

# BROADLEAF CAPITAL INTERNATIONAL PTY LTD

ACN 054 021 117

23 Bettowind Road  
Pymble  
NSW 2073  
Australia

www.Broadleaf.com.au

Tel: +61 2 9488 8477  
Mobile: +61 4 1943 3184  
Fax: +61 2 9488 9685  
Cooper@Broadleaf.com.au

*Specialists in Strategic, Enterprise and Project Risk Management*

## VALUE MANAGEMENT

### 1 Overview

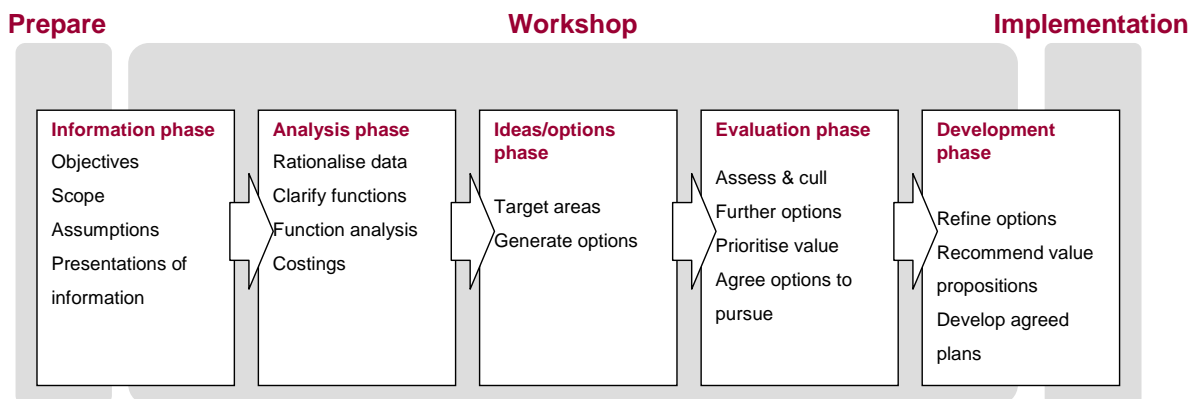
Broadleaf specialises in risk management, value improvement and associated services for organisations and large projects. We provide these services to a wide range of organisations in both the private and public sectors. The Broadleaf team has a track record of providing support that delivers sufficient rigour to ensure the integrity of the outcome and capitalise on the experience and creative input of those participating in analyses while avoiding placing an onerous burden on these participants.

### 2 The Value Management Job Plan

The objective of a Value Management Study is to achieve enhance value for money by exploring ways to provide all necessary functions at the lowest total cost, consistent with the required levels of quality, safety and performance. A structured, systematic and analytical process is used to achieve this.

Our general approach to VM is described in the Australian Standard on Value Management AS 4183:2007 and outlined in Figure 1.

**Figure 1: Value management process**



The Value Management study process is defined by the Value Management Job Plan. At its core is a Value Management workshop. Due to the nature of the activities involved, this usually requires 2 days.

### **3 The Information Phase**

#### **i) Pre-workshop**

The information phase starts before the workshop and includes the logistics and selection of participants and the preparation of required background material. The issues and background material include the perspectives of all the stakeholders. Function and performance requirements are identified and associated cost data are gathered.

Tasks undertaken in this stage include:

- Assess available information;
- Clarify project objectives, explicitly stated and ranked in order of priority;
- Clarify the scope including the limits of the study;
- Finalise the participants and timing;
- Ensure venue and facilities are appropriate;
- Identify the issues of concern;
- Prepare a briefing information pack for the participants;
- Notify and brief presenters.

#### **ii) Workshop**

At the workshop, the information phase continues. The project time, cost and performance requirements, the study objectives, and the issues of concern are presented to the study participants and discussed. Any assumptions are listed and challenged. The problem situation is defined and the study scope and objectives confirmed.

Tasks undertaken in this stage include:

- General introduction including introduction of each participant;
- Overview of the intended Value Management and workshop process;
- Outline of the project and the reasons for it;
- Define the project givens, requirements and assumptions;
- Presentations on the background, issues and concerns;
- Clarify the problem situation and the key issues;
- Confirm the project objectives, phrase as measures of success and prioritise;
- Confirm Value Management study objectives.

