TOOL B.1

VALUE PLANNING IN PRACTICE

1.   INTRODUCTION

In the BDB approach Value Management is used as the way of improving value to the client through the systematic and collaborative analysis of the costs incurred and benefits delivered by different design and construction options.

Value Management is applied as a disciplined effort throughout the duration of the Project and should be conceived as a continual process. However, it is possible to identify two major phases in this process, Value Planning (VP) and Value Engineering (VE), as well as several specific structured occasions and events when value is explicitly considered.

Value planning refers to the activities in the early phases of a project aimed to define, clarify, and agree a clear hierarchy of Client objectives, i.e., the functions and other values that really matter to the particular client, as well as cost limitations must be observed. Value Planning is used by the Client's team to develop the strategic Brief at an early stage of the process, and then by the extended Team - comprising the Client and the Selected Prime contractor with its supply chain - to develop the Strategic Brief into the Project Brief.

Figure 1 summarises how and when the supply chain partner will be involved in the effort of adding value to the project through participation in value planning activities at the outset of the project.
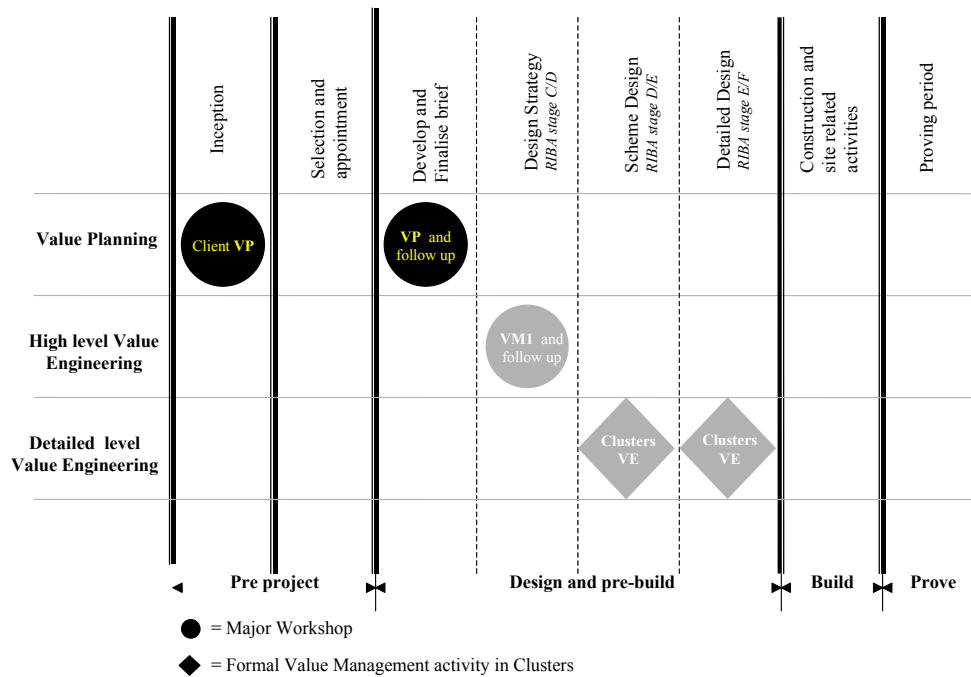
Figure 1: Value Planning events in the project (in dark)

The following practice note provides guidance on how and when the supply chain partner will be involved in the effort of adding value to the project through participation in value planning activities.

2.   CLIENT TEAM VALUE MANAGEMENT INCEPTION WORKSHOP

The first value event in a project may be carried out by the client team prior to the involvement of the Prime contractor and Supply Chain (see figure 1).

The purpose of this exercise is to establish what client needs are and how they can be met. Accordingly, during this phase the client team identifies the business requirements and carries out some form of option study or option analysis. The client's business needs and results of the option study are then summarised in a Mission Statement and in a Strategic Brief which constitute the basis for the involvement of the prime contractor. During these activities the client may appoint an advisor to assist in developing the Strategic Brief. This appointment will depend on whether the client has the in-house technical expertise to undertake the process culminating in the Strategic Brief. In specific situations, where long-lasting relations of mutual trust and respect have been developed between the client and a Prime Contractor, this exercise may be carried out in conjunction or it may be skipped altogether.

