A Study on the Project Risk Management Strategies Adapted By IT Organizations

MD. Imran Alam

Research Scholar (Computer Science), CMJ University, Shillong, Meghalaya

Abstract— Risk management is an organized means of identifying the risk factors, selecting the risk handling options and mitigating risks when they become problems. The primary role of risk management is to identify and respond to potential problems. It is quiet essential that a risk management strategy is implemented in the early stages of the project so that the risk is continuously addressed throughout the system life cycle. Software generic project deals with problems generic to all projects. The goal of the traditional project management is to control the persuasive risks by using systematic procedures.

Index Terms— Business Intelligence

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1. INTRODUCTION

A risk management plan documents the procedures for managing the risks throughout the life of a project. The project teams should hold several meetings towards the initial stages of the project to develop as well as formulate a risk management plan. The team should review the project documents as well as the corporate risk policies, the categories of risks, the lessons learnt from the past projects as well as tempelates of creating a risk management plan. In the midst of this the interest of the stakeholders should be of paramount importance as well. An example will illustrate this on a clearer level, that if a project sponsor is a risk seeker more active risks can be taken rather than someone who is adverse in taking risks.

The risk management plan summarizes how the risks will be performed on a particular project. It is in a way a subset of the major project plan. Other than the risk methodologies, budget as well as schedule for risk related activities the risk management plan should also include well formulated plans, fallback plans as well as continengency reserves. The level of risk tends to vary with the needs of the project (Schwalbe, 2006).

In consequence of the steadily increase in the demand of the projects there is an increasing demand for project risk management in the world of today. Due to the complex nature of the project work and the level of planning associated there are many possibilities where risks can determine the success ratio as well as the practicality of a particular project. In the context of projects the risk is defined as the chances of uncertain occurrences affecting the objectives of the project. To determine the future success of the project risk management should be applied to each and every project (Andresen, 2006).

DEFINITION OF PROJECT RISK MANAGEMENT

Project management is a method of finding, classifying as well as mitigating risks. Both quantitative as well as qualitative methods of ranking the risks according to their potential problems are identified. Project management techniques are generally adopted by the large organizations as well as the government agencies so that there is a standard protocol for considering any sort of proposal.

Figure 1: The risk management process

The art of risk management is to identify the risks pertaining to a specific organization and to respond to them in an appropriate way. In fact risk management is a formal process which enables the identification, planning as well as management of the risks. In fact all the levels of the organization need to be included in the management of the risks in order to make it more effective. They are commonly referred to as corporate (policy setting) identifying the lines of the business as well as the project details. Risk management needs to take into consideration the interaction of these levels and try and reflect on these levels to communicate and learn from each other in the first place. So it is quite clear that the aim of risk management is threefold in nature. Firstly it must identify the risks, then undertake an objective analysis of the risks relating to an organization and finally respond to these risks in an appropriate manner. In this stage one has to consider the internal as well as external resources involved also and also assess how the changes in the prevailing environment may have considerable impact on the whereabouts of the project (Merna and Al-Thani, 2008).

The terminology related to risk management is pretty confused and a clear cut definition is required for the same as the term risk can be interpreted in different ways. The first school of thought regards that risk can be an uncertain event which can be identified, managed as well as assessed through project management techniques. If there is a risk in any domain it will tend to have a considerable impact on all the major areas of the business. A project risk describes the joint effect of various risks along with other sources of uncertainty. In the overall analysis, project risks must be the focus rather than the individual risks, but in the midst of all this it is necessary to understand on how project risk is defined by the components as well as to manage it in the first place. In short project risk is defined as the exposure of the stakeholders to the consequences of the variations in the outcomes. Therefore it is quite clear project risk is a consortium of several individual risks along with traces of uncertainty in the form of ambiguity along with the variability factor. Therefore the term risk is used to cover both the threats as well as the opportunities (Bartlett, 2004).

