Chapter 14

Risk Management Strategies for Project Success

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ABSTRACT

As projects are associated with risks due to the presence of uncertainties and unknowns, risk management assumes importance in project success. This chapter is an attempt to examine various risk mitigation strategies that are commonly employed in different industrial sectors. The chosen risk strategy would also largely depend either on individual’s or organization’s propensity to take risks. The authors summarize the findings of a research study in this chapter. The research results show that effort and details of a risk management for a project are governed by risks associated with cost and time and not necessarily with the project scope. Also, many organizations prefer a contingency budget to the project plan to developing a detailed risk management plan.

BACKGROUND

Risk is generally seen as an exposure to a situation that leads to unfavorable outcome. However, in the context of a project, project risk is an uncertain event or conditions that, if occurs, has a positive or a negative effect on at least one project objective. Therefore, project risk is the possibility of suffering loss or gain. If left unaddressed or ignored, specifically, the negative risk, it could potentially interfere with the successful completion of the project and may result in time and cost overruns, or diminished quality of the product or service.

Risks are integral to all projects as a project is a new endeavor and anything new is associated with unknowns and uncertainties. Progress is associated with taking risks. It is important to make a distinction between a risk and a problem.
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- A problem is identified and known in a current time-frame and it is a certain event. Therefore, it demands an immediate solution.
- A risk is a probable and a potential event that may occur in future. If occurs, its consequences are uncertain. A risk is also known or unknown event.
- Risks are problems that have not occurred yet. A risk can become a problem if it is not planned or managed.

Occurrence and assessment of a project risk is a combination of an event which is unanticipated or unwanted, likelihood of its occurrence and its impact on project execution. So, identifying, analyzing, and responding are the essential elements of risk planning. For a proper risk analysis, three actions are imminent (Zakari Danlami, Emes & Smith, 2016):

1. Identifying a risk event or undesirable change
2. Assessing the probability of its occurrence
3. Evaluating its impact on key project success factors (scope, cost, time, and quality)

Project risk can occur from two sources; first, uncertainties and unknowns associated with the project, and second, actions of people who are either directly or indirectly involved with the project. What makes it challenge to deal with risks is that uncertainty is inherently a difficult topic; it can be computationally overwhelming (Elmaghraby, 2005) unless simplified models are adopted to address risk.

Figure 1. Risk and problem