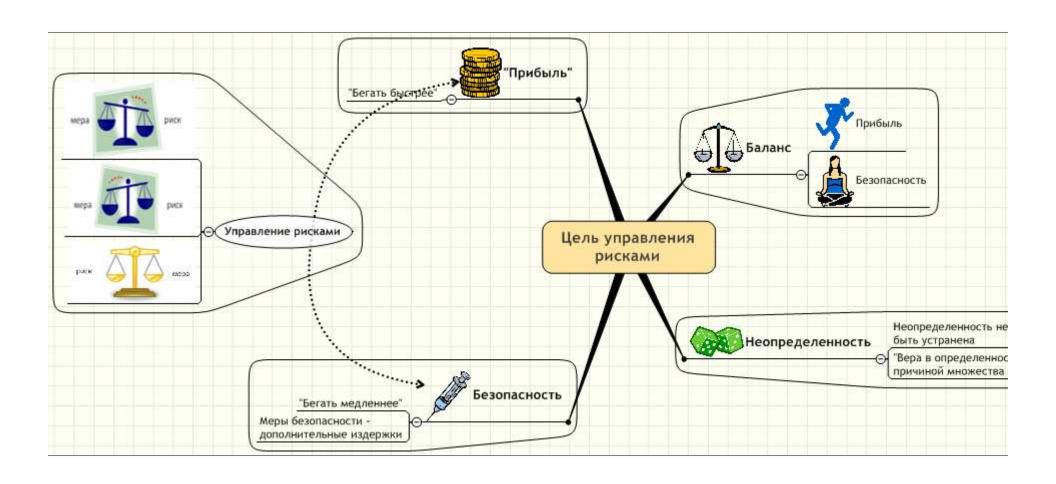
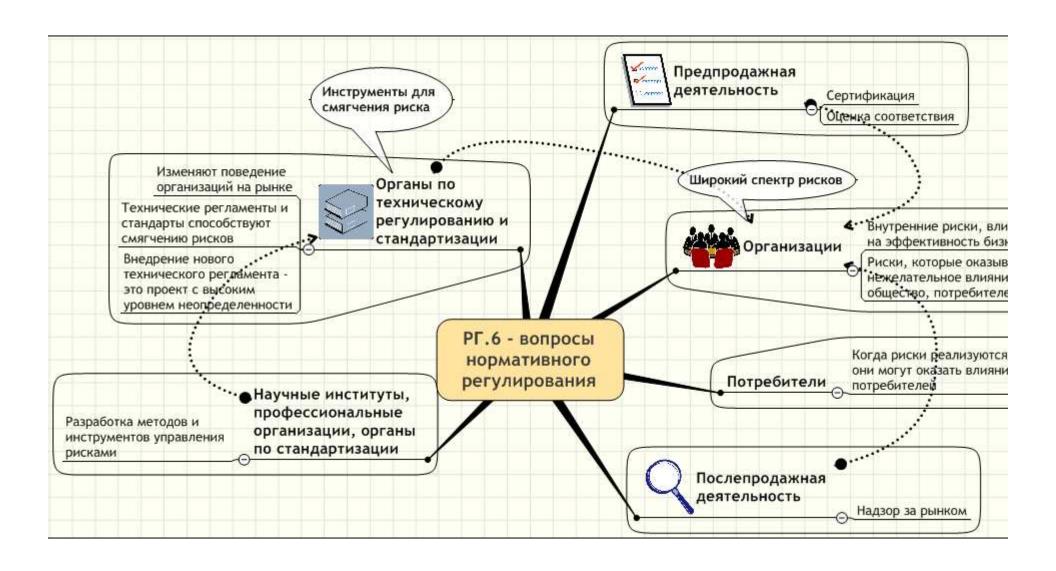
General Risk Management Concepts

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Coordinator, International Conference on Risk
Assessment and Management

