



BUSINESS CASE DEVELOPMENT FRAMEWORK

INVESTMENT LOGIC MAPPING GUIDE

RELEASE 2 | DECEMBER 2016

BUILDING QUEENSLAND BUSINESS CASE DEVELOPMENT FRAMEWORK

Building Queensland has been established under the *Building Queensland Act 2015* to provide independent expert advice to the Queensland Government about infrastructure.

This document forms part of the Building Queensland Business Case Development Framework, as follows:

OVERARCHING FRAMEWORKS	
Business Case Development Framework	
Benefits Management Framework	

GUIDANCE MATERIAL	SUPPLEMENTARY GUIDANCE MATERIAL
Strategic Business Case	 Investment Logic Mapping Guide
Preliminary Business Case	Social Impact Evaluation Guide
Detailed Business Case	Cost Benefit Analysis Guide

RELATED DOCUMENTATION
Project Internal Assurance Framework
Engaging with Building Queensland Guides

Building Queensland acknowledges the following work which has informed this guide:

- Investment Management Standard Version 5, Department of Treasury and Finance, Victoria
- Project Assessment Framework, Queensland Treasury
- Investment Management and Better Business Case Guidance, The Treasury, New Zealand.

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V1 December 2016



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1. INTRODUCTION

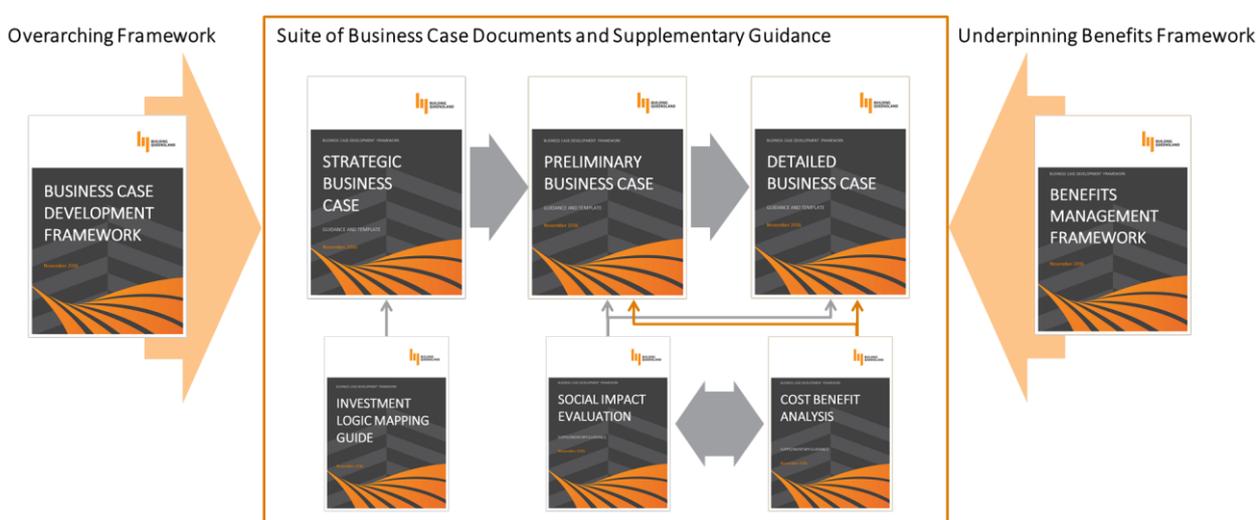
Infrastructure investment decisions have a direct impact on Queensland’s economic and social domain. Good decision making relies on quality proposals, well-developed Business Case documentation and robust review processes.

The BCDF progresses a proposal from conceptualisation (Strategic Business Case), to options generation and analysis (Preliminary Business Case) and finally, to the detailed analysis of the preferred option/s (Detailed Business Case). The BCDF focuses on the development of the following core Business Case documents:

- Strategic Business Case (SBC)
- Preliminary Business Case (PBC)
- Detailed Business Case (DBC).

These documents are supported by a number of other Building Queensland guides, as illustrated in Figure 1.

Figure 1: The Business Case Development Framework



In line with the requirements of the *Building Queensland Act 2015*, Building Queensland’s Business Case Development Framework (BCDF) aims to enhance the way in which infrastructure proposals are developed in Queensland to support improved infrastructure outcomes. Specifically, the BCDF aims to:

- reduce the costs of developing Business Cases
- reduce the time taken to develop Business Cases
- align with best practice to ensure Business Cases meet government requirements (e.g. PAF and assurance activities)
- clarify Building Queensland’s expectations for Business Cases (including those contained within the [Infrastructure Pipeline Report](#)).

The Strategic Business Case (SBC) is the first Business Case in the suite and a robust and well-substantiated SBC is critical to the subsequent development of both the Preliminary and Detailed Business Cases. A carefully considered and well-articulated SBC involves the identification of the actual service need and benefits sought as well as the articulation of potential initiatives that will address the service need and deliver the benefits required.

There are many methods to support service need identification and substantiating and articulating potential initiatives. Building Queensland recommends Investment Logic Mapping as its preferred approach.



1.1. What is Investment Logic Mapping

The Treasury, New Zealand, describes Investment Logic Mapping (ILM) as:

a technique to ensure that robust discussion and thinking is done up-front, resulting in a sound problem definition, before solutions are identified and before any investment decision is made. It is a technique to ensure the 'story' about any proposed investment makes sense (the 'logic' part of ILM) and to test and confirm that the rationale for a proposed investment is evidence-based and sufficiently compelling to convince decision makers to commit to invest in further investigation and planning.