PROJECT MANAGEMENT RISK STRATEGIES

Risk management is more of an art rather than a science and starts before the intimation of the project. It starts with the identification as well as the assessment of opportunities as part of the SWOT analysis. It continues as a part of the project portfolio development that selects the project portfolio to implement the strategies of the company. Project management identifies four major types of risks which are avoidance, mitigation, acceptance as well as transference (Baker, 2010). Here are a glance at the various mechanisms involved in the domain of risk

- Avoidance- selecting a different course of action where the risk totally disappears or has negligible amount of impact on the project
- Acceptance- planning for the risk by working on the time as well as the cost factors
- Transference- transferring the risks to a third party so that the risk of loss is reduced to a considerable extent. A typical example in this regard would be insurance
- Mitigation- facing the risks as well as developing contingency plans triggered by a set of pre defined definitions
- Partnership- This involves sharing as well as collaborating the risks

IT strategic planning as well as performance management

Increasing the authority of the project manager is a strategy for mitigating technical as well as cost risks. Selecting an efficient project manager will go a long way in scheduling the risks along with effective communication channels could also be a tool for mitigating risks. One of the steps in implementing risk management strategies is to assess the strategies put forth as part of the project risk management. Two aspects are to be considered one is when a project risk strategy is formulated and the other is when the strategy is implemented. The risk management plan provides documented guidance for the project risk management process (Hill, 2010).

The risk management is a subsidiary of the project management plan and it happens to be only output of the plan risk management process. All the risks which can have an impact on the project needs to be identified, documented and their characteristics to be studied (Heldman and Mangano, 2011). As the professionals tend to hope for the best in any field negative threats as well as risks are more common in project management activities. Three basic risk management strategies are adopted that are used in risk management environments and are also applicable to project risk management planning which are

- Risk avoidance- the project management can adjust its plans as well as procedures along with adjusting the scope in certain areas to avoid a potential project risk. The nature of risks arise in the initial stages of the project and can be avoided

by such actions such as clarity or adding expertise to the project team

- Risk transfer- the liability is transferred to the third party. This can work when there are multiple units in an organization and the overall risk can be transferred to some organizational group. This is all the more common in case of financial related projects.

- Risk mitigation- the probability of the risk as well as reducing the impact of the risk of the project by adopting less complex processes (Moeller, 2007).

INTEGRATION OF INFORMATION SYSTEMS

In short the project should have a risk strategy and these needs to show how the project will manage the risks in general. Quiet clearly it will define the process as well as procedures to manage the risks, identify the tools and allot responsible persons to the actual risk process (Rolstadas, 2008).

The project management index (PMI) defines the six processes

- Identification of risk
- Risk management planning
- Risk responsive planning
- Quantitative risk management
- Qualitative risk management
- Risk monitoring and controlling

IT ORGANIZATIONS AND PROJECT RISK MANAGEMENT STRATEGIES

The quality expectations of the customers have a profound impact on the aspects of risk management in any project. The first and foremost goal of the project is to understand the specific objectives at risk so that a careful crafted strategy can be framed. The risk management strategy mentions how the risks will be tackled during the course of the project. It is created during the initial stages of the project and modified after each and every stage of the project. Some of the other factors which may have influence on the project's risk management strategy are as follows

- The number of organizations involved and the relationship between them
- The needs of the stakeholders involved with the project
- The importance, complexity as well as the scale of the project
- The organizations operating environment
- What are the assumptions which have been made

There are some early signs which clearly specify that the project is not in order and it calls for urgent action on the part of management. Some of the risks could be the percentage of works which are not completed till data as well as the average output of the workers is not up to the mark (Prince 2, 2009).

Monitoring and domineering risks involves executing the risk management procedures to react to risk events. In fact executing the risk management processes ensures that the risk management processes is an ongoing activity performed by the entire team throughout the duration of the project. The identified risks may not materialize or the probabilities of their occurrence may diminish to a considerable extent. In fact as the project progresses new risks will be identified and these risks need to be assessed in the same manner as the earlier risks. A redistribution of the risk resources devoted to risk management may be necessary because of the relative changes in the level of risk. Project teams sometimes resort to turnarounds when they do not have a contingency plan in place to cover the risks (Schwalbe, 2010).

In fact an alarming piece of statistics follows that in a research conducted on the top 75 companies in the United Kingdom 38 % of them were not confident of their risk management strategies. So it is quite clear that risk management are highly variable, instructive as well as subjective in nature. In the world of today most of the companies promise the fact that they have extensive risk management techniques in place, but whether they can derive the results is another question (Loosemore, Raftery and Reilly, 2006).