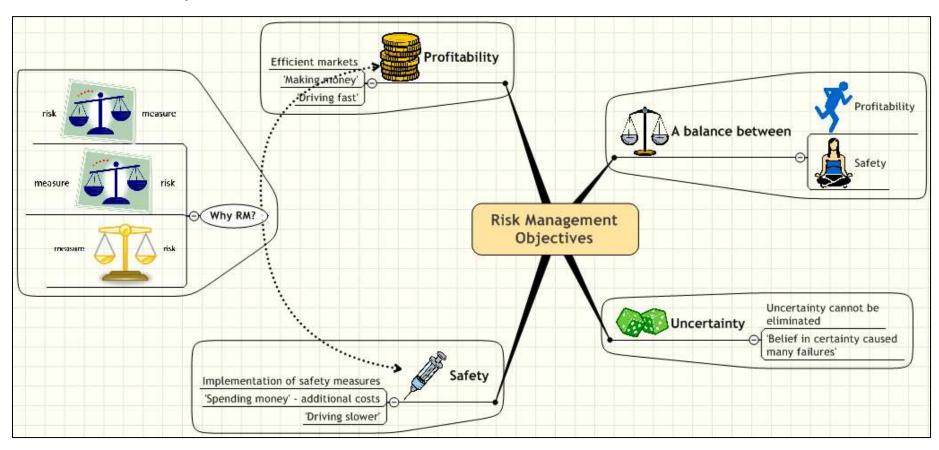
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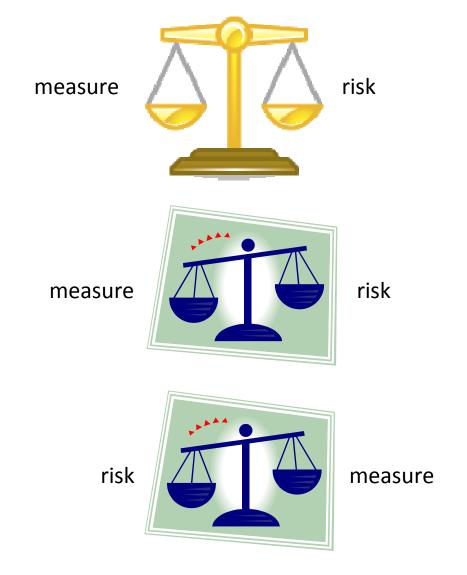


General Risk Management Objectives

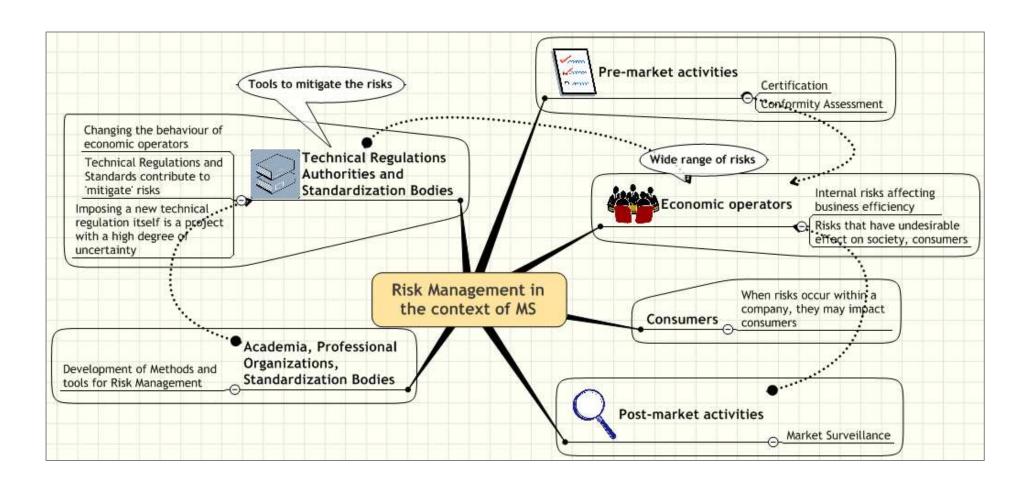
Finding a balance between profitability and safety



