

Is your research project protected if one of these factors change?

External Risks

	Questions to consider	Examples of effects to research	How this could affect your current project? How could you mitigate this risk? (Avoid, Transfer, Minimise, Accept)	How this affects your previous projects? How could you mitigate this risk? (Avoid, Transfer, Minimise, Accept)
Political	How do government party changes affect this research? How would a change in government affect your work? Is availability of grants likely to be affected by different governments?	Health data on COVID was not correctly reported by countries that did not want to acknowledge the impact of the virus. Often, when an election is coming up, spending slows down. Then post election, there's often a large spend.		
Economic	How will this research project resources be funded into the future? Is this likely or open to commercialisation?	Your institute may cut funding for an proprietary analysis program you rely on. Your institute may start charging for long term storage, which you may need for the retention period of data (or beyond)		
Social	Will there be a backlash from your results and research? Will your research be seen as useful to society?	You may do a study that posts a medicine, treatment or vaccine positively, that may be targeted by the anti-vax community. You may suggest an environmentally friendly building design, but others may point out or criticize the environmental effect of building materials or land clearing. You may be funded by a commercial venture that could be seen as contentious or conflicting with common values.		

Technological	<p>How does a lack of internet affect you?</p> <p>Have you considered cybersecurity?</p> <p>How are you affected by hardware breakdowns?</p> <p>Have you considered your dependence on commercial software or file formats?</p>	<p>Have you lost a thumb drive with research data on the bus?</p> <p>When working away from the office, you may have no internet.</p>		
Environmental	<p>How would your research be affected by the following:</p> <p>Bushfires</p> <p>Floods</p> <p>Epidemics or pandemics</p> <p>Earthquakes</p> <p>Drought</p> <p>Heatwave</p> <p>Structural (building) fires</p> <p>Storms</p>	<p>In 2020, a mixture of drought and COVID led to CPU/GPU shortage due to factories not being able to function. This caused a lack of machine learning infrastructure.</p> <p>Disasters such as floods or heatwaves could mean your teams are not in fields collecting data.</p> <p>Or your samples can become contaminated from overheating or compromised due to power cuts.</p> <p>Could flooding from intense storms damage your computers/offices?</p>		
Legal	<p>Could there be new legislation coming in that may affect your work?</p> <p>Have you ensured ownership of data isn't affected by legal frameworks?</p> <p>Are you in line with health and safety legislation?</p> <p>Are you aware of your institute's policy library and how this affects your work?</p>	<p>In Australia, there is legal requirements on ownership and retention needs for any indigenous research.</p>		

Internal Risks

	Questions to consider	How this could affect your current project? How could you mitigate this risk? (Avoid, Transfer, Minimise, Accept)	How this affects your previous projects? How could you mitigate this risk? (Avoid, Transfer, Minimise, Accept)
Partnerships	<p>What collaborations do you have and how does that affect your work?</p> <p>How do you work with communities?</p> <p>Do you have commercial partners with conditions?</p>		
Information and document management Risks	<p>What sensitive data, records and documents do we have?</p> <p>How is it protected?</p> <p>How can we use it, or make it available to others, to create value for the world?</p> <p>How can it be made available to the public or FAIR?</p> <p>How are you handling cybersecurity?</p>		
Financial Risks	<p>Are you reliant on grant income? How would you handle not receiving the next grant?</p> <p>Limited or no cash flow—do you have enough money coming into the business to pay expenses?</p> <p>Could you handle changing prices from suppliers?</p>		
Operational Risks	<p>Are you covered if a supplier doesn't deliver on time?</p> <p>How do you handle hardware breakdowns?</p>		

	Is there enough time to handle operational tasks?		
Human Resources Risks	<p>Are staff properly trained for their position or how to handle a problem when they arise?</p> <p>What happens when key people from your group leave?</p> <p>What would happen if your supervisor leaves?</p> <p>What would happen if your collaborator leaves?</p> <p>When recruiting, is there skill shortages in your industry, meaning you can't get the specialist skills you need?</p>		
Strategic Risk	<p>Have you taken into account the strategic direction of</p> <ul style="list-style-type: none"> - Your organisation? - Your government? 		
Privacy Risks	<p>How are you handling sensitive data?</p> <p>Are collaborators also handling sensitive data in the same way?</p> <p>Have you got collaborative data agreements across your projects?</p>		