# **Problem Definition**

Investment Management Guideline

Version 3.0

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Department of Treasury and Finance

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The Victorian Government would like to acknowledge the work done in this field by Cranfield University (UK). This was important in the early evolution of this Guideline.

## 1 Introduction

## 1.1 The Investment Management Standard

Investment management establishes a set of simple practices that allow an 'investor' to clearly define the need for an investment, shape the solution and track the delivery of benefits throughout the investment lifecycle. The adoption of these practices has been shown to drive investments that are more effective at implementing policy and reducing the risk of investment failure.

The current Investment Management Standard defines six practices that are documented in the form of guidelines as depicted in Figure 1. This guideline relates to the *problem definition*.

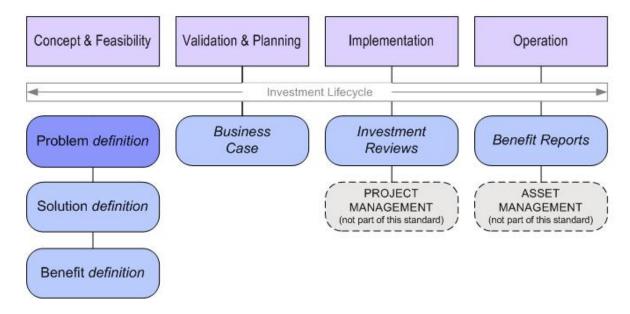


Figure 1: Guidelines of the Investment Management standard

# 1.2 The purpose of this guideline

One of the primary reasons that investments fail is that the basic logic for the investment was either not understood or was not shared by all the parties who needed to know. The common cause of this is that the investors themselves were not clear as to what was driving the investment decision or what benefits the investment could reasonably be expected to deliver.

The *problem definition* workshop is used to rectify this lack of clarity. The logic for an investment is identified at a two-hour facilitated workshop and is defined in the form of an investment logic map (see example in the appendix).

This guideline is written for the 'Investor', that person who has the business need, who will be making or advocating the investment decision, and who will be responsible for delivering the benefits of the investment. Full details of how to conduct a problem workshop and how to build an investment logic map are contained in the Facilitator Notes which are available as part of the document of this standard.

#### Common sense in applying the standard

The approach defined in this standard is applicable to any investment, irrespective of its size or type. However the way it is applied to a \$200M investment will be different to that of a \$20K investment. Common sense needs to dictate what is appropriate. While for a major investment the complete focus of this workshop should be on defining the problem, for a minor investment it might make sense to define the problem, benefits and the solution in a single workshop.

# 2 The Problem Definition Workshop

## 2.1 Intent of the workshop

Very few investments are able to articulate the problem that their investment is seeking to solve or the benefits that will result. This workshop will define both of these to the degree they are currently known. This workshop also provides a powerful communications forum where the investor and stakeholders of the potential investment can discuss and understand the need for the investment and its implications.

The primary focus of this workshop is the definition of the *problem* that the investment will need to solve and the *benefits* that it will be expected to deliver. It may also provide some view of a potential solution. Figure 2 shows the linkages between the three components that make up an investment logic map.

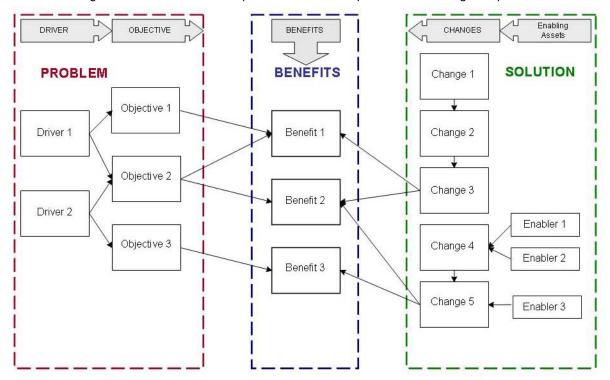


Figure 2: Components of an Investment Logic Map

The *problem* is depicted as the *drivers* and *objectives*. A driver identifies the core reason for investing, while an objective is the high-level action (or strategic intervention) that is proposed in response to the identified driver. The term 'problem' is used here as most investments usually result from a business problem. However an opportunity may also be a driver.

Benefits are the value that will be provided to the organisation or its customers as a result of the proposed investment.

The Glossary to this guideline defines the drivers, objectives, benefits, changes and enabling assets that are used to define the logic for an investment.

The Investment Logic Map is an executive summary of the case to invest. It can also provide the paragraph headings for any subsequent Business Case.

