Risk Project Analysis (RIPRAN)

Use the method RIPRAN for your project

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Project Management

Risk Analysis - RIPRAN

1. Today's task is to prepare a risk analysis of your project.

2. Work in groups to achieve today's output - a comprehensive elaboration of the RIPRAN method, where you will **identify the risks** (risk register), **make a risk matrix**, and **transfer the most important risks** to the RIPRAN method table, where you will define all 4 steps.

3. Finally, you **evaluate the level of risks** to see if they are acceptable for the project implementation.

Contents

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1. **PART** (10 min.)

- Short overview of the RIPRAN method

2. PART (70 min.)

- Ongoing work on the risk analysis, mentoring, discussion, checking the steps in the teams. Checking and feedback on the progress of the risk analysis.

3. PART (10 min.)

- Recapitulate and check each team and their project to see if a risk analysis is completed.

Practical objectives

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You should be able to:

- To classify project risks and determine which of them should be tracked closely.
- Use tools and techniques to determine the likelihood and impact of project risks that have been previously identified.
- Apply the RIPRAN method to your project.

What you are working with today

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- Work with a seminar paper template that includes section **4. Main risks of the project.**
- Apply your knowledge of 12. topic – **lecture**.
- Use the **supporting document** in word - 12. Topic - RIPRAN, which presents the method in detail in 4 steps.
- All materials are available in the IS.

Identification of (threats – risks)

Create Register of risks (table or list)

Threat - Scenario - Probability – Loss

Threat - Danger that is threatening and that is the cause of the harmful consequences and difficulties in the project. (E.g. strong storm, insufficient loan, icing, currency devaluation, strike, dismissal of the project manager, bad subcontracting for the project, ...)

Scenario - The event that we anticipate in the project as a result of the threat. (For example, we will not get a loan - we will not have financial coverage for the project, Tom will fall ill - we will lose the only employee who can do it for our project ...)

Probability - Probability of scenario realization expressed in the interval <0.1>

Loss - Loss for the project, caused by the implementation of the scenario. We usually express it in monetary units (but we can also say otherwise, the size of the time delay, the loss of workers' lives, etc.).

Create Risk Matrix

A risk matrix is a tool that is normally used to assess the level of risk and assist the decision-making process. It takes into consideration the category of probability, or likelihood, against the category of consequence severity.

5x5 Risk Matrix Example

Impact

How severe would the outcomes be if the risk occurred?

What is the probability the risk will happen? — **Probability**

	Insignificant 1	Minor 2	Significant 3	Major 4	Severe 5
5 Almost Certain	Medium 5	High 10	Very high 15	Extreme 20	Extreme 25
4 Likely	Medium 4	Medium 8	High 12	Very high 16	Extreme 20
3 Moderate	Low 3	Medium 6	Medium 9	High 12	Very high 15
2 Unlikely	Very low 2	Low 4	Medium 6	Medium 8	High 10
1 Rare	Very low 1	Very low 2	Low 3	Medium 4	Medium 5

		Probability			
		1 = high (80% ≤ x ≤ 100%)	2 = medium high (60% ≤ x < 80%)	3 = medium low (30% ≤ x < 60%)	4 = low (0% < x < 30%)
Impact	A=high (Rating 100)	(Exposure – Very High) (Score 100)	(Exposure – Very High) (Score 80)	(Exposure – High) (Score 60)	(Exposure – Moderate) (Score 30)
	B=medium (Rating 50)	(Exposure – High) (Score 50)	(Exposure – Moderate) (Score 40)	(Exposure – Moderate) (Score 30)	(Exposure – Low) (Score 15)
	C=low (Rating 10)	(Exposure – Low) (Score 10)	(Exposure – Low) (Score 8)	(Exposure – Low) (Score 6)	(Exposure – Low) (Score 3)

RIPRAN – complete the table with these steps

The whole process of risk analysis following the RIPRAN™ method consists of the following phases:

1. Preparation of the risk analysis
2. Identification of the risk
3. Quantification of the risk
4. Response to risk
5. General assessment of risk

RIPRAN – 4 steps completed

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Example of a filled table

Number of risks	Threat	Scenario	Note	Probability	Impact on the project	The value of risk	Proposal for action	Expected costs Deadline for implementation of measures Personal responsibility (risk owner)	New value of reduced risk
1.	Occurrence of the influenza epidemic in the spring period March-April.	Almost 30% of employees become ill.	We assume the weather as forecast in the previous year.	50 %	Failure of work capacity and delay of the contract by 3 months - penalty EUR 600 000.	300 000 EUR	Flu vaccination	EUR 100 vaccine Vaccination in January Agreed with the company doctor - agreed by the employees at workshops	Exceptional diseases will be compensated for overtime - zero risk
2.	.....	.....	.....	.....	.....	....			
3.									
4.									

