



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Master

Date

Thursday

18 / 03 / 2021.

Course Code

(PMG510)

Project Risk Management

construct commercial market

1. Introduction:

in this research will talk about the risk will face during construction commercial market. Along with how to identify risks on a project and how to ensure the risks were specific to the project and not general business-as-usual risks. First, we define risk “Risk management is the systematic process of identifying, analyzing, and responding to project Risk. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to project objectives [1]. Risk is defined as an uncertain occurrence or a condition that, when it occurs, has positive or negative consequences for project goals [2] Risk assessment of the company could reduce the additional expenses that the company faces possible that during the construction of the project. The objective of risk identification is to identify all possible risks, not to eliminate risks from consideration or to develop solutions for mitigating risks—those functions are carried out during the risk assessment and risk mitigation steps.

Examples of identifying the risk could faces during the project:

- 1- Operating and management risk
- 2- Financial risk
- 3- construction period risk
- 4- sale price risk
- 5- design risk
- 6- construction quality risk
- 7- The completion and check risk

2.0 LITERATURE REVIEW:

The identification of risk enables one to understand its nature and gives an idea of how such risk should be handled. It influences project stakeholder's decisions in creating a sustainable project. In the identification of risks, it is a good practice to delve into the possible causes of risk. Most risks are tied to some obvious causes that can be easily identified and resolved; once that is done, the risk will dissipate. Dealing with 'root causes of risk' in risk planning is an essential component of addressing the challenges posed by

project risks. In addition to the root causes of risk, (Kloppenburger, Contemporary Project Management, Third Edition, 2014).

the project team might want to establish risk relationships; situations that lead to the occurrence of risk [3].

Such situations are referred to as triggering conditions; serves as warning call, that project manager and team should not treat lightly.

In identifying risks, the project team must be mindful of the following:

- Possible deviations from the risk management plan
- The impact to the objectives of the project if nothing is done about the risk
- Alternative risk response strategies that will prove beneficial to the project

3.0 Methodology:

In this project first we will identify the risk could faces us during the project, after we listed the risks, we use the Impact-Probability Matrix to determine the probability and impact from high to low that's will help us to calculate the Expected Monetary Value .

1	equipment breakdown
2	Unknown site conditions
3	construction period risk
4	construction quality risk

Probability	0.7-1	high	high	medium
	0.3-0.69	high	medium	low
	0-0.29	medium	low	low
		0.7-1	0.3-0.69	0-0.29
		Impact		

4.0 RESULTS

Risk event	Probability	Impact	Score
equipment breakdown	0.7	high	70%
Unknown site conditions	0.25	Low	25%
construction period risk	0.2	medium	20%
construction quality risk	0.3	High	30%
total	145		

EVM calculation:

$$EMV = \text{Probability} * \text{Impact} = P * I$$

Risk	Risk probability (p)	Cost impact (ic)	Risk Contingency (P*IC)
A	0.7	5000 \$	3500 \$
B	0.25	1800 \$	450 \$
C	0.2	1450 \$	290 \$
D	0.3	2000 \$	600 \$
TOTAL		10250 \$	4840 \$

5.0 DISCUSSION:

The Benefits of EMV It gives you an average outcome of all identified uncertain events. It helps you to calculate the contingency reserve. In a decision tree analysis, it helps in selecting the best choice. It does not require any costly resources, only experts' opinions. While you are evaluating a risk, you will look at the probability or impact, but calculating the expected monetary value is a better measure to determine an overall ranking of risk.

6.0 REFERENCE:

- 1- Fundamentals of risk management 5th edition Paul Hopkin]
- 2- [Hillson & Simon, 2020]
- 3- (Kloppenborg, Contemporary Project Management, Third Edition, 2014).
- 4- [The Owner's Role in Project Risk Management (2005)]