Safety – necessary and enough

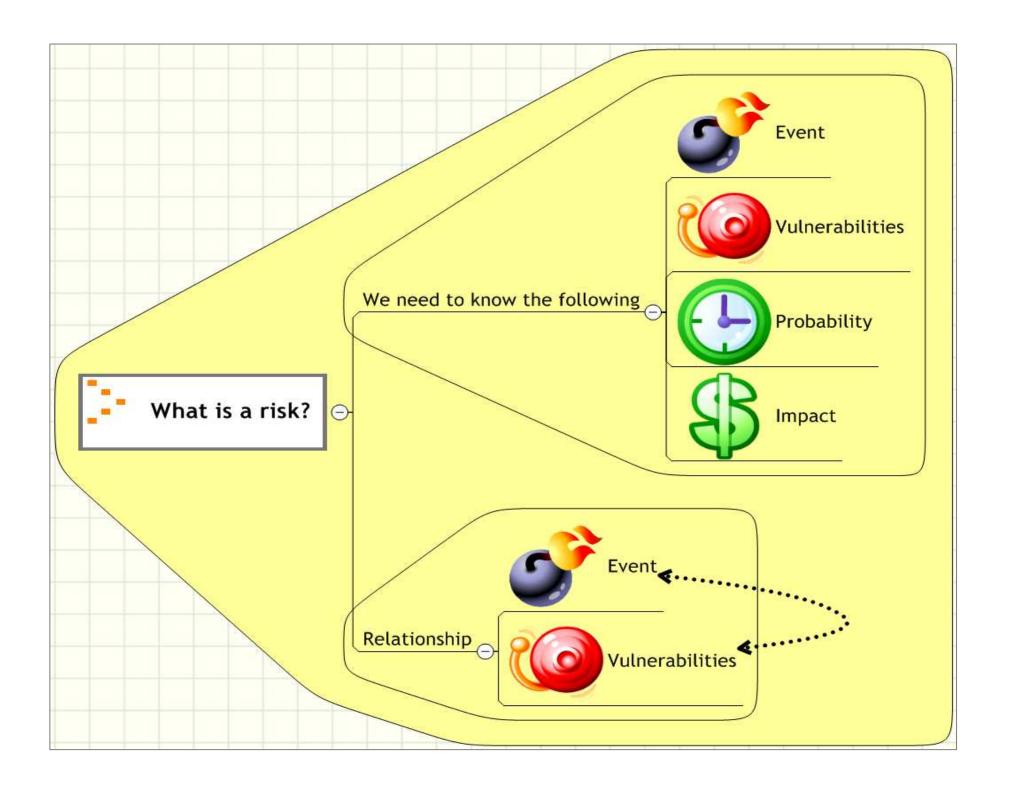


Risk Management in the context

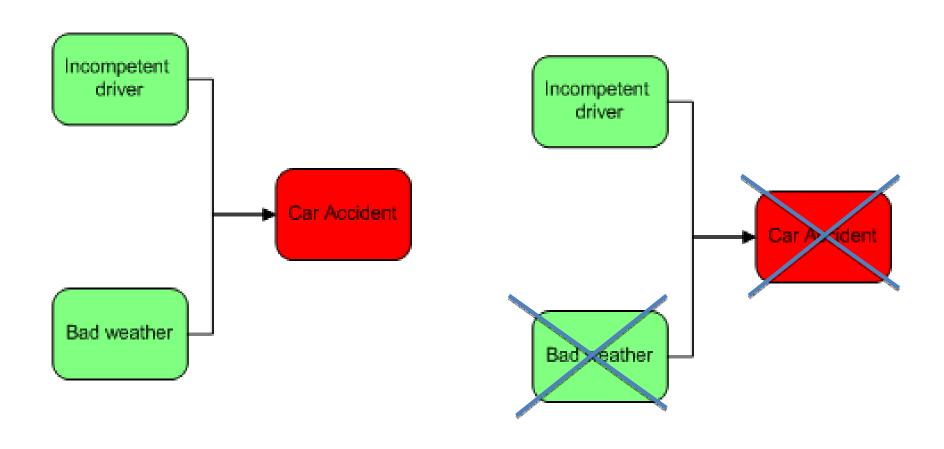


What is good risk management?

- Risks are determined in a way that it becomes clear what to do with them
- We see the whole picture of risks
- We know the most critical risks and don't start with least important
- We determine and implement optimal risk management strategies
- We develop a crisis management plan (continuity)



