**ACTIVITY 4**

**TOPIC:-1.**Identify cost of risk;

**2**.Identify commonly used risk management tools.

Identify cost of risk;

**What is Risk?**

"Tomorrow problems are today's risk." Hence, a clear definition of a "risk" is a problem that could cause some loss or threaten the progress of the project, but which has not happened yet.

These potential issues might harm cost, schedule or technical success of the project and the quality of our software device, or project team morale.

Risk Management is the system of identifying addressing and eliminating these problems before they can damage the project.

**What is cost of risk?**

The **cost of risk** is the cost of incurring losses because of risk and managing risks. The total of this cost is the sum of every aspect of a company’s functions relating to risk, consisting of retained (uninsured) losses, related loss adjustment expenses, administrative costs, risk control costs, and transfer costs.

**The common components of cost of risk are as follows:**

* Administration Costs
* Risk Control Costs
* Mitigation Costs
* Losses
* Transfer Costs

Identify commonly used risk management tools.

**Top Risk Management Tools & Techniques for Project Management**

1. Brainstorming
2. Root Cause Analysis
3. SWOT Analysis
4. Risk Assessment Template for IT
5. Probability and Impact Matrix
6. Risk Data Quality Assessment
7. Variance and Trend Analysis
8. Reserve Analysis

### ****1. Brainstorming****

Before any project begins, the first step is to plan a strategy. For this, the team members conduct brainstorming sessions with the project manager. This brainstorming session needs to include all the risks that could impact the project’s completion and success.

The steps involved in this brainstorming process are:

* Reviewing all project documentation
* Overseeing all historic data and information about risks from previous projects that are similar to the current one
* Reading over articles related to the risks involved
* Understanding all organizational process assets
* Any information available that will give insight into the issues that might occur while the project is going on

The project manager can also get in touch with experts, team members, and other stakeholders who might have experience with handling risk in similar projects.

### ****2. Root Cause Analysis****

This is a technique to help project members identify all the risks that are embedded in the project itself. [Conducting a root cause analysis](https://www.invensislearning.com/blog/how-to-conduct-a-root-cause-analysis/) shows the responsiveness of the team members in risk management. It is normally used once a problem arises so that the project members can address the root cause of the issue and resolve it instead of just treating its symptom. It answers questions such a: What happened? Why did it happen? How? Once these questions are answered, it becomes easier to develop a plan of action so that it does not happen again in the future.

### ****3. SWOT Analysis****

SWOT is an analysis to measure the strengths, weaknesses, opportunities, and threats to a project. This tool can be used to identify risks as well. The first step is to start with the strengths of the project. Then team members need to list out all the weaknesses and other aspects of the project that could be improved. Here is where the risks of the project will surface. Opportunities and threats can also be used to identify positive risks and negative risks respectively.

All findings need to be put on a grid to make analysis and cross-referencing easier.

### ****4. Risk Assessment Template for IT****

[66% of financial institutions](https://www2.deloitte.com/us/en/insights/industry/financial-services/global-risk-management-survey-financial-services.html) believe that collaboration between business operations, such as projects, and risk management is a top priority when it comes to enterprise risk management. There are some techniques that are used for other departments that can be used to manage risks within a project as well.

A risk assessment template is usually made for IT processes in an organization, but it can be implemented in any project in the company. This assessment gives a list of risks in an orderly fashion. It is a space where all the risks can be collected in one place. This is helpful when it comes to project execution and tracking risks that become crises.

The risk assessment template comes with figures and probabilities of any risk occurring, along with the impact it will have on the project. This way the project manager and the team members are fully aware of the potential harm of any risk and the likelihood of it occurring.

### ****5. Probability and Impact Matrix****

Project managers can also use the probability and impact matrix to help in prioritizing risks based on the impact they will have. It helps with resource allocation for risk management. This technique is a combination of the probability scores and impact scores of individual risks. After all the calculations are over, the risks are ranked based on how serious they are. This technique helps put the risk in context with the project and helps in creating plans for mitigating it.

### ****6. Risk Data Quality Assessment****

When project managers use the risk data quality assessment method, they utilize all the collected data for identified risks and find details about the risks that could impact the project. This helps project managers and team members understand the accuracy and quality of the risk based on the data collected.

The data quality assessment is used to improve the project manager’s understanding of the risks the project could face as well as collect all the information about the risk possible. By examining these parameters, they can come up with an accurate assessment of the risk.

### ****7. Variance and Trend Analysis****

Just like other control processes in the project, it helps when project managers look for variances that exist between the [schedule of the project](https://www.invensislearning.com/blog/project-schedule-management/) and cost and compare them with the actual results to see if they are aligned or not. If the variances rise, uncertainty and risk also rise simultaneously. This is a good way of monitoring risks while the project is underway. It becomes easy to tackle problems if project members watch trends regularly to look for variances.

### ****8. Reserve Analysis****

While planning the budget for the project, contingency measures and some reserves should be in place as a part of the budget. This is to keep a safeguard if risks occur while the project is ongoing. These financial reserves are a backup that can be used to mitigate risks during the project.