Common Sources of Risks in IT Projects

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Introduction

Hello, fellow project managers to our next exploration in the world of project risk management. During IT projects, navigating through scenarios of uncertainty requires an understanding of the sources of risks that threaten our project. Project risk management is not only about identifying risks but also developing strategies to navigate and mitigate these risks. In today's blog, we will discuss the common sources of risk in IT projects, how to identify them, and ways to mitigate them.

Sources of Risk

There are many different types of risks that you could face while managing your IT project. While it is good to identify and create mitigation strategies, it is important to first understand the common sources of risks that most IT projects face:

1. Market Risk: *Will the users accept and use the product or service? Will someone create a better product or service?* These market risk factors come from changes in consumer preference, shifts in industry trends, and the rise of other competitive landscapes. These changes can impact the viability of a project and lead to project overruns, delayed timelines, etc.
2. Financial Risk: *Can the organization afford to undertake the project? Is this project the best way to use the organization's financial resources?* Financial risk factors are inevitable in IT projects because of the amount of substantial investments. These risks can happen because of budget overruns, unexpected expenses, and even changes in currency exchange rates when dealing with overseas projects. Not being able to understand the financial aspects can lead to project failure.
3. Technology Risk: *Will hardware, software, and networks function properly? Will the technology be available in time to meet project objectives?* Factors to technology risks include compatibility issues, software/hardware failures, and cybersecurity threats. Technology risk can have a big impact on project workflows and also have an impact on stakeholder trust.
4. People Risk: *Do people have the proper managerial and technical skills? Is the organization familiar with the sponsor or customer for the project?* People play an

important role in IT projects. Factors of people risk can be skill shortages, team conflicts, or turnover of personnel.

5. Structure/Process Risk: *How many distinct user groups does the project need to satisfy? Does the organization have processes in place to complete the project successfully?* Inefficient project structures can introduce these risks, stemming from poor workflows, inadequate resource allocation, and other factors. This can lead to delays as well as quality issues.

TABLE 11-3 Potential negative risk conditions associated with each knowledge area

Knowledge Area	Risk Conditions
Integration	Inadequate planning; poor resource allocation; poor integration management; lack of post-project review
Scope	Poor definition of scope or work packages; incomplete definition
Time	Errors in estimating time or resource availability; errors in determining the critical path; poor allocation and management of float; early release of competitive products
Cost	Estimating errors; inadequate productivity, cost, change, or contingency
Quality	Poor attitude toward quality; substandard design, materials, and workmanship; inadequate quality assurance program
Human resource	Poor conflict management; poor project organization and definition of responsibilities; absence of leadership
Communications	Carelessness in planning or communicating
Risk	Ignoring risk; unclear analysis of risk; poor insurance management
Procurement	Unenforceable conditions or contract clauses; adversarial relations
Stakeholders	Lack of consultation with key stakeholder; poor sponsor engagement

Source: R.M. Wideman

Identifying Risks

Effective risk management begins with a thorough understanding of potential risks that could impact project objectives. When identifying risks it is important to do this early in the project. As a project manager it is important to remember that "you cannot manage risks if you do not identify them first" (Schwalbe). There are many tools and strategies you can utilize to help you manage risks. Here are some strategies you can use for identifying risks:

- **Brainstorming**: this is a basic and easy strategy for you and your team to generate ideas of possible risks. While this is an open dialogue, a project manager needs to lead and facilitate the conversation (Schwalbe)
- **The Delphi Technique**: this technique is similar to brainstorming, except it takes in more of the positives and prevents the negatives of the brainstorming tool. This will consist of a panel that will help identify future risks at an expert level. This will include using feedback questioning, or even written responses (Schwalbe).
- **Risk Register**: A risk register or a risk log is a document specifically for identifying risk, risk impact, risk occurrence, and probability. It is your job as a project manager to remember to update the risk register throughout the project for new risks (Schwalbe)
- **Scenario Planning/ Forecasting**: Developing scenarios or forecasting can help you explore possible situations and their impact on your project. These techniques can help you simulate risk scenarios for your evaluation.
- **SWOT Analysis**: SWOT stands for strengths, weaknesses, opportunities, and threats. This tool allows you to analyze internal and external factors that could influence your IT project.

