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Contingency planning: managing project risks

Introduction

More and more reliance is placed upon the project manager and his or her team to complete a project successfully. Effective planning and execution of the plan are essential in supporting project success.

Within the early stages of the project, the team participates in activities that explore risk factors, which may negatively impact the project. Of major importance to the project, is not only to identify the risks, but also to determine how the team will address them.

This is done through the four components of project risk management:

1. Risk identification
2. Risk quantification
3. Risk response development; and
4. Risk response control

Contingency planning involves defining action steps to be taken if an identified risk event should occur, a necessity in today's project world.

4 steps of Risk Management

1. Risk identification

One of the first tasks the project manager and the project team participate in is the identification of the risks that may impact the project. The initial step is to identify events that pose a threat or risk to the project's success.

There are two types of risks that need to be identified and evaluated: internal and external risks. **Internal risks** are those “things that the project team can control or influence,” while **external risks** are those “things that are beyond the control of the project team”. Of the two types, the internal risks are often easier to identify because external risks are not as obvious. An internal risk might be "*Our online data storage turns out to be too small*". An external risk might be "*A snow storm arrives and noone can get to the office to meet the new students*"

The execution of the risk assessment process is a team exercise with the project manager present as a guide/moderator. The submission of risks from the team needs to be in an open forum, and the team must be able to freely discuss the merits of the risk being identified. In addition, the team needs to be in agreement as to whether an identified risk is really a risk to the project or not.

2. Risk quantification

Once the team has identified the risks, the next step is to quantify them. The purpose of risk quantification is to determine which risks would be most detrimental to the project, should they occur. The next step after quantification is to address these risks.

There are many procedures that enable a team to perform risk quantification. Regardless of the process, a basic concept involves both the project manager and the team as they determine the probability of the risk occurring. Some procedures attach a numerical probability (percentage) to each risk. Another procedure may rate each risk using a scale of high, medium or low as a form of evaluation. In some cases, subject matter experts may assist the team by helping to assess and determine the risk occurrence.

Another dimension that works in conjunction with risk probability is risk severity. Risk severity refers to the impact that the risk would have on the project if it were to occur. The severity/impact can be quantified by the words high, medium, or low.

All risks will be evaluated for risk response. Those risks that earn “high-high, high-medium, high-low, medium-low, and low-low severity/impact-probability combinations should be evaluated for mitigation and contingency strategies" (Royer, 2000).

Those risks that earn “medium-high, medium-medium, and low-medium, severity/impact-probability combinations will be evaluated for mitigation strategy" (Royer 2000). Finally, those risks that earn a low-high severity/impact-probability combination should be “treated as project assumption”

3. Risk Response Development

There are many different strategies within response development. Here we consider risk mitigation and contingency strategies. While both strategies are planned, each strategy addresses risk during a different time in the project.

- **Mitigation** addresses risk before manifestation and attempts to reduce its impact before occurring (in the example of the risk that our online data storage is too small, we can buy more storages space now).
- **Contingency** addresses the risk at the time the event occurs and attempts to reduce its negative effects. In the example of the snow storm, we can put in place a communications plan, and arrange for people who can walk to work to be here on time.

Although risk assessment is executed in the primary stages of the project, further risk assessments can/should be done as the project progresses to ensure that all risks are addressed.

A contingency plan is executed when the risk presents itself. The purpose of the plan is to lessen the damage of the risk when it occurs. Without the plan in place, the full impact of a risk could greatly affect the project. The contingency plan is the last line of defense against the risk.

For a project manager, it is better to have the contingency ready for implementation than to have to develop one as the risk is taking its toll. The contingency is another tool that a project manager can use to ensure project success. Due to the timing when a contingency needs to be implemented, contingency planning is a necessity in today's project management world.

Click on these links for an example of a simple contingency plan, and a more complex contingency plan and use the following to build your own contingency plans.

Elements of a contingency plan:

a) Scenarios

Refer to your risk assessment and impact/probability charts and choose the most damaging or most likely scenarios that you want to plan for. Then, map out what should happen in each case (see Examples 1 and 2, below).

Aim to include a broad range of scenarios – for instance, cyber attacks, prolonged staff absences, IT malfunctions, loss of suppliers, serious power outages, or structural problems with your business premises.

b) Triggers

Specify what, exactly, will cause you to put your contingency plan into action. If you have a plan for heavy snow, will it be triggered by a severe weather warning, or only by actual snowfall?

One event could also have multiple triggers, each of which initiates a different part of your plan

c) Response

Include a brief overview of the strategy that you will follow in response to the event. This provides a context for the actions that you ask your people to take.

d) Who to Inform

Identify the people who need to know about what's happened. This could include employees, suppliers, customers, and the wider public, as appropriate. Also, make sure that you are aware of your legal obligations, and that incidents are reported to the relevant authorities where necessary.

e) Key Responsibilities

Define who's responsible for each element of the plan, who will be in charge at each stage, and what you expect them to accomplish. The **RACI Model** is a useful tool here.

f) Timeline

State what needs to be done within the first hour, day and week of the plan being implemented.

This could be as simple as, "Inform employees of the situation immediately." But you may need far more detailed timelines for certain situations, such as data breaches, serious workplace injuries, or leaks of hazardous materials.

Also include details of when you would expect normal business to resume, and what will signal that your organisation is ready for this.

4. Risk Response Control

Risk response control “involves executing the risk management plan in order to respond to risk events over the course of the project.”