



THE UNIVERSITY of EDINBURGH
informatics

Informatics Project Proposal: Tutorial 2: Risk Assessment and Mitigation

INFR11137: Informatics Project Proposal



THE UNIVERSITY of EDINBURGH
INFORMATICS FORUM

Content

1. 'Elevator pitch' (rapid fire around table) (5 min)
2. Risk assessment basics (10 min)
3. Group exercise (20 min)
4. Risk assessment for your project (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

Elevator Pitch – Rapid fire around the group (5mins)

- In this tutorial, the ‘pitch’ requires you to describe what you already know about risk management and how it might apply to research
- 1) What is your background experience in Risk management (you might be a professional, you might never have done anything)
 - 2) Can you suggest one thing that might be considered a “Risk” in a research project (not all projects will have the same risks)

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)

	Low Impact	Medium Impact	High Impact
High probability	medium	high	extremely high
Medium probability	low	medium	high
Low probability	extremely low	low	medium

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

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

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

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

Risk assessment for your project

Activity	Risk	Affects	Control Measures	Risk Likelihood	Risk Severity	Overall Risk Category
GPU fails	Cannot train model and get results	Students	University can provide cloud GPU credits	Medium	High	Medium
Skill not suitable for project	Cannot complete the project effectively	Students and Supervisors	Understand the required skills during sem2 and start preparing	High	High	Extremely high
Supervisor does not have enough time to help with project	Students may be stuck with the project	Students	Allocate alternative supervisors/ free bandwidth	Medium	High	High

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.

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