Informatics Project Proposal: Tutorial 2: Risk Assessment

INFR11137: Informatics Project Proposal

Content (1 min)

1. 'Elevator pitch" – post it on Piazza

2. Risk assessment basics (10 min)

3. Group exercise (20 min)

4. Risk assessment in IPP (5 min)

5. (optional) Follow up from group exercise (5 min)

Elevator Pitch – Identifying Main RQ(s) and Gaps

- In this tutorial, the "pitch" requires you to clearly articulate your project's main Research Question (RQ) based on the work you have completed so far.

- In approximately 150 words, state your primary research question(s), ensuring they are specific, focused, and aligned with your project's aims and approach/methodology you will use.

- Your question(s) should address the key gaps in existing research or practice that you have identified. Make clear why these gaps matter and how your research responds to them. Once finalised, post your response on Piazza..

Definitions (3 mins)

- **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.

More about risks (2 mins)

- Normally risk assessment is applied to Health, Safety and Environment (HSE).

- Risk assessments normally concerns damage or injury to any individual in the vicinity of an activity and/or damage to the environment.

- Projects also typically have a risk assessment. It should include HSE assessment as appropriate but also risk to the successful delivery of the project. In your case this is the risk to you being awarded your M.Sc.

- Your IPP should contain a risk assessment.

Sources of project risks (3 mins)

- Changes in legal or regulatory frameworks

- Delays and timeline risks

- Limited resource availability (e.g., participants for studies)

- Competitive constraints (excluding MSc context)

- System failure or technical instability

- Technological disruption (e.g., paradigm shifts)

- Skill limitations or overly ambitious scope (single-point evaluation risk)

- Prioritisation conflicts

- Others?

Risk Matrix (for each possible risk) (4 mins)

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

	Low Impact	Medium Impact	High Impact
High probability	⚠️ medium	❌ high	❌ extreme
Medium probability	✅ low	⚠️ medium	❌ high
Low probability	✅ very low	✅ low	⚠️ medium

Assessing risks (2 mins)

1. Identify/name a risk (that is feasible within the project)
2. What is the effect/impact 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 (3 mins)

Activity	Risk	Affects	Risk Likelihood	Risk Severity	Control Measures	Overall Risk Category
Projector fails	No way to show tutorial material	Students	Medium	Low	Bring laptop as backup and circulate slides in advance	Low
Students get lost	Student cannot attend tutorial	Students	Low	Low	Advertise rooms, let students join alternatives, record a summary tutorial	Very Low
Building Closed	Students cannot attend tutorial	Students	Low	High	None	Medium

Group exercise (15 min)

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 make something up, lets watch the final film... What would you have put on your risk assessment?

Link

(YouTube search or similar for Danny Macaskill: The Ridge)

Exercise: Your project risk assessment (15 mins)

Activity	Risk	Affects	Risk Likelihood	Risk Severity	Control Measures	Overall Risk Category

Finally (1 min)

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

Link

(or search for Inaccessible Pinnacle: Danny Macaskill 'Making The Ridge'

Tutorial Checklist (1 min)

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 M.Sc. projects