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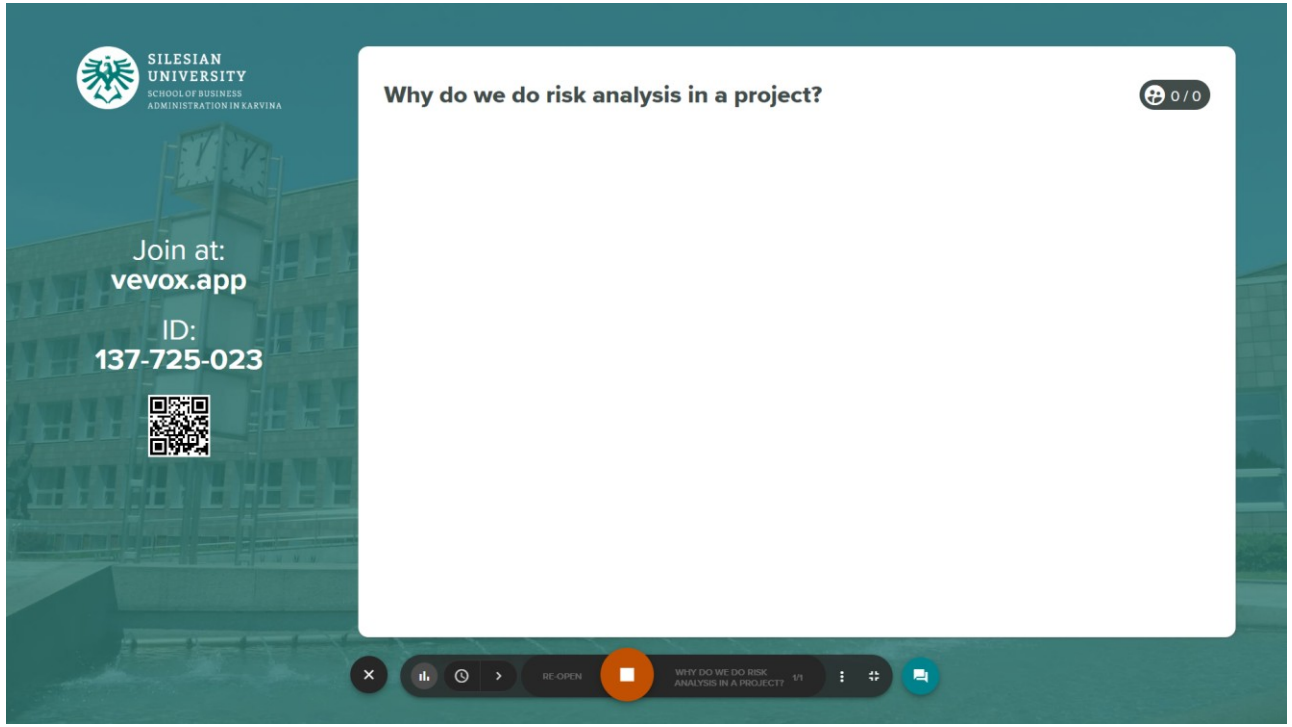
Vevox quiz questions



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- Risk analysis helps project managers decipher the **uncertainty** of potential risks and how they would impact the project in terms of **schedule, quality and costs** if, in fact, they were to show up.

- Risk management Framework is following process: Continuous risk identification, Risk evaluation, Risk mitigation and contingency measure definition, Risk monitoring, reporting and control.

- A **risk matrix** is a tool that is normally used to assess the level of risk and assist the decision-making process

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7 Risk Response Strategies

- Accept: Do not initiate any action but continue to monitor.
- Mitigate/Enhance: Reduce (for a risk) or increase (for an opportunity) the probability of occurrence and/or the severity of impact.
- Transfer/Share: Transfer responsibility of a risk to a third party who would bear the consequences of the problem (share the benefits of a realized opportunity).
- Avoid/Exploit: Entirely eliminate uncertainty / take advantage of the opportunity.

- RIPRAN method can be used for plannig risk analysis in your project

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