### **4 The Functional Analysis Phase**

A function-based analysis is the key to the value management exercise. Where appropriate data exists, the costs associated with functions are added and the most likely opportunities are targeted for closer analysis.

Tasks undertaken in this stage include:

- Identify the required functions;
- Represent the functions diagrammatically using a FAST diagram or by grouping functions and representing them as a cluster diagram or a tree diagram;
- Assess the cost of functions where possible and identify target functions on the basis of their benefit/cost ratio.

## **5 The Ideas / Options or Creativity Phase**

Starting with the targets identified in the previous phase, functions are examined using a range of brainstorming and creative thinking techniques. Options are generated for providing the functions at lower cost without compromising quality, environmental requirements and performance criteria. As is typical in this type of brainstorming, ideas are not judged in this phase.

The study team is often divided into groups for most of this phase, with each group concentrating on a different area or set of issues. Each group presents its options to the others and further options are sought from the entire group.

## **6 The Evaluation or Judgement Phase**

The complete list of options, which can run to several hundred, is evaluated for cost effectiveness and practicality.

Tasks undertaken in this stage include:

- Clarify and assess the options generated;
- Rank options as:
  - A – Adopt;
  - B – Real opportunity;
  - C – Unlikely;
  - D – Discard.
- Group the ‘A’ and ‘B’ options into coordinated alternative solutions;
- Where a ‘C’ option supports the other options, include it in the alternative solution.

## **7 The Development Phase**

### **i) Solution Development**

In this phase, the study team is again divided into groups. Each group evaluates an alternative solution or options within a potential solution. The groups assess the options that were ranked most positively (‘A’ and ‘B’), and then refine, detail and develop the options as part of their solution. Costs, risks, cost savings and other key benefits are assigned to the options.

The groups present alternative solutions to the other participants and the study team assesses the options. The risks associated with each of the selected options are identified. The risk register is reviewed and a revised risk profile is assessed. If additional treatment is required to reduce risks to an acceptable level, the cost of the treatment is included with the option. If necessary, techniques such as paired comparisons are used to arrive at a final preferred option. The end result is a list of recommended options with associated costs and benefits.

Where a lack of information prevents full development of an option, the investigation required to address the issue will be defined and recommended as part of the solution.











### **ii) Post-Workshop Development**

The development phase continues after the workshop. Selected options identified during the workshop are developed and action plans are implemented. Members of the study team are assigned to undertake this work.

Implementation of the agreed options is integrated into the project management processes to upgrade the project plan and deliver enhanced value.

## 8 Example Applications

Broadleaf has performed major value management for many organisations and projects.

	Paper mill coating line project, Tasmanian Mills Paper mill liquid waste management, Maryvale
	Australian Magnesium Corporation: Project value management for major cost reduction
	GEMCO: 4.5 MTPA and 5.5MTPA expansion projects HBI project value analyses, Port Hedland Illawarra Coal: West Cliff Domain Replacement Project Illawarra Coal: West Cliff Coal Preparation Plant Project
	Water for Bowen Project
	Public Transport Corporation: Jolimont Rail Rationalisation Project
	NSW Roads and Traffic Authority: road upgrade projects
	QCLNG Upstream Project
	Coal Stream Alliance rail project
 	Vale Inco Goro Nickel project

## 9 Contacts

For more information, please contact us.

Dr Dale F Cooper  
[Cooper@Broadleaf.com.au](mailto:Cooper@Broadleaf.com.au)

Geoffrey Raymond  
[Raymond@Broadleaf.com.au](mailto:Raymond@Broadleaf.com.au)

Dr Stephen Grey  
[Grey@Broadleaf.com.au](mailto:Grey@Broadleaf.com.au)

Phil Walker  
[Walker@Broadleaf.com.au](mailto:Walker@Broadleaf.com.au)

Mike Wood  
[Wood@Broadleaf.co.nz](mailto:Wood@Broadleaf.co.nz)

Pauline Bosnich  
[Bosnich@Broadleaf.com.au](mailto:Bosnich@Broadleaf.com.au)