The Investment Logic Map is a simple single-page flowchart that tells the story of an investment and exposes its underpinning logic. It is in plain English and has been designed to answer many of the key questions required to make an investment decision.¹

Building Queensland's ILM approach has been adapted from the ILM guide developed by the Department of Treasury and Finance in Victoria. Building Queensland has adapted the guide in three ways:

- The output results in two maps: an Investment Logic Map and an Initiatives Map, which articulate the service need, benefits sought and potential initiatives. The two outputs support a conceptual separation of the service need and the potential initiatives while also enabling mapping of initiatives to the State Infrastructure Plan (2016)² priorities.
- The logic-mapping process concludes with the identification of potential initiatives, rather than progressing to the design of specific options for solutions. This is designed to support a high-level, strategic focus for the mapping and avoid specific solution-based options.
- The process is designed for flexibility and scalability. Building Queensland acknowledges that complex problems may need to be investigated and conceptualised through more than one ILM workshop and more than one single-page flowchart.

1.2. Purpose of this Guide

This guide details how to:

- use ILM to develop a shared understanding and agreement of the service need, benefits sought and potential initiatives
- prepare an Investment Logic Map and Initiatives Map through one or more workshops (subject to the complexity of the service need); these maps provide a summary of the logic that underpins a potential investment
- plan, facilitate and conclude an ILM workshop.

1.3. Further Information and Support

Contact Building Queensland on 07 3237 7500 for further information and assistance on:

- Strategic and Preliminary Business Case development (Early Stage Project Development Group)
- Investment Logic Mapping (Early Stage Project Development Group)
- Feedback or clarification on any BCDF document (Frameworks Group).

¹ www.treasury.govt.nz/statesector/investmentmanagement/plan/bbc/methods/investmentlogicmapping

² www.dilgp.qld.gov.au/infrastructure/state-infrastructure-plan.html



2. INVESTMENT LOGIC MAPPING APPROACH

The Investment Logic Map and its companion, the Initiatives Map, summarise the SBC by providing an overview of:

- the service need
- the benefits sought from a response to the service need
- the potential initiatives identified to address the service need and achieve some or all of the benefits sought.

Both maps are most effectively developed in facilitated workshop/s. Building Queensland recommends:

- conducting research and engaging with stakeholders prior to the ILM workshop, to seek insight into the underlying causes and impacts of the problem/opportunity
- holding at least one workshop with key stakeholders to develop the Investment Logic Map/s and Initiative Map/s; the number of workshops and maps will depend on the complexity of the issue
- engaging a workshop facilitator who is external to the owner agency (contact Building Queensland for assistance).

Development of an Investment Logic Map and Initiatives Map to support the SBC development involves:

- identifying and articulating the problem/s or opportunity/s underpinning the service need
- conducting preliminary research into the problem/s or opportunity/s to understand the scope, stakeholder perspectives, stakeholder interest, context and history (where appropriate)
- identifying appropriate stakeholders to attend an ILM workshop
- holding an ILM Workshop/s to establish and document:
 - the problem/s or opportunity/s
 - the service need
 - the cause and effects of the problem/s or opportunity/s
 - the benefits sought if the service need is addressed
 - possible strategic responses and business changes which would respond to the service need
 - potential initiatives which could operationalise the strategic responses and business changes and achieve the benefits sought
 - how the potential initiatives align with the State Infrastructure Plan.

2.1. Investment Logic Mapping Risks

Investment Logic Mapping has a number of inherent risks which must be considered and managed when holding an ILM workshop. These risks include:

- failure to understand the problem/opportunity effectively, resulting in the identification of potential initiatives that are not suitable for addressing the actual service need
- focusing on solutions, resulting in a failure to identify potential initiatives which may address the service need in innovative, sustainable and/or more resource-effective ways
- oversimplifying a complex problem/opportunity, resulting in an inappropriate service need being articulated and investigated.