Vulnerabilities and Risk Events

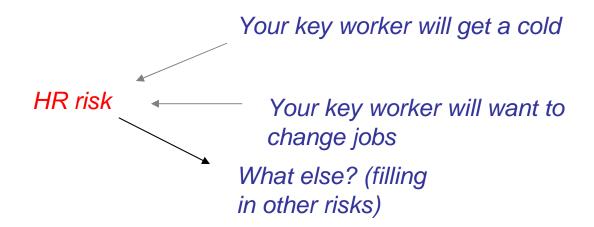


Assignment 1

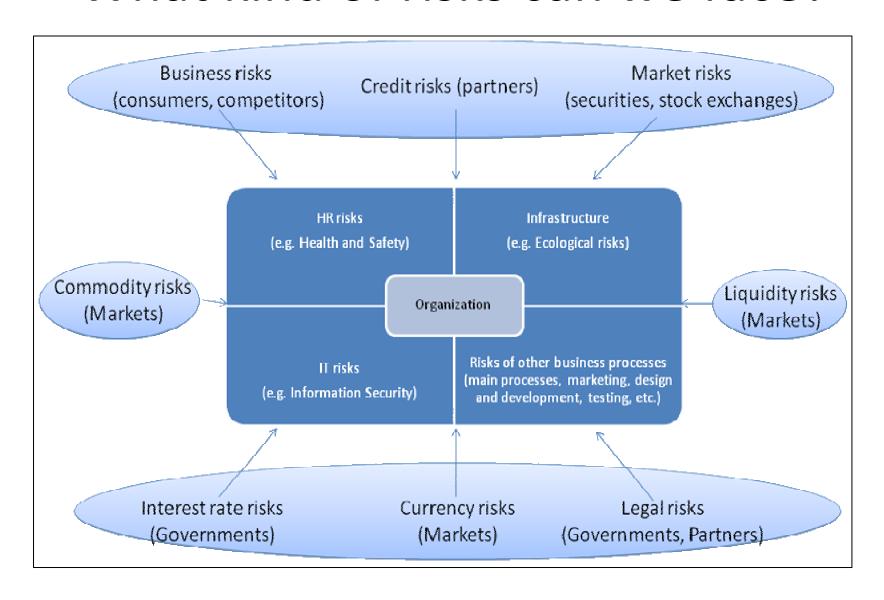
- Imagine that you took your kids to an amusement park. While you are sitting at the café having coffee, the kids are enjoying the attractions. After a while, they come running and tell you this:
 - They desperately need some ice-cream and they know where you can buy it; they spoke with a guy who's selling it already to know how much it costs, he is a funny guy though coughing all the time
 - The observation wheel is great but it is gritting loudly;
 and they didn't like the operator he looked very pale
- Determine the risks based on this information

Developing a risk profile

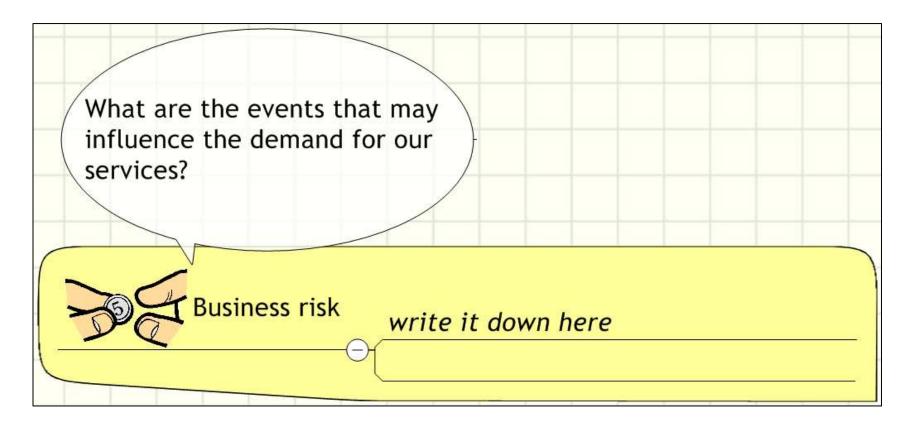
- To know as many risks as possible
- The concept is very simple:



What kind of risks can we face?



