Informatics Project Proposal:
Tutorial 2: Risk Assessment and Mitigation

INFR11137: Informatics Project Proposal
Content

1. Risk assessment basics (10 min)
2. Group exercise (20 min)
3. Risk assessment for your project (10 min)
4. Questions (5 min)
5. (optional) Follow up from risk assessment (5 min)
Tutorial Checklist

At the end of this tutorial, you should:
1. Understand how to use a simple risk matrix
2. Understand the basics of a risk assessment
3. Understand that you need to include a risk assessment in your IPP
4. Appreciate some common risks that affect MSc Projects

Record attendance
Definitions

• **Risk**: a situation involving exposure to danger.

• **Risk management**: focuses on identifying and assessing the risks of the project and managing those risks to minimize their impact.

• **Tools** to record and assess risks: allow uncertainty to be addressed by identifying and generating metrics, parameterising, prioritising, and developing responses, and tracking risk. These activities may be difficult to track without tools and techniques, documentation and information systems.
Sources of project risks

• legal frames change,
• lateness,
• not available resources (e.g., participants for studies),
• competition (not in the MSc),
• the system does not work,
• technological disruption (e.g. paradigm shift),
• skills limitations, ambition (single point of evaluation),
• prioritisation.
Risk Matrix (for each possible risk)

- Consider the **likelihood** of the risk event: (low, medium, high)
- Consider the **impact** of the risk if it occurred (minor, moderate, severe)

<table>
<thead>
<tr>
<th></th>
<th>Low Impact</th>
<th>Medium Impact</th>
<th>High Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High probability</strong></td>
<td>medium</td>
<td>high</td>
<td>extremely high</td>
</tr>
<tr>
<td><strong>Medium probability</strong></td>
<td>low</td>
<td>medium</td>
<td>high</td>
</tr>
<tr>
<td><strong>Low probability</strong></td>
<td>extremely low</td>
<td>low</td>
<td>medium</td>
</tr>
</tbody>
</table>
Assessing risks

1. **Identify** a risk (that is possible within the project)
2. What are the **effects and impacts** of the risk?
3. Identify **who or what is affected** (usually the researcher or project)
4. What **control measures** will be put in place
5. Evaluate the **risk likelihood** if control measures followed
6. Evaluate the **risk severity** if control measures followed.
7. Evaluate the overall **risk category** (from matrix)
# Example: Risk assessment for tutorial

<table>
<thead>
<tr>
<th>Activity</th>
<th>Risk</th>
<th>Affects</th>
<th>Control Measures</th>
<th>Risk Likelihood</th>
<th>Risk Severity</th>
<th>Overall Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projector fails</td>
<td>No way to show tutorial material</td>
<td>Students</td>
<td>Bring laptop as backup and circulate slides in advance</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Students get lost</td>
<td>Student cannot attend intended tutorial</td>
<td>Students</td>
<td>Advertise rooms, let students join alternatives, record a summary tutorial</td>
<td>Low</td>
<td>Low</td>
<td>Extremely low</td>
</tr>
<tr>
<td>Building closed</td>
<td>No one can attend the tutorial</td>
<td>Students and tutor</td>
<td>Find an alternative venue or teach online</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>
Group exercise (20min)

**Scenario:** You are the health and safety advisor for a film company. Your first job is to do a risk assessment for a short action film shot in Scotland.

Rather than invent something, let’s watch the final film. What would you have put on your risk assessment?

[https://youtu.be/xQ_IQS3VKjA](https://youtu.be/xQ_IQS3VKjA)

(YouTube search or similar for Danny Macaskill: The Ridge)
## Risk assessment for your project

<table>
<thead>
<tr>
<th>Activity</th>
<th>Risk</th>
<th>Affects</th>
<th>Control Measures</th>
<th>Risk Likelihood</th>
<th>Risk Severity</th>
<th>Overall Risk Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Think about some general sources of risk:

- legal frames change,
- lateness,
- not available resources (e.g., participants for studies),
- competition (not in the MSc),
- the system does not work,
- technological disruption (e.g. paradigm shift),
- skills limitations, ambition (single point of evaluation),
- prioritisation.
Questions (5 min)
Tutorial Checklist

By now you should:

1. Understand how to use a simple risk matrix
2. Understand the basics of a risk assessment
3. Understand that you need to include a risk assessment in your IPP
4. Appreciate some common risks that affect MSc Projects

Record attendance
And finally

Another cool video (if time) that shows the making of the Ridge.

https://youtu.be/uFD-jCFUNNk
(or search for Inaccessible Pinnacle: Danny Macaskill 'Making The Ridge’

Acknowledgements: CUTMEDA