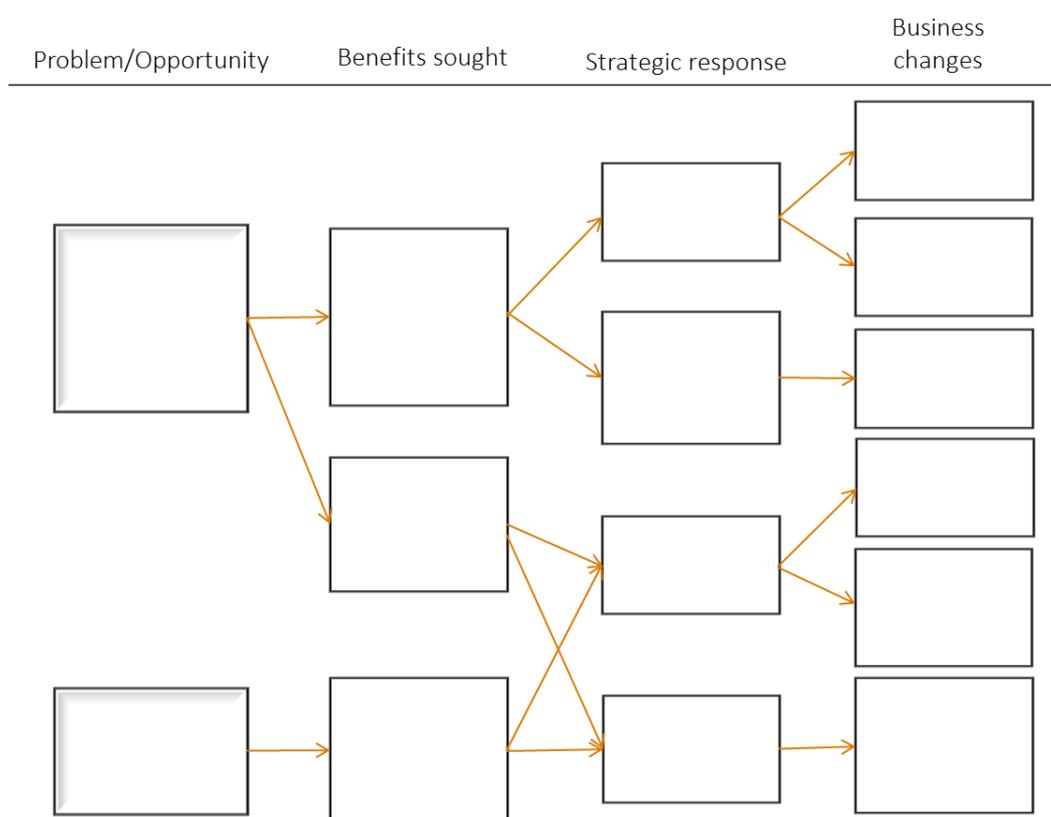
3. STRUCTURE OF THE INVESTMENT LOGIC AND INITIATIVES MAPS

3.1. The Investment Logic Map/s

The Investment Logic Map/s summarises the service need, benefits sought and strategic responses and changes required to address the service need while achieving the benefits. An Investment Logic Map is composed of four columns (illustrated in Figure 2):

- Column 1—Problem/opportunity
- Column 2—Benefits sought
- Column 3—Strategic response
- Column 4—Business changes.

Figure 2: Example Investment Logic Map Structure



The Investment Logic Map/s is essentially a summary of the content of the SBC and can be included in the SBC as either an Executive Summary or an attachment.

3.2. The Initiatives Map/s

The Initiatives Map/s summarises the potential initiatives which may respond to the service need and maps those initiatives to Queensland’s priorities in the State Infrastructure Plan.

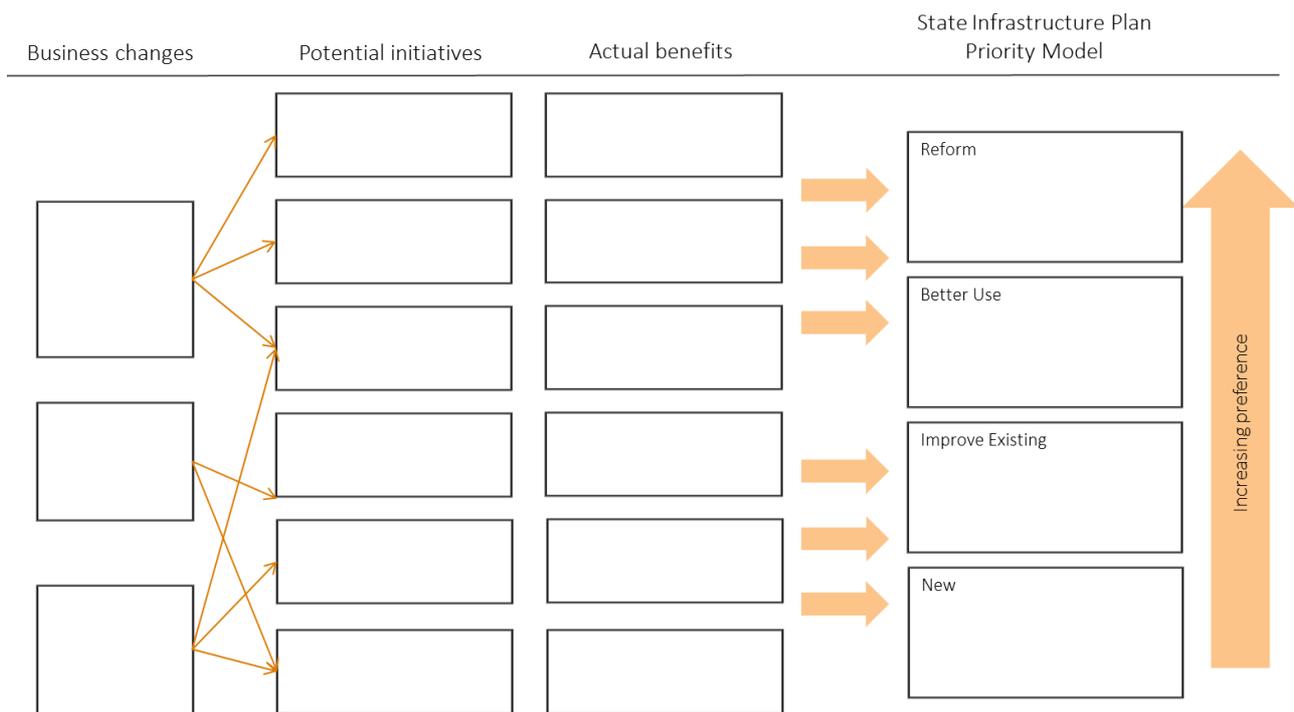
An Initiatives Map/s is developed from the completed Investment Logic Map/s. It is produced by developing the identified business changes into actionable initiatives and grouping them according to the categories identified in the State Infrastructure Plan.



An Initiatives Map includes four columns (illustrated in Figure 3):

- Column 1—Business changes (this is the information from column 4 of the Investment Logic Map)
- Column 2—Potential initiatives
- Column 3—Actual benefits
- Column 4—State Infrastructure Plan Priority Model.