Developing a risk profile

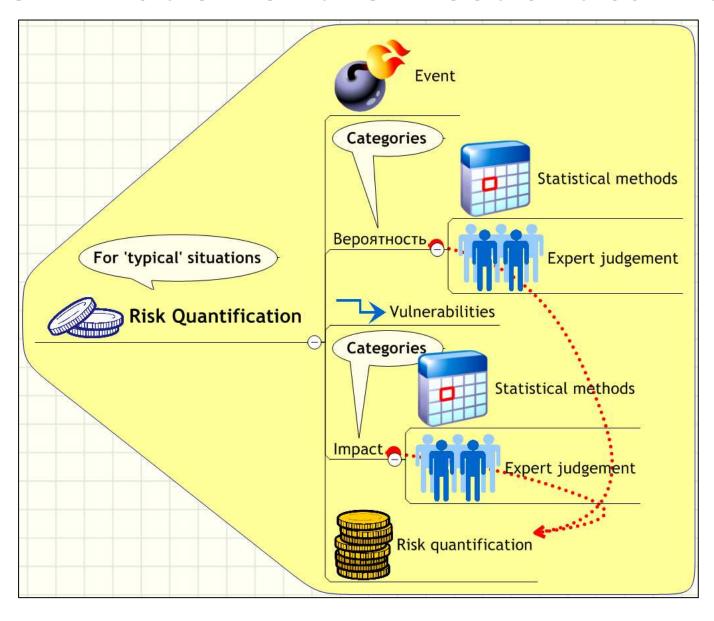


Go on – for all types of risks in your classification

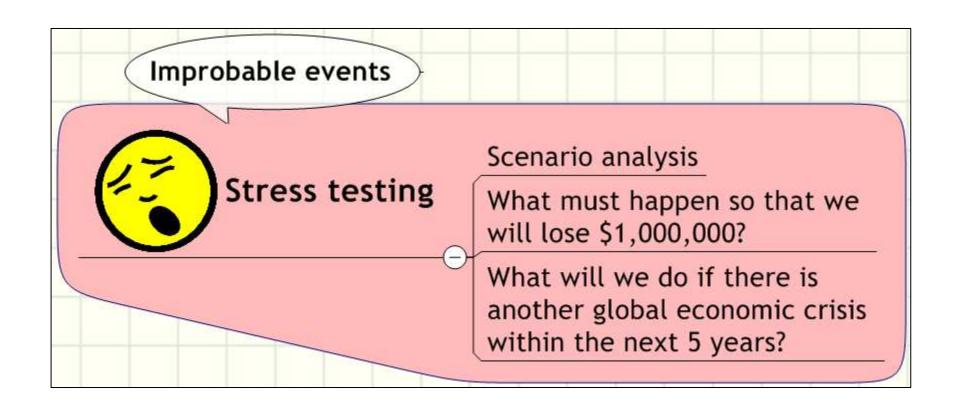
Assignment 2

- You were sitting at the café reading the papers and talking to the waiter; and that is what you got to know:
 - Close to the amusement park you are sitting at somebody will soon start building a huge mall and an aqua park;
 - Euro is rising and the café is buying beer in Euros;
 - There was an accident on a roller-coaster at another park;
 - A lot of people forget to pay after they played tennis;
 - The park is planning to buy a new attraction 'Pirate's ship'
- Develop a risk profile on the basis of this information (on behalf of amusement part)

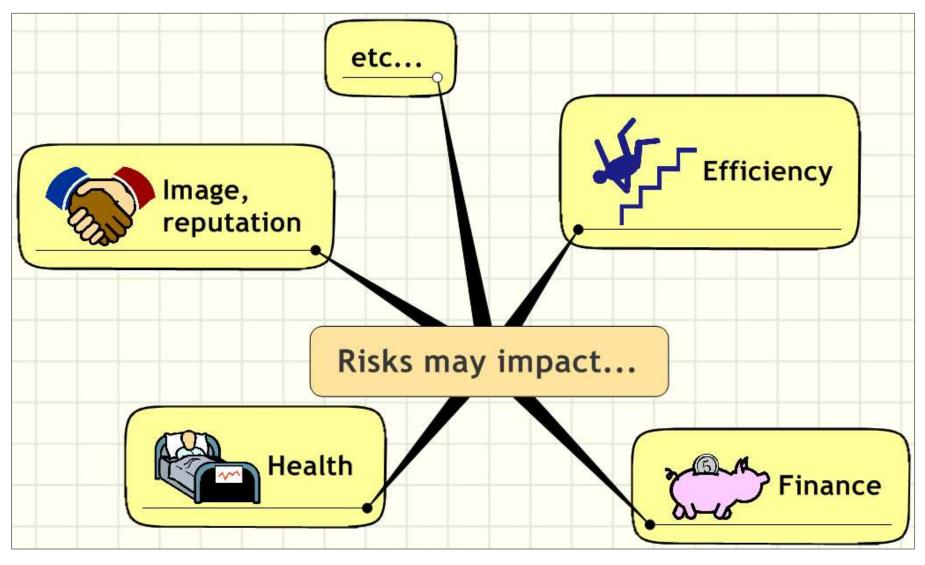
Determination of the most critical risks



Stress testing



Impact categories



Determination of the most critical risks

 Which impact should a risk have so that we consider it to be a severe risk in terms of business efficiency? In terms of health? In terms of finance?