The characteristic of the Client Team Value Management Inception Workshop are the following:

Level:	Strategic
Timing:	Inception of the project
Objectives:	Identify Business Needs, Carry out Option Analysis or Option

	Study, Draft Mission Statement and Strategic brief
Who should attend:	Facilitator, Client Team, (Client's Advisor), (Contractor)
Induction:	Participants should be provided only with the minimum indispensable information sufficient for deriving a Mission Statement at the beginning of the workshop and to explain to the participants why they are coming together.
Output	Mission Statement Strategic brief Value Tree

3.   VALUE PLANNING WORKSHOP AND FOLLOW UP

Value Planning marks the involvement of the Prime Contractor and its Supply Chain in the Project. The Value Planning event consists of a workshop and a follow up process, and it is aimed to develop the strategic brief into the project brief. The project brief provides in depth details on the business needs and functional specification without indicating design solutions; it develops and expands the original briefing information into a "language" that construction people can understand and appreciate.

The goal of this workshop and related follow up activities is to convey all the necessary information on how the building should work, thus enabling the design team to identify some basic design options.

Level:	Strategic
Timing:	Start of concept phase
Objectives:	Develop the project brief
	Define user requirements
	Brainstorm opportunities for enhancement
Team:	Facilitator, Client Sponsor, Sponsors Advisor
	End User
	Prime Contractor
	Prime contractor "Core team" including design co-ordinator and key preferred suppliers.
Induction	The "VM Briefing Pack" will include:
	o The objectives of the workshop
	o Details on the event (dates and schedule)
	o A list of participants
	o Some background information on the project
	o An agenda for the meeting
	o A synthetic flier on Value management and its basic tools (e.g., an example of a Fast Diagram)
	o A short description of what the participants will do when attending the workshop
	No further induction or training on Value Management is advisable in that any activity prior to the workshop is very likely to pre-empt it.
Output	*Report from the Workshop and draft of "Project Brief"*
	FAST diagram and/or "Value Tree"
	Action Plans for Opportunities
	Revised User Requirements

For example, for the Building Down Barriers, which was created to build a recreational and sports centre, the end user delegation included the project sponsor

(budget holder representative), a physical training representative, an H&S expert, the maintenance manager, the property manager and a crime prevention expert

4. CRITICAL SUCCESS FACTORS IN THE USE OF VALUE PLANNING AND VALUE MANAGEMENT

On the basis of the lessons learned in the Building Down Barriers project, and in view of the literature on the topic, it is possible to identify four main critical factors for the success of VP and VE activities: appropriate participation and setting, participants' attitudes toward VP and VE, the process, and facilitation (see Figure 5 for a summary).

4.1 Appropriate participation and setting

Involving the "right people"

A key factor for the success of all VP (and VE) activities is the involvement of the right people at the different value meetings and workshops. Although definitions of who counts as "the right person" varies across projects and in different phases of the same project, the basic rule is to assure *comprehensive representation* of all the relevant stakeholders in a particular phase of the process. This means, for example, that in the early phases of a project the end users and the client need to be properly involved so that they can effectively inform the process of function analysis and requirement specification. Later on, it is important that the supply chain is thoroughly involved, so that all available options and solutions are brought to the fore and considered. However, changing attendance at value events during the same project does not imply that past deliberations are brought back into the discussion at later stages: VP (and VE) are a cumulative effort which develops increasing levels of specification, each of them building on the results of the previous ones.

Limited numbers and "no passengers"

The previous principle need to be reconciled with the need to limit the number of participants at a VP (and VE) event to 10-12 maximum. The principle to be followed is that of "minimum comprehensive representation". One consequence of this limitation is that, as a rule, VM activities should only include active and relevant contributors. Other people should attend the VM events only under special circumstances.

Equal status of participants

In many ways VM activities constitute a formalised group decision-making methodology. Accordingly, it is important that all participants share a similar status with respect to the project, or that at least they are equally and formally empowered so that they have the necessary legitimacy to contribute to the VM process. The presence of an expert facilitator is often needed in order to ensure this happens.
Full time attendance

A key element for the success of VM activities is the full time attendance of all participants to the workshop, as well as continuity of attendance between the main session and the follow up events. Participants should concentrate on the VM exercise in hand and refrain from being involved in any other activities making claims for their attention on the day.

Proper setting

In order to guarantee the success of the VM activities it is fundamental that the setting be neutral, comfortable, and that members are not disturbed or distracted. Very often this means that VM exercises should be carried out away from the daily work environment.

4.2 *Participants' Attitudes Toward VP and VM*

Active listening and lateral thinking.

Participants should attend the VM events with a sincere, active listening attitude. At the same time, lateral thinking should be encouraged and fostered during the process.

Awareness and understanding of the project.