Figure 3: Example Initiatives Map Structure



4. PREPARING FOR AN INVESTMENT LOGIC MAPPING WORKSHOP

ILM workshops are designed to ensure that a broad range of potential responses to the service need are identified and assessed. The ILM workshop has two main goals:

- develop a clear understanding of the nature of the service need, including:
 - the underlying problem/s or opportunity/s that create the service need
 - why responding to the problem/opportunity is necessary
 - the strength of available evidence to confirm both the cause and effect of the problem/opportunity
 - the benefits that can be expected from successfully addressing the service need
 - the possible strategic responses and business changes for addressing the service need
 - the potential initiatives that may affect the strategic responses/business changes
- achieve alignment with key stakeholders on the issues discussed above at the earliest stage.



4.1. Preliminary Research

Before conducting the ILM workshop, the business owner should gather as much data and information as possible. This will enable workshop participants to make informed decisions. Relevant information may include:

- details of the location, geographic reach and demographic reach of the problem/opportunity
- the relevant stakeholders, including:
 - a list of stakeholders (public, agency, potential delivery partners, possible integration/coordination opportunities)
 - stakeholders’ perceptions of the causes and whether these causes change over time (worsen or improve)
 - the actual and potential impacts of the problem (or the potential impacts for the opportunity) on stakeholders—economically, socially and environmentally
- information about:
 - why it is necessary to address the problem or opportunity (supported by evidence of a service need)
 - any urgency in responding to the problem or seizing the opportunity
 - the timeframe for any potential impacts
 - what is expected to occur if the current state is maintained (the investment proposal is not progressed)
 - expectations of service demand (anticipated or existing), supported by evidence
 - how addressing the service need will contribute to the State Infrastructure Plan and/or other strategic plans
 - how any response might support or integrate with other initiatives and projects within the broader system or program.
- information on relevant planning works or feasibility studies previously undertaken (noting the scope, depth and results of any previous investigations and studies).

4.2. Identifying Stakeholders

Stakeholder involvement in Investment Logic Mapping is important because:

- a stakeholder’s perspective will influence how they frame or understand the problem/opportunity, the service need and any potential response
- different stakeholders will have different perspectives
- the way that the problem/opportunity is perceived and articulated will ultimately shape the range of potential initiatives identified
- an effective definition of the service need may involve canvassing multiple stakeholder perspectives
- engaging stakeholders ensures stronger investment logic and therefore a stronger and more robust SBC.



Stakeholders include:

- public stakeholders—including service/investment users, neighbours and special interest groups
- internal stakeholders—including delivery teams and performance monitoring groups
- external stakeholders—including potential delivery partners and sector experts
- government stakeholders—including relevant Ministers, other agencies, potential partners, central agencies and other government levels.

A simple method for identifying stakeholders involves assessing cause and effect (refer to Section 5.2.3) and asking the following two questions:

- Who is impacted by this?
- Who can influence/change this?

Different mechanisms may be necessary to engage with different types of stakeholders. Section 3 of the 'Strategic Business Case Guidance and Template' and Appendix 2 of the 'Business Case Development Framework—Overview' provide details on identifying and engaging with stakeholders.

4.3. Key Roles and Responsibilities

4.3.1. Facilitator Responsibilities

The facilitator should:

- ensure the workshop is scheduled so the business owner can attend
- with the business owner, identify appropriate people to attend the workshop and suitable time is allocated for the discussion
- have the business owner send an email to participants, outlining the purpose of the discussion (example in Appendix 2)
- prepare for the workshop:
 - arrange suitable resources i.e. at least one suitably large whiteboard, a flip chart, and a computer and data projector (a computer and projector are most useful if a support person is available to develop the ILM electronically in parallel with the whiteboard development)
 - draw an ILM framework on one whiteboard, with column headings and column lines, leaving a second whiteboard for jotting down issues and making working notes.
- ensure outputs and the developed ILM are provided to the business owner within the timeframes defined in this document (refer to Section 6)
- if necessary, provide a 'consolidated' ILM which seeks to complete, consolidate and simplify the ILM developed in the workshop for consideration by the business owner.

4.3.2. Responsibilities of the Business Owner

The business owner's tasks throughout the process are to:

- invite the necessary participants
- provide the necessary briefing materials for the facilitator (identified in Section 4.1)
- be the key decision maker
- approve the completed ILM.



The business owner is responsible for identifying the people who should attend the ILM workshop. The business owner should bring together people who understand the problem/opportunity and can provide evidence confirming that the identified problem/opportunity is real.

The business owner is also likely to be the person who will be held accountable for the success of any project initiated to address the service need (i.e. they will assume the role of Project Owner or Senior Responsible Officer (SRO) for subsequent initiatives).

4.4. Structuring the Workshop

4.4.1. Workshop Attendees

The ideal number of active participants in a workshop is between 5 and 8; however, depending on the nature of the investment, the number could be more. Workshop participants should include:

- the business owner—this is the person perceived to be primarily responsible for addressing the service need and is the key decision maker
- stakeholder representatives—representing those who are or may be impacted by the service need or who can influence a response (including those who may provide funding for eventual solutions)
- people with a track record of innovative thinking, who can minimise the risk of participants offering only business-as-usual solutions to problems
- people with experience in business analysis with backgrounds in broader strategic policy areas of the agency, who can help to ensure the problems are appropriately explored and challenged
- key stakeholders who will be important in making the potential investment successful (including stakeholders from outside the agency if appropriate).

4.4.2. Timing

When a single workshop is conducted, the following timings are recommended (Table 1). This allows for a 2.5-hour workshop with a 30-minute contingency.

