Business case uncertainty register

Risks and uncertainties are key themes throughout development of a business case. Risks can be managed by following the guidance in minimum standard [Z/44 Risk management practice guide](file:///C%3A%5CUsers%5Chelenri%5CAppData%5CRoaming%5COpenText%5COTEdit%5CEC_infohub%5Cc53106370%5CZ%5C44%20-%20Risk%20management%20practice%20guide) or, for approved organisations, a local equivalent (where available). This template can be used to collate and track information relating to uncertainties (as distinct from risks).

In the context of the Business Case Approach (BCA):

* **Risk** refers to the probability of an event having an impact on project delivery (in terms of cost, time or scope), or on the outcomes of the investment. Note that risks can be positive, as well as negative.
* **Uncertainty** refers to a specific type of risk that usually affects the case for change and is typically driven by external factors that lie outside the project team’s control. If realised, uncertainties can affect whether:
	+ the proposed option still represents best value for money
	+ the proposed timing for implementation is still appropriate, or
	+ whether the investment is still needed.

Each business case must be able to demonstrate to decision makers that risk and uncertainty can be managed to an acceptable level, appropriate to the phase of development. To achieve this, risks and uncertainties must be clearly identified, and any management steps must be identified, so they can be clearly communicated to decision-makers, stakeholders and project teams alike.

The process of identifying and managing risks and uncertainties begins right at the start of a business case, in the point of entry (PoE) phase. It continues throughout the development of the business case, as new risks or uncertainties are identified, added to the register, and decisions made about how they should be managed. This template is designed to support this continuous development approach.

Further information on [risk and uncertainty in the BCA](https://www.nzta.govt.nz/planning-and-investment/learning-and-resources/business-case-approach-guidance/the-five-case-model/introduction-to-the-five-case-model/#RiskAndUncertainty) is available on our website.

**How to use this template**

This template is designed to provide a structured approach to recording and managing uncertainties. Its use is advised – it is not mandatory.

* The underlying principle is – identify, record and track uncertainties that affect your business case, and show how they will be managed.
* You do not have to use this template: you can use whatever format is most appropriate to your business case – but you should aim to capture similar information to that in the table below.
* If you need to tailor the register to better fit the context of your business case, for example by adding or removing columns or rows, please do so.

|  |  |
| --- | --- |
| Business case name |  |
| Current phase  |  |
| Date last updated |  |

|  |
| --- |
| **Uncertainties** |
| **Reference #** | **Uncertainty name** | **Uncertainty type** | **Description** | **Case where identified** | **Likelihood** | **Impact** | **Timeframe** | **Key assumptions** | **Scenarios tested** | **Status** | **Uncertainty treatment** |
| *U1* | *Name of uncertainty* | *For example demand; supply; productivity; economic* | *Brief description of the uncertainty, eg potential land-use change, uncertainty relating to demographic or other growth projection, climate change trends or system shocks, technology etc*  | *Case (from the five-case model) where the uncertainty is identified/ described* | *See table below* | *See table below* | *The most likely timeframe for the uncertainty to be realised* | *List any key assumptions*  | *For example,*  | *For example preliminary, live, closed* | *Describe the proposed approach to manage the uncertainty, eg sensitivity testing, real options analysis* |
| *U2* |  |  |  |  |  |  |  |  |  |  |  |
| *U3* |  |  |  |  |  |  |  |  |  |  |  |
| *U4* |  |  |  |  |  |  |  |  |  |  |  |
| *U5* |  |  |  |  |  |  |  |  |  |  |  |
| *U6* |  |  |  |  |  |  |  |  |  |  |  |
| *U7* |  |  |  |  |  |  |  |  |  |  |  |

Uncertainty likelihood

|  |  |  |
| --- | --- | --- |
| **Likelihood** | **Description** | **Example**  |
| Certain | There is a high likelihood the uncertainty will happen |   |
| Probable | It is more than likely the uncertainty will occur | Planning decision that can impact the investment, where precedent strongly indicates the uncertainty will be realised |
| Potential | The uncertainty can be reasonably foreseen but likelihood of occurrence is considered less than probable  |  |
| Remote | The uncertainty is considered unlikely to happen  | System shocks, for example pandemics, global economic crises, climate change impacts |

Uncertainty impact

|  |  |  |
| --- | --- | --- |
| **Impact** | **Description** | **Example**  |
| Negligible | If realised, the uncertainty would not materially affect decisions about the need for investment, nor selection of the best value option.  |  |
| Low | May have minor impact on view of best value option, but not likely to point to a different option  |  |
| Medium | Likely to impact the value for money of the recommended option, or reduce the urgency for investment |  |
| High | May render the recommended option unworkable, or even remove the need for investment completely |  |

**Examples of uncertainty**

The following list is provided to prompt thinking about sources of uncertainty; it is not intended to be an exhaustive list.

|  |  |
| --- | --- |
| **Uncertainty** | **Comments** |
| Population growth | Forecasts of population growth typically carry significant levels of uncertainty.  |
| Demographic changes | As with population as a whole, forecasts of demographic change over time are typically associated with uncertainty.  |
| Land use changes | Demand can be strongly affected by land use change. This could be new development – whether residential, retail or commercial, or it could be significant change in land use, such as conversion of forestry land to dairy farming.  |
| Key interdependencies | Where an investment is dependent on another, separate investment in order to succeed, this can introduce significant uncertainty. For example, if the related investment either doesn’t happen, or the timing or scope changes. Uncertainty can be particularly high where decision making regarding the related investment rests with another organisation.  |
| Technology | New technology can significantly affect demand, often in unexpected ways. For example, the introduction of electric scooters has created a demand for a different mode of transport in many urban areas. Other forms of technology may reduce demand, for example video calling enabling more home-based working.  |
| Climate impacts | Climate change can result in longer-term trends or through changing frequency of ‘one-off’ events, such as storms or wildfires. Longer-term changes in climate can result in changing land use, population etc. For example sea level rise over time may make some coastal communities unviable, or affect transport links. The timing and magnitude of such trends include considerable uncertainty. An increase in the frequency of storm events can affect the resilience of transport links, or affect communities across a region.  |
| Natural events (non-climate) | ‘One-off’ events such as earthquakes or volcanic eruption |
| Economic changes | For example international prices in commodities such as milk or timber; global financial performance (like the impact of the global financial crisis (GFC) in 2008) |
| Other unforeseen events | For example. pandemics – Covid-19 has had impacts on transport demand worldwide, the ongoing implications of which are still not fully understood.  |