A simple table: amusement part example

	Category1: Business efficiency	Category 2: Finance	Category3: Health	Category 4: Image, reputation	Category5: Regulatory requirements
Severe risks lead to	Business Interruption (the whole park)	Losses more than \$1 000 000	Severe injuries (hospital)	All clients dislike the brand	License suspension
Medium risks lead to	One attraction will not work for more than one hour		Medium injuries	Articles in Mass Media	Fines
Low risks lead to	Additional work for employees	Losses less than \$500 000	Light injuries	Rumors	Warnings, notifications

Determination of a risk management strategy

- Risk management strategies
 - Risk acceptance
 - Risk avoidance
 - Risk mitigation
 - Risk transfer
- What we need to know to choose a strategy:
 - Payoff from the activity than contains a risk
 - Risk management costs
 - Risk impact

Risk acceptance

- We know that there is a risk
- We accept it and continue to work 'no matter what'
- Risk acceptance does not mean 'I don't care':
 - We know what is at risk and why we are taking it
 - We know all the risks that we accepted
 - We know what we will do if risks occur

When does risk acceptance make sense?

- High profits when the payoff is 'worth it'
- When risk mitigation costs are higher than the probable losses
- When something doesn't depend on us
- When we want to accept a risk

Risk avoidance

- We simply eliminate the activity that contains a risk
 - If you don't leave your house, you face no risk of getting into a car accident
 - And you don't get any benefits of being outside

When does risk avoidance make sense?

- If the payoff will be less than the risk mitigation costs
- If you can't accept the risks

Risk transfer

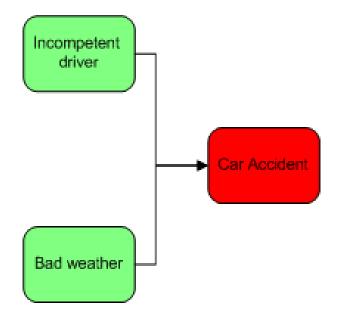
- There are two options:
 - To pay an insurance company for managing our risks (insurance);
 - To pay some other company for managing the activities that contain risks (outsourcing)
- When risks after risk transfer are lower than before...

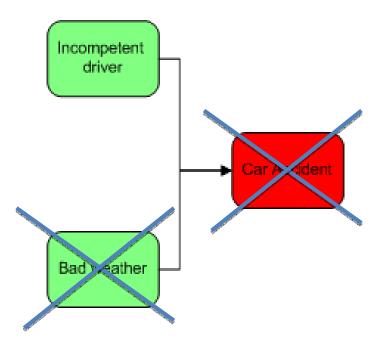
Risk mitigation

- The most interesting strategy
 - Minimizing the probability
 - Minimizing the impact
- Risk mitigation requires investments
- Not all the risks can be mitigated
- Not all the risks should be mitigated

Risk mitigation tools

- Vulnerability analysis
- Diversification
- Hedging





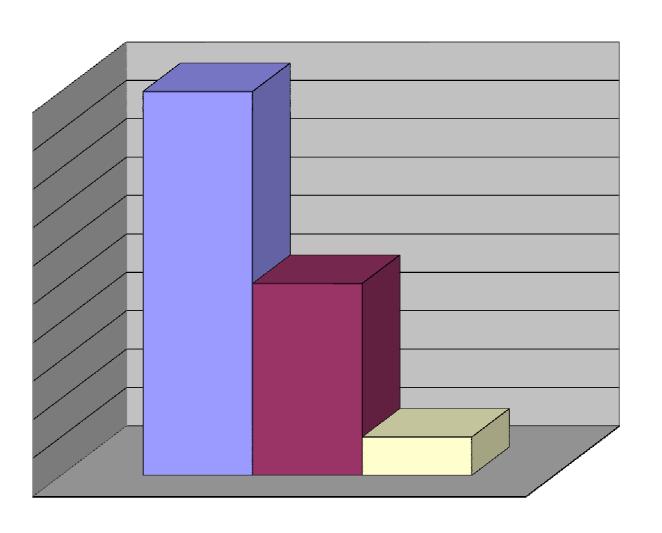
Diversification

- Minimizing our dependence on one particular parameter that can change in the future
 - Investing simultaneously into two assets that behave differently
 - Not storing all information on one memory stick
 - Not getting all supplies from one supplier
 - etc