Table 1: Approximate Workshop Timings

ACTIVITY	DURATION (MINS)	CUMULATIVE (MINS)
Introductions and settling in	15	15
Service need definition	45	60 (1 hour)
Benefits	30	90
Strategic response	30	120 (2 hours)
Potential initiatives	20	140
Initiatives map	10	150 (2.5 hours)

Workshops that are expected to last longer than three hours should be split into two or more workshops.



4.4.3. General Timing Tips

Try these strategies to keep the workshop running to time:

- maintain time-pressure awareness throughout the discussion—although 3 hours is allocated for the workshop, aim for completion within 2.5 hours (energy levels in the room tend to drop off after 2.5 hours and attention starts to waver)
- if necessary, allow for ‘venting’ of ideas in the first period (10–15 minutes).

5. DURING THE INVESTMENT LOGIC MAPPING WORKSHOP/S

5.1. Setting Expectations

It may be helpful to set participants’ expectations for the workshop by discussing:

- the workshop’s objective is to produce a largely complete ILM within the 2.5–3 hour timeframe and the facilitator’s job is to ensure this occurs
- workshop participants are recognised as the experts on this subject; their knowledge and experience is expected to inform the discussion
- the workshop is a first step in the investment process and its outputs will represent the best available view at the time. Much more work will be conducted on any potential investment, including the development of a Strategic Business Case, a Preliminary Business Case and a Detailed Business Case (if the project remains viable)
- a single workshop can provide intensive exploration of the problem/opportunity, but it is unlikely that there will be sufficient time to get the wording of the service-need statements exactly right. The focus of the workshop, therefore, will be on achieving clear agreement about the intent of the wording, with final editing and wordsmithing undertaken later.

5.2. Articulating the Problem/Opportunity

The workshop should identify and clearly articulate the problem/s or opportunity/s that underpin the service need to be addressed. Understanding the problem/opportunity requires:

- preliminary research—including stakeholder consultation and data collection
- agreement among key stakeholders (including potential service delivery partners) about what the service need constitutes. An ILM workshop is an effective mechanism for achieving this shared understanding. The ILM workshop will produce a number of statements that clearly articulate the problem or opportunities underpinning the service; these need to be included in column 1 of the Investment Logic Map.

5.2.1. Approach

To identifying the problem/opportunity:

- have participants identify the key issues
- once the issues list reaches a natural conclusion, identify themes and categorise the list under the themes (e.g. inefficiency, service quality, reputation, injury and safety, cost, risk, productivity or waste). The most important issue becomes the starting point for identifying and articulating the first problem (including why it is a problem).



A key challenge to articulating the problem/opportunity is to focus on the problem/opportunity itself and why it is necessary to address it/them rather than identifying potential solution/s.

5.2.2. Concerns

Potential issues may arise if the participants:

- view a problem/opportunity within a political context (e.g. as an election promise or a Minister's request) or as a compliance requirement. In this situation, the underlying community need that stimulated the election promise, Minister's request or compliance requirement should be identified. Typically, all of these situations have a real and evidence-based need that can be described in the service need statement
- start at a low level such as discussion about a broken or outdated asset; this may result in the workshop moving down a solution pathway.

5.2.3. Analysing Problems/Opportunities

Problems/opportunities should be analysed from two perspectives: the cause and the effects. Understanding the likely causes and the effects enables identification of:

- potential strategies and business changes that may remove or minimise the causes
- potential strategies and business changes that might minimise (or maximise) the impacts
- the benefits sought
- sources of data to measure benefits sought
- impacted stakeholders
- stakeholders who can influence the causes or effects.

Understanding causes and effects will support the development of an SBC that focuses on outcomes sought rather than on potential solutions. This understanding will also help to sharpen the problem/opportunity statements and provide a starting place for the identification of strategic responses, business changes and potential initiatives. Root cause analysis is a tool that can help to unpack the issue by exploring the source of the problem and identifying why an issue may be a problem.

The fictional example in Figure 4 illustrates the line of questioning used in root cause analysis to understand the problem/s or opportunity/s.



Figure 4: Example of Root Cause Analysis

Finding the root cause

We have an issue around 'High levels of toxicity in a national park'.

Question: What caused the high levels of toxicity?

Answer: The water quality was declining.

Question: What is causing the decline in water quality?

Answer: Pollution from a nearby factory and run-off of pesticides from agricultural land.

Focus first on the factory.

Question: What is causing the factory pollution?

Answer: Lack of standards-based filtration equipment.

Question: Why don't they have appropriate filtration systems?

Answer: Cost and lack of monitoring to ensure compliance.

Now let's look at the pesticide run-off.

Question: What's causing the increase in run-off of pesticides?

Answer: Excessive pesticides being used by local farmers.

Question: Why are farmers using more pesticides that are of a greater strength than they need?

Answer: Outdated farming practice.

This example highlights two points:

- there are two aspects to the cause of the problem, rather than simply the high-level, overarching cause of *high levels of toxicity*
- identifying the root causes means that the strategic responses can be better targeted. Rather than a strategic response attempting to address the cause of *high levels of toxicity* (a discussion which could head in many different directions), the strategic response will address two very specific issues.

It is important to identify the true, underlying effects that are associated with the causes.

5.2.4. Creating Problem/Opportunity Statements

The problem/opportunity statements are recorded in the first column of the ILM.

The challenge to formulating a problem/opportunity statement is to refrain from being captured by any possible solution (which is where people typically want to start a discussion). Instead, focus on the negative impacts or effects that form the impetus for change.

Extracting good problem/opportunity statements is likely to take up a significant proportion of the workshop. It is critical to get the initial statements correct.

The problem/opportunity statements must be supported by evidence. Ideally, an attendee at the ILM workshop should be prepared to present evidence of the problem/opportunity.