With these strategies and tools, you will be able to identify your IT project risks and potential threats. Effective risk management takes practice, as well as laying a foundation for your team to help them mitigate these risks.

Risk Mitigation

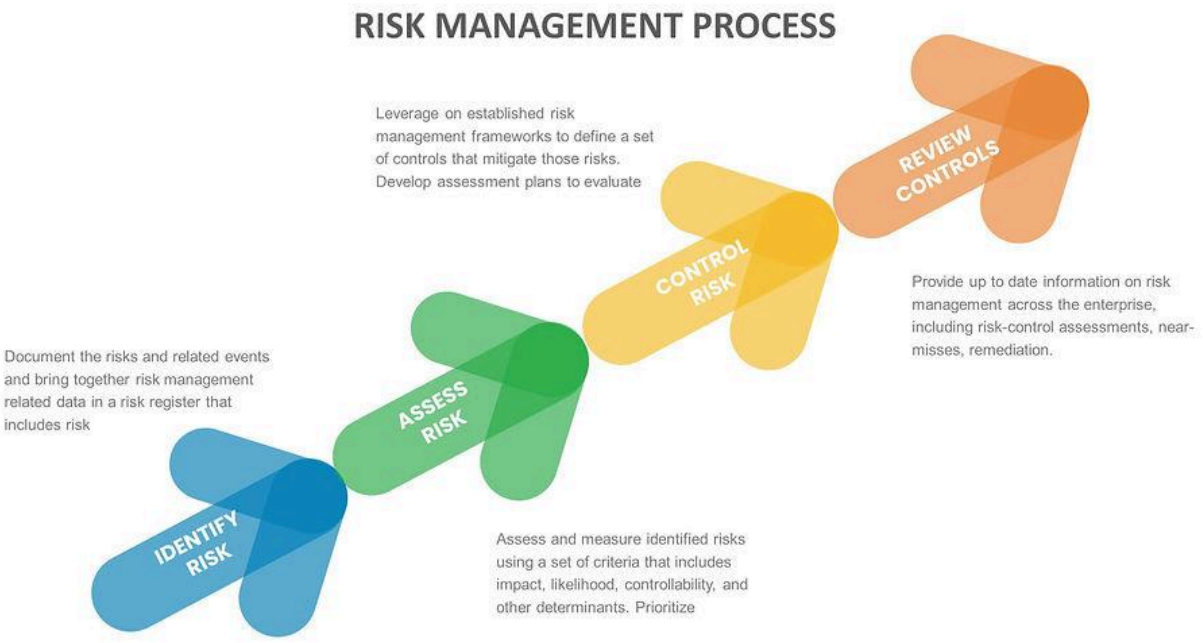
We have now gone over the sources of risks as well as how to identify these risks. In this last section, we will go over mitigation strategies and ways to help prevent these project risks.

- Market Risk:
    - Conducting market analysis to predict trends and shifts.

    - Change or develop your customer/clientele to decrease reliance on one specific market.
    - Adapt agile strategies for project timelines and resource allocation. This can help you adapt to the fast and unpredictable market conditions.

- Financial Risk:
    - Establish budget controls and be vigilant in monitoring project expenses.
    - Have regular financial audits to identify potential ways to save money during the project.
    - Always have a contingency plan by setting aside additional funds for any unexpected expenses.
- Technology Risk:
    - Quality assurance testing on products or services to find technical issues.
    - Implement advanced encryption strategies to help protect sensitive data.
    - Developing backup and recovery protocols for system breaches or data failures.
- People Risk:
    - Help encourage a positive work environment that includes open communication, collaboration, and feedback between everyone on the team.
    - Advance your team member's skills by providing training opportunities.
    - Establish roles, and responsibilities, as well as address conflicts and issues within the team.

Understanding the foundation of each type of risk and deciding the appropriate mitigation strategy is an important factor when managing your project. With these strategies, you can help mitigate risks throughout your project life cycle.



Conclusion:

Navigating and managing risks in your IT project requires a specific approach. Understanding the sources of risks is the first step in being able to manage potential risks. After you are able to use the given strategies to identify your project risks and develop the correct mitigation strategies to have a successful project life cycle, remember that risk management is not only about solving the risks but also about understanding and building ways to prevent them.

References:

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