Hedging

- To fix now everything that may change in the future
 - Booking a table at the restaurant
 - Buying oil which is not yet even pumped
 - etc

Risk acceptance diagram

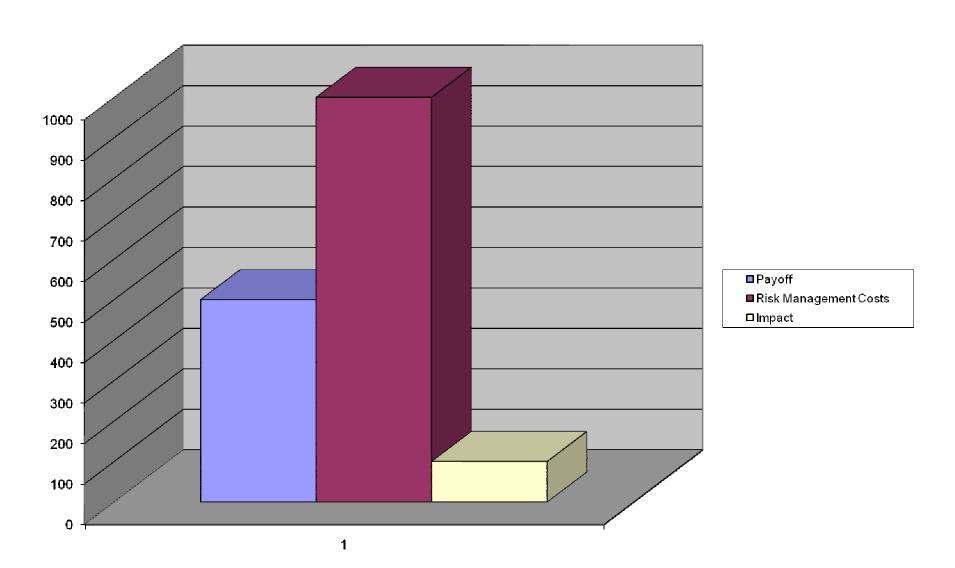


■Payoff

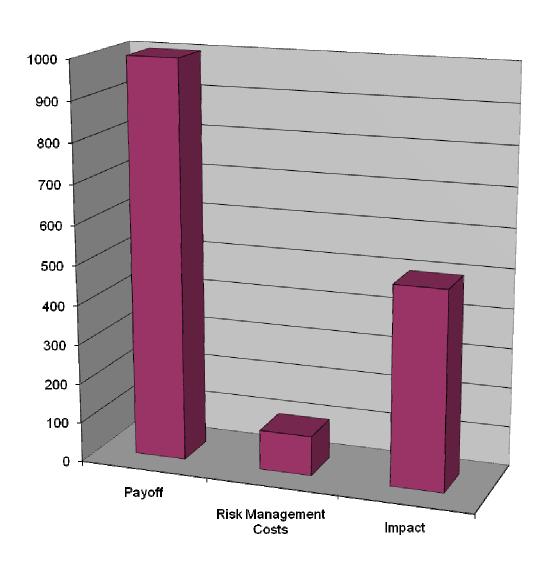
■ Risk Management Costs

□lmpact

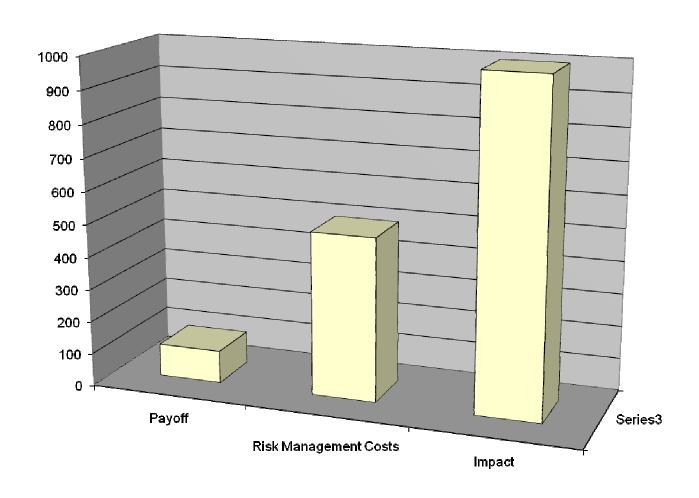
Risk acceptance diagram



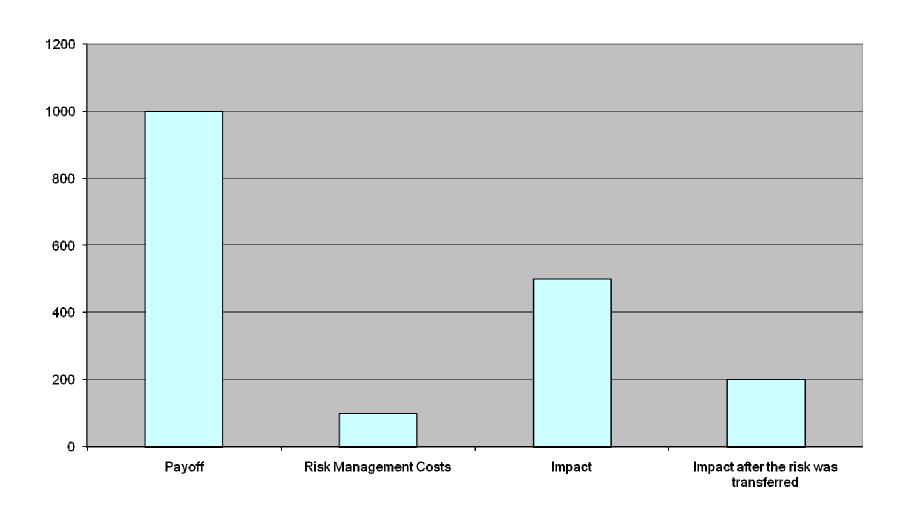
Risk mitigation diagram



Risk avoidance diagram



Risk transfer diagram



Assignment 3

 Determine risk management strategies for all risks that were identified earlier

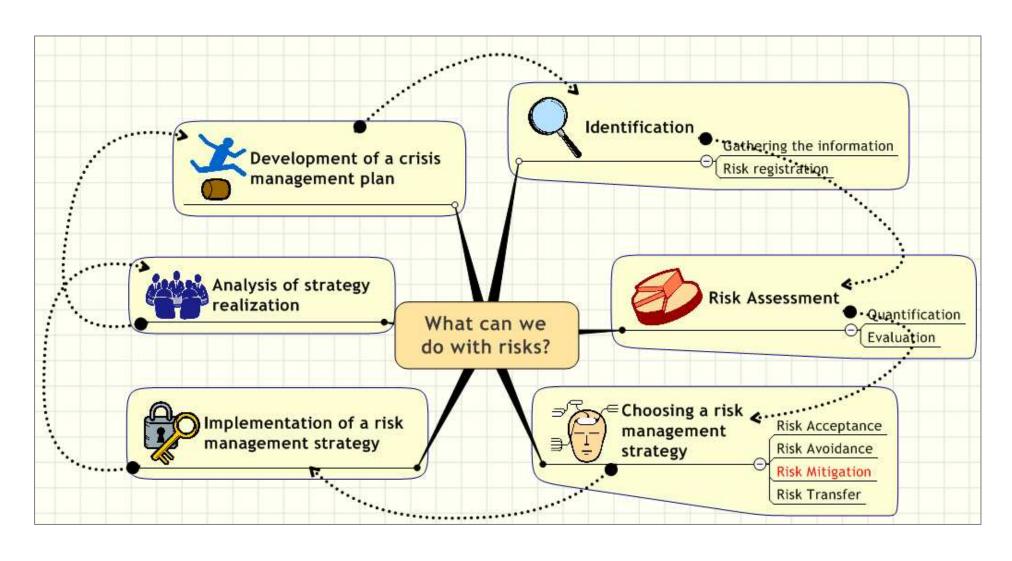
Business continuity management – crisis management

- 'Safety pillow'
- Business continuity plan what will we do if the risk occurs?
 - Who does what, who manages the team, etc.
- Building reserves

Assignment 4

 Develop a crisis management plan for a risk 'Technical break which causes an interruption during the roller-coaster ride'

Risk management process



Conclusion

- Risk management process is similar for all organizations, though implementation depends on the nature of risks that are managed;
- It is not an elimination of uncertainty, it is a way of doing business under the conditions of uncertainty
- If it is implemented properly it will help to find a balance between safety and profitability, profits and costs