A problem/opportunity statement should be:

- expressed in plain English and include a clearly defined cause and effect
- supported by evidence to verify both the problem/opportunity and the cause and effect
- compelling and something the organisation and/or community care about (i.e. if the effect or consequence is of little importance or concern, the problem/opportunity is not compelling).

Key questions to consider when developing a problem/opportunity statement include:

- What is the cause and what is the effect or consequence?
- What are the drivers for investment?
- What will happen if nothing is done?
- What trigger means a response is required now?
- What is the effect or consequence that we really care about?
- Can we do something about remedying the cause (or what is broken)?
- What evidence is there to support the relationship between cause and effect?

These hints will help develop the service need statement:

- focus on the core problem/opportunity rather than the symptoms of the problem
- if the investment is driven by a political imperative (e.g. it's an election promise or a Ministerial request), set out to identify the community need that stimulated the political response
- seek to take a strategic view rather than a tactical view (a tactical view is often asset or solution focused). Avoid problem/opportunity statements that might indicate a particular asset solution (e.g. refer to 'long commute times' rather than 'motorway congestion')
- where possible, frame the problem/opportunity statement around the impacts the problem/opportunity is having on stakeholders rather on the adequacy of particular assets.

5.2.5. Consider Relative Importance

Each problem/opportunity should be ranked to indicate its relative importance. This provides a priority listing for identifying strategies and business changes. In an ILM workshop when problem/opportunity statements are developed when articulating the service need, the workshop participants should agree on their relative importance.

5.3. Articulating the Service Need

Information to be incorporated in a statement of service need includes:

- the problem or opportunity to be addressed
- why it is necessary to address the problem or opportunity.

The service need may result from a problem or opportunity, but must include evidence of why the problem/opportunity should be addressed (i.e. an initiative developed in response to a current or future service need that may be 'nice to have' but is not supported by evidence that a response is **necessary** should not be progressed).

Evidence to support both the problems/opportunities to be addressed and the necessity of that response should be included in an attachment to the SBC.



5.3.1. The Investment Title

The Statement of Service Need may be used as the title for the SBC and Investment Logic Map.

It is imperative that the Statement of Service Need and title of the SBC do not pre-empt the choice of solution (e.g. the SBC title for a fictitious high school could appropriately be 'Responding to Educational Needs in South Western Queensland' rather than 'Adavale High School Replacement').

5.4. Identifying Benefits Sought

The benefits sought articulate an initial concept of what the service need aims to achieve (i.e. the benefits to the community, enterprise or organisation that aim to be delivered as a result of any investment). The benefits sought should include the potential to deliver increased value, where possible, while addressing the service need.

Documenting the benefits sought provides a baseline for comparing the benefits expected to be achieved by each potential initiative. This will allow potential initiatives to be ranked according to their potential benefits.

Although benefits should not necessarily be excluded at SBC stage, it is necessary to consider the eventual need to effectively manage and measure the benefits. To be articulated in the Benefits Statement, a benefit needs to pass three tests:

- it needs to remove or mitigate the defined problems (or optimise the opportunities) and be aligned to the outcomes valued and articulated by the agency
- it needs to be supported by one or two Key Performance Indicators (KPIs) that are meaningful, preferably measurable and attributable to the investment; KPIs assist when developing the Strategic Response (refer to Section 5.5.1)
- it needs to be resource effective—the effort required to monitor and measure the benefit is commensurate with the value and insight it provides the organisation.

5.4.1. Creating Benefit Statements

An effective Benefit Statement supports an investment focus rather than a project delivery approach to the problem. It focuses attention on why an investment is being made rather than on the asset to be delivered.

Key questions to consider when developing a Benefit Statement include:

- What value will we get out of this investment and how will we know whether value has been delivered?
- What benefits will the organisation expect in successfully responding to the problem?
- What outcomes will we get from remedying this problem?
- What benefit will government and the community get from this investment?
- What part of the government agenda will this investment support?
- What KPIs will demonstrate value and are outcome focused?

The Benefit Statement is made up of an overarching statement that provides line-of-sight to the outcomes the organisation seeks and is supported by a number of KPIs. Benefit Statements should provide an obvious connection to the government's or agency's outcomes, but be contextualised to indicate their local impact.

It is critical that any benefits claimed are supported by reasonable KPIs, which are meaningful, attributable and measurable. These KPIs should be outcome focused, rather than output or activity focused. The emphasis should be on the results or impact of the work done to deliver the benefit and overcome the problem.



The Benefits Statements are included in column 2 of the ILM and should be linked to the corresponding problem/opportunity statements. Benefits should also be documented in the Benefits Register (refer to Section 4.1 of the Strategic Business Case Guidance and Template).

5.4.2. Consider Relative Importance

Benefits should be ranked in the same way as the service need or problem/opportunity. Aspects to consider when ranking benefits include:

- relative merit of the benefit sought
- risk
- impact on stakeholders
- scope of benefit.

Benefits sought in a response to the service need should be compared to the benefits to be achieved from potential initiatives (and resultant options), to assess which initiatives should/could be progressed (refer to Section 5.6.2).

5.5. Considering Strategic Response and Business Changes

Strategic responses and business changes are the internal and external activities that may be implemented to affect change. The identification of strategic responses and business changes should not be constrained by agency boundaries; instead, they should focus on achieving the benefits. Potential service delivery partners may be identified as a result of effective strategic response and business change identification.

Strategic responses are included in column 3 of the ILM and linked to the corresponding benefits. Business changes are included in column 4 of the ILM and linked to the corresponding strategic responses and column 1 of the Initiatives Map.