# 2.2 Outcome of the workshop

This workshop will provide any one of three possible outcomes:

- 1. The investment logic depicted will indicate a strong case exists to proceed further with the consideration of this investment
- 2. The investment logic depicted will indicate that the case to proceed further is weak
- 3. No coherent investment logic was able to be produced.

Each of these outcomes is both valid and valuable and will clearly justify the time expended by the participants. Above all, the workshop will have provided a valuable communications forum that brought together the current thinking around a particular problem or problem area.

# 3 Why use an accredited facilitator

Although the development of Investment Logic Maps might seem simple, without the facilitation of someone skilled in their development the outcome can be significantly diminished. To rectify this situation, a process of facilitator accreditation has been established. As a result there is now a pool of people who can effectively facilitate investment management workshops. Some of these work within Government and others are consultants. The list of accredited facilitators is on the Investment Management website.

It is recommended that for 'serious' investments an accredited facilitator is engaged. If your organisation does not have anybody accredited you can engage a consultant from the list to facilitate this workshop and develop the Investment Logic Map for a cost of between \$AUD1,000 to 1,500 and in an elapsed time of 48 hours. An accredited facilitator will also be able to assist in setting up the workshop and advise as to who might be the right mix of participants.

Due to the minimal cost of acquiring an accredited facilitator and the compelling value that developing an investment logic map provides, there is a strong case that they be developed for any investment exceeding \$AUD20.000.

The facilitator accreditation process ensures that a person understands the theory and practice involved in creating an Investment Management Map – and this is important. It does not test their facilitation and mediation skills. It is therefore recommended that, before engaging an accredited facilitator, an Investor validates these capabilities by contacting an investor who has previously engaged them.

# 4 How a problem definition workshop is conducted

## 4.1 Before the workshop

### 4.1.1 Selecting and inviting participants

The participants at a problem definition workshop comprise the following:

Investor	The person who has an identified business problem (or opportunity), will be responsible for making (or advocating) a decision to investment, and who will be responsible for delivering the expected benefits. This person is often referred to as the 'senior responsible owner'.  • It is critical that the primary investor is present as the key participant at the workshop
	The investor might also be supported by one or two subordinates who may be involved with the problem (or opportunity) and its resolution.
Stakeholders	May be invited to help define the business need
Observers	Silent observers such as business analyst or project manager
Facilitator	Is accredited to facilitate the development of Investment Logic Maps

In preparing for the workshop the Investor must decide who are the most appropriate people (both from inside and outside the organisation) to assist him/her to define the business problem. The ideal number of active participants at a workshop is around 5 but the nature of the investment may dictate that this is anything up to 12

The Investor should invite the selected participants to the workshop ensuring that they are aware of what their role will be.

#### 4.1.2 Booking venue

The workshop is time-boxed at 2 hours in one single sitting. This limitation has evolved through experience. On the one hand it is not realistic to effectively complete the exercise in less time. On the other, if in a facilitated workshop the Investor is not able to articulate the problem in 2 hours then the compelling need for an investment should be questioned.

The venue must be able to accommodate the number of participants comfortably and have a suitably sized whiteboard - preferable one that can produce screen copies.

## 4.1.3 Knowledge of the problem

No preparation of any content is required. It is assumed that the investor and their invited participants will together be able to provide a full understanding of the need for the potential investment.

# 4.2 At the workshop

The workshop process is as follows:

The workshop process is as follows.			
Setting the workshop 'RULES'	The Facilitator will outline the rules of the workshop:  • Time constraint		
ROLLS			
	Possible outcomes		
	Participant roles		
CONTEXT of the proposed investment	The Investor will provide the context for the potential investment. This will seed discussion between the participants around the need for the investment.		
Defining DRIVERS	While most participants have a firm idea of the potential solution they are considering funding, it is uncommon that the drivers for the investment are well understood. In this 2 hour workshop it is normal to spend more than 1 hour identifying and defining the drivers.		
	Investment Logic Maps are about telling the investment story as simply as is practicable.  As such, the most effective maps have somewhere between 1 and 3 drivers.		
	Each driver must be validated by describing and noting the evidence that it really does exist. This is a critical part of defining the investment logic. A reason that many investments fail is that the drivers either didn't exist at all or were contrived.		
	The relative importance of each driver is noted by allocating a percentage to each. This is then reflected in the Objectives and Benefits and used to shape the solution.		
Defining OBJECTIVES	An Objective is the high-level action (strategic intervention) that is proposed to react to the identified Drivers. These must be defined in the context of the organisation's mission.		
Defining BENEFITS	Benefits must be defined in the context of why the organisation exists. The Benefits Framework in the appendix is used to ensure that the benefits claimed can reasonable by attributed to the proposed investment.		
Defining CHANGES and Enabling Assets	The focus of this workshop has been on the problem and the benefits and it is important that these have defined with good rigour. It may be that there is no real concept of a solution but that the next step is to develop a strategy to determine what the solution might be. However, if a solution (with enablers) is known or can be simply extracted it is worth capturing.		
Concluding the workshop	The facilitator will reflect on the outcome of the workshop and the next steps.		