It is necessary for the project team to create project risk documentation while addressing project issues on the way. These deliverables are all the important to the project managers as they indicate what sort of information they should be collecting at the various stages of the project and the materials they should make available to the stakeholders involved in the business. In this regard the PRAM model of risk management is all the more important as it demonstrates to the project managers a systematic process for best employing risk management as well as mitigation strategies. The PRAM model is not a one shot

process but a continuous process that links the project development to accurate risk management as well as assessment. The deliverables are ascertained in each and every step and allows the top management to monitor the performance of the project across the various portfolios in a balanced manner. In a way a proactive approach is adopted where some sort of problem may affect the project at some time in the future. In fact the more sophisticated and systematic the project management process is the more confident the project moves from the planning to the execution phase (Pinto, 2007).

ADVANTAGES AND EXAMPLES OF IT COMPANIES WHERE PROJECT MANAGEMENT STRATEGIES ARE ADOPTED.

A high percentage of information systems take more time as well as money which is anticipated towards the beginning of the project. In fact good project management is essential to ensure that the systems are delivered on time and within the specified budgets. Project management deals with five major variables cost, time, quality, risk as well as scope. Organizations need to develop information plans that support the business goals of the organization. The large companies will have the management structure to show that the most important areas receive top most priority.

The information systems provide value for a business firm in a lot of ways both in terms of productivity as well as profitability. Some of these benefits cannot be quantified also. Building an information system is a process of planned organizational change that must be carefully managed. Management support as well as control of the implementation process are essential, as the mechanisms for dealing with the level of risk in each project tends to vary. The level of risk in a project is dependent on three major factors. The first one is the project size, the second is the project structure and the last is the level of technology involved (Laudon and Laudon, 2007).

The domain of Information technology has been for more than 50 years. The main effort of It has been to change the process and make improvement in the management information systems. Surveys point to the fact that of all the projects completed in IT nearly 35 % of the ones are with intangible benefits. The development as well as the application of software exposes the community to various types of risk. Failure of a project results in loss of time and money as well as lost business opportunity of sorts. The risk of such failures is known as IT project risk (Remenyi, 2007)

This happens when the system is detetoriated or the information needs of the system are compromised to a considerable extent. If the informational needs of the system are compromised it leads to software risk. When people are added to the compounding problems or the human element comes into picture it adds to the technical difficulties of the project all the more. In the midst of all this the software is error prone and the coordination among the people tends to be also poor. As a result the expectations of the customers are not met

IBM has a long history of producing hardware as well as software along with managing complex projects for large organizations. They are also aware of the fact that a large number of projects in the domain of IT exceed the stipulated time frame and are not completed on time. In fact one could go to the extent of conferring that they fail to meet the expectations from the project. Many a times the project managers along with the project teams do not properly deal with inherent risks that should have been defined as well as planned before the project started in the first place.

In order to overcome this governance IBM has incorporated a new IT risk and governance strategy to help the global enterprises plan better, integrating positively as well as reducing expenses for compliance as well as security projects. IBM promises that it will craft more intelligent top down strategies which will save time and money as well as coordinating the project efforts. A key component in this regard is to make the products use to multiple issues rather than individual ways. IBM wants to change the way people perceive IT problems as perceived to specific and isolated ones. In fact IT companies are struggling with the backlash of new products on a regular basis. Just like IBM has realized that risk management is an important point of consideration in any project the other companies are also realizing the fact big time. In order for the projects to be successful in the project planning phase one needs to identify the risks, assess their impact, plan for those risks as well as monitor them throughout the course of the project (Gido and Clements, 2009).

CONCLUSION

The risk management correlates with cost management as well as developing the overall project budget. In the process of budget development one should look at the risks as the same way in case of schedule management. In fact many of the practicing project managers are trying to avoid formally the risk management practices. This becomes all the more difficult in areas like Information technology

People are the resources of a company and it is necessary to have the skilled manpower in the right place. In fact whenever a new technology needs to be introduced, all the

proposed systems must be thoroughly studied and an alternative back up plan must be there. The cost involved in the project in terms of money as well as schedule must be evaluated against the probable advantages of the new technology. So from the analysis of the paper it is quite clear project management strategies needed to be implemented by the IT company. Considering the importance of this lot of leading multinational giants have incorporated it as part of the system. The future scenario also looks all the more bright in the days to come also.

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