5.5.1. Strategic Response

The strategic response includes a number of high-level interventions that describe a potential response to identified problems/opportunities.

The purpose of a strategic response is to address at least part of the service need and deliver some of the identified KPIs. The strategic response must remain sufficiently high level so as not to lock the agency into a specific project option.

A valid strategic response must:

- allow more than one possible solution
- address at least part of the problem
- deliver at least some of the identified KPIs
- ideally allow for more than one possible initiative.

A strategic response can respond to problems by:

- responding directly to the problem to minimise or negate it
- implementing strategies to influence the causes of the problem:
 - reduce the opportunity for the problem to occur
 - change the supply (treat it or fix it)



- implementing strategies to influence the effects/impacts of the problem:
 - change the demand (stop, slow, divert or increase it)
 - improve productivity or throughput efficiency.

Key questions in identifying and articulating a strategic response include:

- What strategic responses will best respond to the problems and deliver the benefits?
- What is a response to the cause of the problem/opportunity?
- How will the problem be remedied or rectified?
- Do the stakeholders who are present have the power/influence to respond to this? Are the appropriate people available to develop responses and, if not, what other stakeholders should be invited into this conversation?
- Does this align with the agency's strategic role and direction?
- Have ways to change demand, improve productivity, improve throughput efficiency and/or change supply been canvassed?
- Will this deliver on the KPIs, their measures and targets?

5.5.2. Business Changes

Business changes are the possible changes that could be made that would deliver the strategic responses. Not all identified business changes will be required and some might subsequently be 'either/or' choices. Business changes may be linked to more than one strategic intervention.

Identifying a range of business changes will not necessarily mean that they will all be implemented. However, the list of business changes should, in their totality, address the service need (recognising that there may be 'either/or' choices to be made later).

5.6. Potential Initiatives

Potential initiatives are high-level activities to address the service need, culminating from the strategic responses and business changes.

Potential initiatives may include activities that improve the use of an asset, change behaviour or focus, improve the capacity of an existing asset or implement a new asset. These options are generally referred to as non-asset, asset-lite and asset solutions.

Potential initiatives may, at some future point, become options, projects or elements of a program. Not all potential initiatives are likely to be implemented and some actions may become redundant as a result of other identified/implemented actions. However, the full set (program) of potential initiatives should provide confidence and be capable of addressing the service need and realising the benefits sought, recognising that some potential initiatives might be 'either/or' choices that will be made later.

The potential initiatives are the things that must be done by the business if the expected benefits are to be delivered. They provide the detail of how the strategic response will be put into effect.

Features of potential initiatives include:

- each will solve some or the entire problem (some initiatives may only address part of the service need while others may resolve it entirely)



- some may defer the need for capital expenditure by reducing the size of the problem or providing a better framework for future investments (e.g. a better policy framework), even though they may address only part of the service need
- some may be mutually exclusive (i.e. if you do one, you would not do the other)
- the final solution is likely to be a combination of potential initiatives.

The key questions this section aims to answer are:

- How will we undertake or implement the strategic responses we identified?
- Do these initiatives align with our strategic responses?
- Is this approach feasible?

5.6.1. Documenting Potential Initiatives

Documentation of potential initiatives should include:

- a high-level concept of what the initiative will do (note that this conceptualises the response but does not specify options)
- identification of benefits that may be achieved (this may include additional benefits and dis-benefits emerging from the potential initiatives)
- identification of stakeholders and beneficiaries (including stakeholders who may be impacted negatively by the proposed initiative)
- identification of any potential service delivery partners and/or integration opportunities
- a high-level cost estimate of the proposed initiative to provide decision makers with an opportunity to consider the potential initiatives in terms of comparative high-level cost.

A summary statement of any potential initiatives is included in the second column of the Initiatives Map.

All benefits identified should also be documented in the Benefits Register.

5.6.2. Compare to Benefits Sought

The benefits to be achieved if the initiatives be implemented (column 3 of the Initiatives Map) should be documented and compared with the initial benefits sought (column 2 of the Investment Logic Map). This ensures that proposed initiatives remain focused on achieving the benefits sought. Initiatives that do not align with the benefits sought should be discarded or redefined.

Additional benefits may be noted during the identification and articulation of potential initiatives. These benefits should also be considered in the relative value of the initiatives and will provide an indication of which initiatives should/could be progressed.

5.6.3. Mapping the Initiatives to the State Infrastructure Plan Priority Model

The final column of the ILM maps the potential initiatives to the options categories identified in the State infrastructure Plan (2016) (refer to Figure 5), namely:

- Reform—typically non-asset initiatives
- Better use—typically improving service performance
- Improve existing—typically asset-lite solutions
- New—typically new assets.



Figure 5: Queensland Government Prioritisation Process as Illustrated in the State Infrastructure Plan (2016)



5.7. Finalising the Investment Logic and Initiatives Maps

It may not always be possible to finish a workshop with a fully complete Investment Logic Map and Initiatives Map. Although both maps should be largely complete with the content of all columns identified, there may be gaps (such as missing KPIs).

Within 24 hours of the workshop, the information should be entered into the ILM template and sent to the business owner as an exact copy of the workshop output.

Within 48 hours, a consolidated (with some wordsmithing) and potentially a simpler or more refined ILM should be developed. The business owner must approve any changes.