# 4.3 After the workshop

Based on the outcome of the workshop, within 24 hours of the workshop the Facilitator will send each of the participants Version 0.1 of the investment logic map. This will contain observations of its quality and any suggestions for improvement. Participants will be asked to provide any suggested amendments to the map within a further 24 hours. The Facilitator will then consider the suggested changes and distribute Version 1.0 to all participants.

An investment logic map is never final - it merely captures the compelling logic for an investment at some point in time. Version 1.0 is the first iteration that resulted from the problem definition workshop. It is written in plain English so that any interested person can understand it and validate its ongoing currency as the idea progresses through the investment lifecycle.

# 5 More information

The documentation of this standard includes a template used to create the investment logic map once the workshop has been conducted. This template is on the Department of Treasury and Finance website. For more information, please go to <a href="www.dtf.vic.gov.au/investmentmanagement">www.dtf.vic.gov.au/investmentmanagement</a> or email <a href="mailto:investmentmanagement@dtf.vic.gov.au">investmentmanagement@dtf.vic.gov.au</a>

# 6 Appendices

## 6.1 Appendix: Glossary

#### **Benefit**

The value that the investment will provide to the organisation or its customers. Benefits are normally a positive consequence of responding to the identified driver. Each claimed benefit must be supported by Key Performance Indicators that demonstrate the investment's specific contribution to the identified benefit.

#### **Benefit Management Plan**

A short document that defines the pre-requisites for the delivery of each expected benefit, how the delivery of each benefit will be measured, and who will be responsible for measuring and realising each benefit.

#### **Benefit Reports**

A report for the investor that depicts the status of the delivery of the benefits compared to the original expectations.

#### **Business Case**

A document providing the information that an investor needs to decide whether to commit resources to a new investment.

#### Change

The things that must be done by the business if the benefits are to be delivered. The changes provide detail of how the strategic intervention defined in the objective will actually happen.

#### **Dis-Benefit**

A negative impact that might occur as a direct consequence of implementing a particular solution.

#### Driver

The reason that action needs to be considered at this time. Drivers are normally couched in negative terms such as "climate change is demanding new ways of living in Australia". A driver should capture the essence of what is broken and the consequence.

#### **Enabling asset**

Any physical asset that must be built or purchased to enable the identified changes to occur. These may be a hospital, a pipeline or an IT system.

#### Gateway

The Gateway Review Process is a best practice initiative based on proven techniques used extensively in progressive industries and governments. The Gateway Review Process has been validated and optimised for use in Victoria over a wide variety of projects and programs.

#### **Growing Victoria Together**

A ten-year vision that articulates what is important to Victorians and the priorities that the Victorian Government has set to build a better society.

#### **Investment Concept Brief**

A two-page document that depicts the logic underpinning an investment and identifies the likely costs, risks, dependencies and deliverables of the proposed solution. It is used to summarise the merits of an investment and allow decision makers to prioritise competing investments before proceeding to business case.

#### **Investment Logic Map**

A simple single-page depiction of the logic that underpins an investment. It provides the core focus for an investment and is modified to reflect any changes to the logic of an investment throughout its lifecycle.

#### **Investment Management Standard**

A best practice approach applied over the life of an investment that aims to reduce the risk of investment failure, provide greater value-for-money and drive better outcomes. It has been designed to enable the *investor* to shape and control investments throughout their lifecycle.

#### **Investment Reviews**

Formal scheduled periodic reviews that aim to confirm that the logic for an investment remains valid.

#### Investor

The person who has an identified business problem (or opportunity), will be responsible for making (or advocating) a decision to investment, and who will be responsible for delivering the expected benefits. This person is often referred to as the 'senior responsible owner'.

#### **Key Performance Indicator (KPI)**

A measure that has been selected to demonstrate that a benefit expected from an investment has been delivered.

