Risk Identifications

Possible risks should be identified and addressed by the project manager and analysts as early as possible while the project is undertaken. The most important point in making risk determinations is the special emphasis on the basic milestones throughout the project life cycle. Risk identification is one of the key issues in regular project status and reporting meetings. Although some of the risks in the project can be easily identified, it is necessary to work meticulously to anticipate some risks. However, this does not mean that no risk can be predicted.

b. Risk Analysis

Risk analysis examines how the risks that may arise when the project construction reaches its goal will have an impact on the project and how it can change the outcome of the project. After the risks are identified, the qualitative and quantitative effects of the anticipated risks on the project are analyzed and appropriate steps are identified and taken to reduce these risks.

	1 Rare	2 Unlikely	3 Possible	4 Likely	5 Almost Certain
5 Catastrophic	5 Moderate	10 High	15 Extreme	20 Extreme	25 Extreme
4 Major	4 Moderate	8 High	12 High	16 Extreme	20 Extreme
3 Moderate	3 Low	6 Moderate	9 High	12 High	15 Extreme
2 Minor	2 Low	2 Moderate	6 Moderate	8 High	10 High
1 Negligible	1 Low	2 Low	3 Low	4 Moderate	5 Moderate

c. Risk Response Planning

In some cases, a practical solution may not be produced to absorb or eliminate the risks faced by a project. In such cases, it is necessary to take steps to ensure that risks are reduced in a planned and strategic way. Therefore, action plans should be prepared to reduce risks. One person from the project team should work on the anticipated risks.

d. Risk Monitoring, Controlling, And Reporting

Risk levels in planned projects should be monitored and reported throughout the project life cycle. The project team should classify the risks according to their highest and impact levels and report them as part of the project status reporting process for their projects.

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Probability (%)

- Insignificant : 0-20
- Low : 20-40
- Moderate : 40-60
- High : 60-80
- Very High : 80-100

Impact

- Insignificant : 1
- Tolerable : 2
- Normal : 3
- Serious : 4
- Catastrophic : 5

Magnitude

Impact x Probability

Risk ID	Date Identified	Headline	Description	Type	Impact	Probability (%)	Magnitude	Owner	Mitigation Strategy
1	29.04.2020	Requirements Changes	There can be extrem or more changes to the requirements than anticipated.	Req.	3	30	0,9	Manager	Increase cooperation and coordination on requirements. In addition, the development team will work flexibly so that any changes to the requirements will be easy to carry out.
2	29.04.2020	Motivation	Team may have lack of motivation, this may affect the processes.	Peop.	4	40	1,6	All Team	It is very important that team members support each other. If any member encounters this problem, the other group members will motivate him or her again in support of him or her.
3	29.04.2020	Missing Tests	While designing test cases some cases may be missed.	Est.	3	30	0,9	Tester	Designing test cases by thinking like the related actor is important. On the other hand test cases must be kept up-to-date. So if tester missed a test case, he/she will implement it immediately.
4	29.04.2020	Bad Requirements	Requirements may not be appropriate for the purposes of the project.	Req.	4	20	0,8	Analyst	Bad defined requirements can cause of confusion and decreasing of motivations. Every requirements should discuss with related stakeholders and be reviewed to be well defined.
5	29.04.2020	Change Requests	There may be change requests about all-around the system.	Tech.	1	70	0,7	Architect	To avoid the difficulties of applying changes, system must be developed maintainable. Every changes can be implemented to system easily.

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6	29.04.2020	Ambiguous Decisions	Some decisions may be ambiguous or difficult to understand.	Est.	2	25	0,5	All Team	Every decision should be made within the frame of logic and expressed through examples. There should be no inconsistency and contradictions. So meetings take important role to provide this.
7	29.04.2020	Team Members	Conflicts may be occur between team member or there may be poor relationships.	Peop.	3	3	0,1	All Team	We carefully created the team and shared the roles properly. We talk every problem with us and we are very fair to each other.
8	29.04.2020	Wrong Technologies	Team may be use wrong or incompatible tools or technologies.	Tech.	5	30	1,5	Architect Conf.Man.	Before the using new tool or start to develop a module, we comprehensively research that and if it looks proper, we test it at outer of the system. After we implement it to system.
9	29.04.2020	Time Restrictions	Deadlines may be defined bad or team may be late to do tasks.	Est.	4	30	1.2	Manager	Deadlines of tasks will be defined by considering the requirements and especially team members' abilities and capacities. Also every member helps to others if he/she complete his/her tasks.
10	29.04.2020	Disapproval of Customers	People may not use the application.	Org.	5	6	0,3	Manager	Make a strong marketing strategy, reach to the potential users.
11	29.04.2020	General System Size	System may be contain too much items like products. This may affect performance.	Tech.	3	20	0,5	Architect Conf.Man.	We made some improvements to increase the performance. They are paginations, response limits etc.
12	29.04.2020	Data Loss	Database may be crashed or damaged.	Tech.	5	6	0,3	Architect Conf.Man.	Secure systems and tools are used. These tools have extra security mechanisms. Also there will be back-ups regularly to avoid data losses.
13	29.04.2020	Vulnerabilities	There may be some vulnerabilities.	Tech.	4	30	1,2	Architect Conf.Man.	Secure systems and tools are used. These tools have extra security mechanisms.
15	29.04.2020	Missing Objectives	Stakeholders miss the original objectives of the project when the timing is not tailored to what is desired.	Org.	3	10	0,3	Analyst	Provide an effective communication between stakeholders and always reviewing requirements

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4 Observed Risks

Risks forecasted in planning	How it was handled / mitigated
Change Request : At first, user could make comment only if he/she purchase the book. The requirement changed. We updated this feature as everybody can make comment on a book.	As mentioned above, the team can work flexibly. Also system developed maintainable and flexible. We easily updated this feature.
Time Restrictions : Sometimes, some tasks could not be done in determined deadline.	Other team members helped, and even they take the task on them.
Bad Requirements : Users could send message but at admin side, there were no see messages feature.	While doing test, we recognized this situation very early and we had time to add this to project.
Motivation : Team members lost his motivation or get ill sometimes.	The other team members closed this gap. Both trying to motivate and take task on themselves.
Missing Tests : While developing application, some tests missed and that cause some bugs.	We are testing application exhaustively. So we detect bugs and fix them.

Risks NOT forecasted in planning, but observed	How it was handled / mitigated
Elasticsearch service was working a bit slowly.	To balance and get correct responses, we added a little delay with calculating working time of the service.