6. AFTER THE WORKSHOP

- Within 24 hours of the session, send to the business owner and all participants:
 - version 0.1 of the ILM. This should be largely a word-for-word copy of the workshop output
 - a photograph of the whiteboard showing this version 0.1.
 - copies of any notes made during the workshop.
- Within 48 hours, create a consolidated version of the ILM. This version aims to simplify and refine the original ILM without changing its intent or message. Opportunities may include:
 - completing the ILM if some aspects were not finalised during the workshop (e.g. rankings, linkages, Initiatives Map, KPIs)



- wordsmithing or editing
 - consolidating the items in columns into a smaller number
 - grouping potential initiatives into logical work packages.
- With the consolidated ILM, provide an itemised list of any material changes made to ILM version 0.1.
 - If necessary, make any observations about the strengths or weaknesses of the ILM or draw attention to areas that need input to complete.
 - Test the consolidated ILM against the ‘Quality Assessment Form–Investment Logic Map’ (Appendix 1).

7. RESOURCES

AS/NZS ISO 31000:2009 Risk Management–principles and guidelines.

Australian Government. 2015. National PPP Policy Framework.

<https://infrastructure.gov.au/infrastructure/ngpd/files/National-PPP-Policy-Framework-Oct-2015.pdf>

Department of Treasury and Finance, Victoria. Investment logic map example.

www.dtf.vic.gov.au/Publications/Investment-planning-and-evaluation-publications/Investment-management/Investment-logic-map-example-Initiative

New Zealand Treasury. 2015. Better Business Cases: Suggested Methods and Tools.

www.treasury.govt.nz/statesector/investmentmanagement/plan/bbc/methods/methods/index.htm#strategi_c

New Zealand Treasury. 2016. Investment Management.

www.treasury.govt.nz/statesector/investmentmanagement

New Zealand Treasury. 2016. Managing Benefits from Projects and Programmes: Guide for Practitioners.

www.treasury.govt.nz/statesector/investmentmanagement/plan/benefits/guidance/managingbenefits-guidance.pdf

NSW Government. 2015. Benefits Realisation Management Framework.

www.finance.nsw.gov.au/publication-and-resources/benefits-realisation-management-framework

Queensland Government. Community engagement. <http://www.qld.gov.au/web/community-engagement/guides-factsheets/>

Queensland Government. 2015. Project assessment framework. www.treasury.qld.gov.au/projects-infrastructure/initiatives/project-assessment-framework/index.php

Queensland Government. 2016. State Infrastructure Plan. <http://www.dilgp.qld.gov.au/infrastructure/state-infrastructure-plan.html>

Social licence resources:

- <http://sociallicense.com/>
- <http://learningforsustainability.net/social-license/>
- <http://accsr.com.au/>

Transport and Infrastructure Council Australia. 2016. Australian Transport Assessment and Planning Guidelines: T6 Benefits Management. <http://atap.gov.au/tools-techniques/benefit-management/index.aspx>

VicRoads. 2015. Evaluating Investment Outcomes (links to VicRoads Benefits Management Framework Version 2). www.vicroads.vic.gov.au/planning-and-projects/evaluating-investments



APPENDIX 1: QUALITY ASSESSMENT FORM—INVESTMENT LOGIC MAP

The purpose of an Investment Logic Map is to clearly and honestly communicate the case for a potential investment. Whether the case for the investment is weak or strong then becomes a matter of judgement for the reader. There are five tests that an Investment Logic Map must pass to be considered of an acceptable standard.³

Test 1: Could a layperson read and easily comprehend the story of this investment to the point where they could have some opinion of it?	Assessment:
	YES / NO / MAYBE

Comments:

Test 2: Is each <i>service need</i> a ‘call to action’ that conveys what is broken (both the cause and effect)?	Assessment:
	YES / NO / MAYBE

Comments:

Test 3: Is there a logical connection between the effect of the problem/opportunity and the <i>benefits</i> and their KPIs?	Assessment:
	YES / NO / MAYBE

Comments:

Test 4: Is the <i>strategic response</i> one that:	Assessment:
<ul style="list-style-type: none">• is likely to deliver the expected benefits and KPIs• allows for more than one <i>project option</i>• seems to be a valid response to the <i>problem(s)</i>.	YES / NO / MAYBE

Comments:

Test 5: Does the <i>solution</i> read as a set of logical and sensible business changes and assets that need to be undertaken to adequately deliver the <i>strategic response</i> ?	Assessment:
	YES / NO / MAYBE

Comments:

How would you rate this ILM?	Assessment:
	GOOD / FAIR / UNSATISFACTORY

Comments:

³ Investment Management Standard, Department of Treasury and Finance, Victoria. www.dtf.vic.gov.au/Publications/Investment-planning-and-evaluation-publications/Investment-management/Investment-logic-map-quality-assessment-form



APPENDIX 2: SAMPLE EMAIL—BEFORE THE INVESTMENT LOGIC MAPPING WORKSHOP

Agency email outlining the purpose of the discussion to the participants.

[Greeting]

[Brief description of the proposed investment]

As a way to consolidate our thinking about this initiative we will hold an Investment Logic Mapping workshop with the aim of properly understanding and articulating the need for this investment. You are invited to help define this potential investment. The first workshop will be held:

Date:

Time:

Venue:

The workshop, which will last a maximum of three hours, is designed to extract the compelling logic that underpins a potential investment and develop an Investment Logic Map (a single page story of the investment).

The Investment Logic Map evolves to form the basis of all subsequent investment decisions and is ultimately used to measure the effectiveness of the investment. As a subject-matter expert with an understanding of the service need, your involvement is vital to enable effective investment decision making.

The discussion will be facilitated by [Facilitator's name]. The role of the Facilitator is to extract the story of the potential investment from the group in the form of an Investment Logic Map.

I look forward to seeing you at the workshop.

[Sign off]

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