Participant should come to the VM events with an "open but not empty" mind. Accordingly, it is important that all the participants gain a proper understanding of the project and that newcomers are taken up to speed, so that all workshop attendees have an equal potential for contributing to the process. Prior to the VM event all participants should receive a short "information package" containing an overview of the project, an update of the objectives, and a summary of previous relevant deliberations. The content of the information package should strike a balance between the contrasting requirements of providing enough

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CRITICAL SUCCESS FACTOR IN THE USE OF VALUE MANAGEMENT

1.   APPRORIATE PARTICIPATION AND SETTING

- ☐ Involving the "right people
- ☐ Limited numbers and "no passengers"
- ☐ Equal status of participants
- ☐ Full time attendance
- ☐ Proper setting

2.   PARTICIPANTS' ATTITUDES TOWARD VM

- ☐ Active listening and lateral thinking
- ☐ Awareness and understanding of the project
- ☐ No pre-meetings
- ☐ Commitment

Process
- ☐ Timing
- ☐ First functions then solutions
- ☐ Transfer of deliberations
- ☐ Review and follow-up

3.   FACILITATION

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information, and avoiding influencing or "conditioning" the participants.

No pre-meetings

For the reasons described above special care should be put to avoid pre meetings which can pre-empt or condition the results of the Value Workshop. It does not make sense to involve a large number of participants in a decision making process where the outcome has already been established elsewhere. Using VM as a way to make a decision "auditable" is a waste of time and resources.

Commitment

Like other structured processes, VM is effective only if people "buy into" the process, and if the outputs are properly regarded and implemented. Accordingly, it is appropriate that the VM process is kicked off, chaired, and concluded by a high level representative of the main stakeholder (the client or the main contractor, depending on the phase of the project). Please note that the chairmanship of the process does not correspond with the facilitation role, which should be carried by a properly trained individual (see below).

4.3 Process

Timing

Timing is an essential factor for the success of VM activities. The general rule to be followed is that all VM events should take place as early as possible once relevant stakeholders are in a position to contribute actively to the generation of alternatives, and express well-founded value opinions. That is, value planning events should be carried out very early in the process of function analysis and brief development. Later on, value engineering activities should take place at the branching point when there are enough design elements for participants to make creative contributions and informed evaluation, but before any final decision is taken.

First functions then solutions

It is important that, especially in the early stages of each VM workshop, participants focus their attention to identify the functional and other requirements before proposing solutions. At the same time, one should avoid getting involved into "price thinking" too early, so that all available options are fully considered

Transfer of deliberations

A critical success factor in the VM process is to ensure that the deliberations and assumptions agreed at an early stage are passed on and taken up by later participants. This can be achieved in different ways, for instance providing continuity of attendance by a core team during the whole duration of the project; issuing a clear mission statement for the project as early as possible; producing a clear and unequivocal hierarchy of functional preferences and value criteria (value tree or

weighted FAST diagram) at an early stage in the project, for use as a "value compass" at later stages.

Review and follow-up

Reviews and follow-ups are an integral part of the process: in fact, it is often during follow-up meetings that decisions are taken and options selected. Accordingly, special care should be put into planning and managing the follow up process and events.

4.4 Facilitation

Experienced facilitator

VM is a highly structured and codified process. Moreover, it is largely based on group activities. For this reason, the success of VM events is largely dependent on the skills and experience of the facilitator. Accordingly, VM facilitators should obtain the necessary training and experience before conducting a workshop.

Team Facilitation

VM workshop facilitators do not simply "chair " the event. They perform at least three fundamental roles: to effectively steer the overall process, to facilitate the meetings and to keep a faithful and complete record of all contributions and deliberations. This can not easily be done properly by a single person. It is therefore advisable that at least a facilitator and a "recorder" work as a team during major VM events.

Planning and preparation

Planning and preparation are critical success factors in VM meetings. Every meeting needs to be carefully planned, and the objectives and agenda need to be circulated to all participants prior to the workshop. However, in order not to pre-empt the results of the workshop, participants should be given the minimum information sufficient for their taking an active role in the workshop, explaining to them why they are coming together. The information will be provided via a "Value event briefing pack" to be circulated by the facilitator at least two weeks prior to the event. The "Value event Briefing Pack" will normally include:

- o The Workshop objectives
- o Details of the event (dates and schedule)
- o A list of participants
- o Some background information on the business needs
- o An agenda for the meeting
- o A brief description of Value management and its basic tools (e.g. an example of a FAST Diagram)
- o A short description of what the participants will do when attending the workshop

No further induction or training on Value Management is advisable in that any activity prior to the workshop is very likely to pre-empt it.

Management of group processes

In view of the nature and characteristics of VM meetings and activities, it is of critical importance that the facilitators' team closely monitors and properly manages the group processes which emerge during the activities. Some of the issues related to the formation and facilitation of groups and meetings are discussed in Section II.2 of this handbook and in Tool C.7.