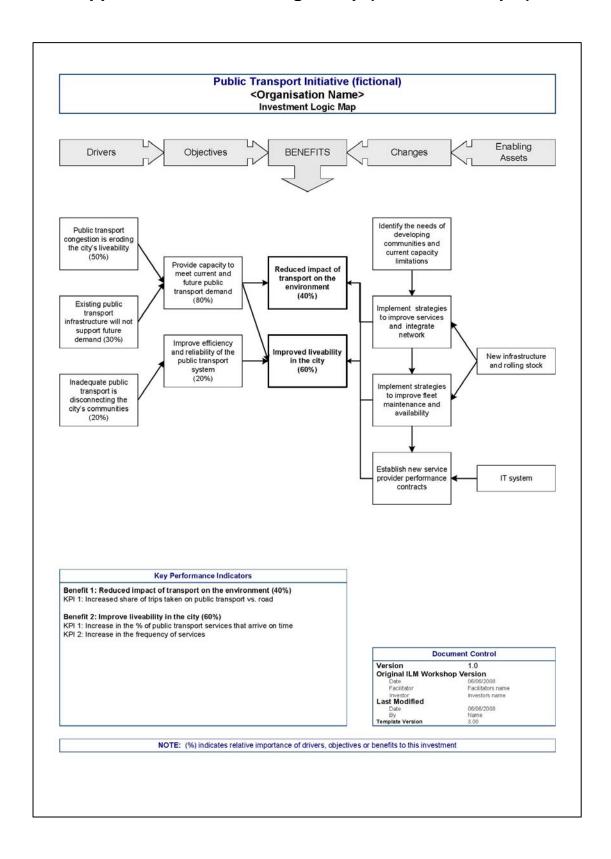
#### Objective

The high-level action (or strategic intervention) that is proposed as the response to the identified driver. This intervention must be framed within the context of the organisation's purpose.

#### **Project Management**

A controlled process of initiating, planning, executing, and closing down a project. The changes required to enable the benefits of an investment to be delivered are usually defined as projects.

# 6.2 Appendix: Investment logic map (fictional example)



## 6.3 Appendix: Benefits Framework

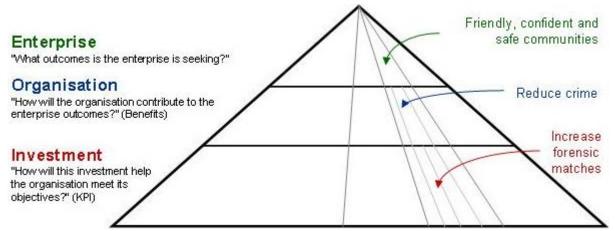
Each time an organisation makes an investment there is an expectation that some form of benefit will be returned. It therefore follows that the ability to design investment solutions that provide maximum benefits and to be able to confirm that the expected benefits were delivered is critical to every organisation.

Why is it then that very few investments are able to articulate the benefits they will provide, to define how they will be measured or to actually measure the benefits that are ultimately delivered?

In taking a fresh look at the problem of benefit management, it seems that within large organisations there has been an inability to define how each individual investment contributes to the primary benefits that are the point of the organisation's existence.

It is typical and appropriate that everyone within, say Police, believe their individual investment will provide the benefit of 'reduced crime' and everyone in Education will claim theirs will result in 'better learning outcomes'. But until now there has been limited ability to describe the contribution of an individual investment to reducing crime or to achieving 'better learning outcomes'.

The Benefits Framework that is depicted below has evolved, been tried and found to be effective at addressing this long-standing problem.



The framework is a three-level structure that links the contribution of an individual investment to the outcomes the enterprise is seeking.

In the example depicted here, at the *Enterprise* level, the Government is seeking to create 'friendly, confident and safe communities'. To this end they set benefits and targets that must be met at the *Organisation* level in this case the Police are required to 'Reduce Crime'.

At the *Investment* level it is necessary to demonstrate how a particular investment will contribute to the benefits sought by the organisation. In the fictional example we are using here, the team of forensic scientists are seeking an investment to acquire state-of-art forensic software and to renew their aged computer system. In return for this investment they claim they will 'reduce crime'. Their evidence to support this claim is that they will reduce the time it takes to provide forensic matches by 30% and obtain 20% more forensic matches.

The head of the police organisation is then left to decide the following:

- How significant will meeting the targets associated with these KPIs be to a reduction in crime?
- Would the claimed KPIs and their targets be directly attributable to the proposed investment? and
- Would the likely impact on crime reduction be worth the cost of the proposed investment?

This Benefit Framework is used as the basis for considering the validity of potential benefits during the development of Investment Logic Maps. It has also been used during the development of more than sixty Benefit Management Plans, many of which are now tracking the delivery of benefits.