A guide to value propositions

CONSTRUCTING EXCELLENCE

in the built environment

Foreword

In 2007, the core members of Constructing Excellence carried out a review of futures reports to decide on priorities for new guidance for our members who remain committed to a collaborative future. Six themes emerged and task groups were established to review existing material and produce a guide to help members stay one step ahead:

- Collaborative procurement
- Collaborative cost reduction
- Collaborative design management
- Whole life costing and facilities management
- Environmental sustainability
- Better ways of working

This guide was produced by a task group of members and others, all of whom committed time and resources to support this work, they are duly acknowledged at the end of this publication. It was also peer reviewed at meetings of the full membership to ensure maximum relevance and coherence as a set of publications.

We welcome feedback on all our publications at any time, please contact us at the address shown on the back cover.

Vaughan Burnand

Chairman, Members Steering Group, Constructing Excellence

"Value Management is an effective way to determine and articulate client objectives on a complex project thereby facilitating development of a robust design brief reflecting a client's requirements … resulting in a scheme that meets client expectations ….
fine tuning of developed designs to ensure projects can be delivered to client's expectations on time, within budget whilst delivering the functionality required"

Withington Community Hospital
OGC Case Studies: Value Management in Construction

Mike Green, Chair of the South Manchester PTC board and member of the save Withington Hospital campaign, said:

"The Save Withington Hospital campaign succeeded. The new community hospital is a direct response to the wishes of South Manchester residents for a first-class health facility in the area, meeting their needs. The hospital will provide quicker access, more capacity, high quality and more satisfaction for patients and staff."

Introduction

Late in 2007 Constructing Excellence's Building and Estates' Task Group on Collaborative Cost Reduction carried out research to identify methods which would improve the delivery of cost benefits to live projects. A number of areas were explored; however one theme which emerged very clearly from this initial research was the development of Value Propositions – a powerful technique to help deliver maximum project benefits whilst driving through cost reductions.

The Task Group set out to identify critical processes and procedures for the application of Value Propositions but also to explore how these might be enhanced.

From early Task Group meetings it became apparent that processes to quantify and measure Value, and in particular prioritise it, were significant by their absence within the industry. In order to cooperate as a collaborative project team, utilising the skills of Supply Chain Members, Contractors, Designers, Clients and End-Users, it was essential that the skills within these groups be harnessed effectively.

In response to the lack of tools and techniques associated with Value mapping, new tools such as Loughborough University's 'Value in Design' (VALiD) and CABE's 'The Value Handbook' were developed. The Task Group found however that on further investigation their take up had been limited. In particular VALiD focusses on organisational values, rather than project specific objectives and drivers.

The Be Valuable guide published by Constructing Excellence provides a wide ranging review of value touching upon its many facets and definitions. However, the Task Group recognised that it did not seek to provide a guide to the application of value techniques.

In view of the disappointing take up of value propositions and the lack of practical information on the subject the Task Group decided to produce this concise guide to help the wider implementation of Value Propositions.

The Value Proposition's critical intention when used in a collaborative cost reduction scenario is a vital tool for a project team to identify the strategic points that drive benefit and hence value within any project before it can effectively identify cost reductions. Failure to identify critical drivers could lead to wasted efforts value engineering aspects of a design that are already at maximum value in proportion to the client teams requirements.

This guide is therefore designed to highlight the benefits of these approaches and allow the users an easy entry into the principles of their use. Building on simplified facets of "The Value Handbook" and utilising techniques practised by members of the Task Group this guide seeks to help readers reach a point where they may utilise Value Propositions as part of their project procedures and allow users to identify focus Value Engineering in a more effective manner.

Tools to support value: (L to R) Loughborough University's *VALiD*, CABE's *The Value Handbook*, and Constructing Excellence's *Be Valuable*.

Timeline & gateways

The optimum point at which to determine the Value Proposition statement is at the very early stages of a project before design work has commenced. Typically a facilitated Value Management workshop is convened with the stakeholder group to determine the Value Proposition which can then form an integral part of the design brief.

Greater value can also be added if the initial VM workshop is used to inform the business case, and to guide the options appraisal exercises.

The 'what, who and how' behind the Value Management workshop is covered in the following sections of this guide to clearly explain the format and outcomes of the session. A simple clear output from the workshop is the publication of a brief report which includes the Value Proposition stating the project objectives, drivers and priorities.

Immediate benefits then spring from the Value Proposition during the feasibility stage when the initial options can be tested against the definition of project objectives to give a measured selection of the preferred strategy.

Further benefits accrue during the design and early construction phases. Value engineering exercises can be rigorously tested against a clear definition of priorities and objectives as set out in the Value Proposition to ensure that they focus on maximising value, not just driving down costs in an unstructured manner.

Finally, at the post occupancy evaluation stage the performance of the finished project can be tested against the defined objectives and drivers set out in the Value Proposition.
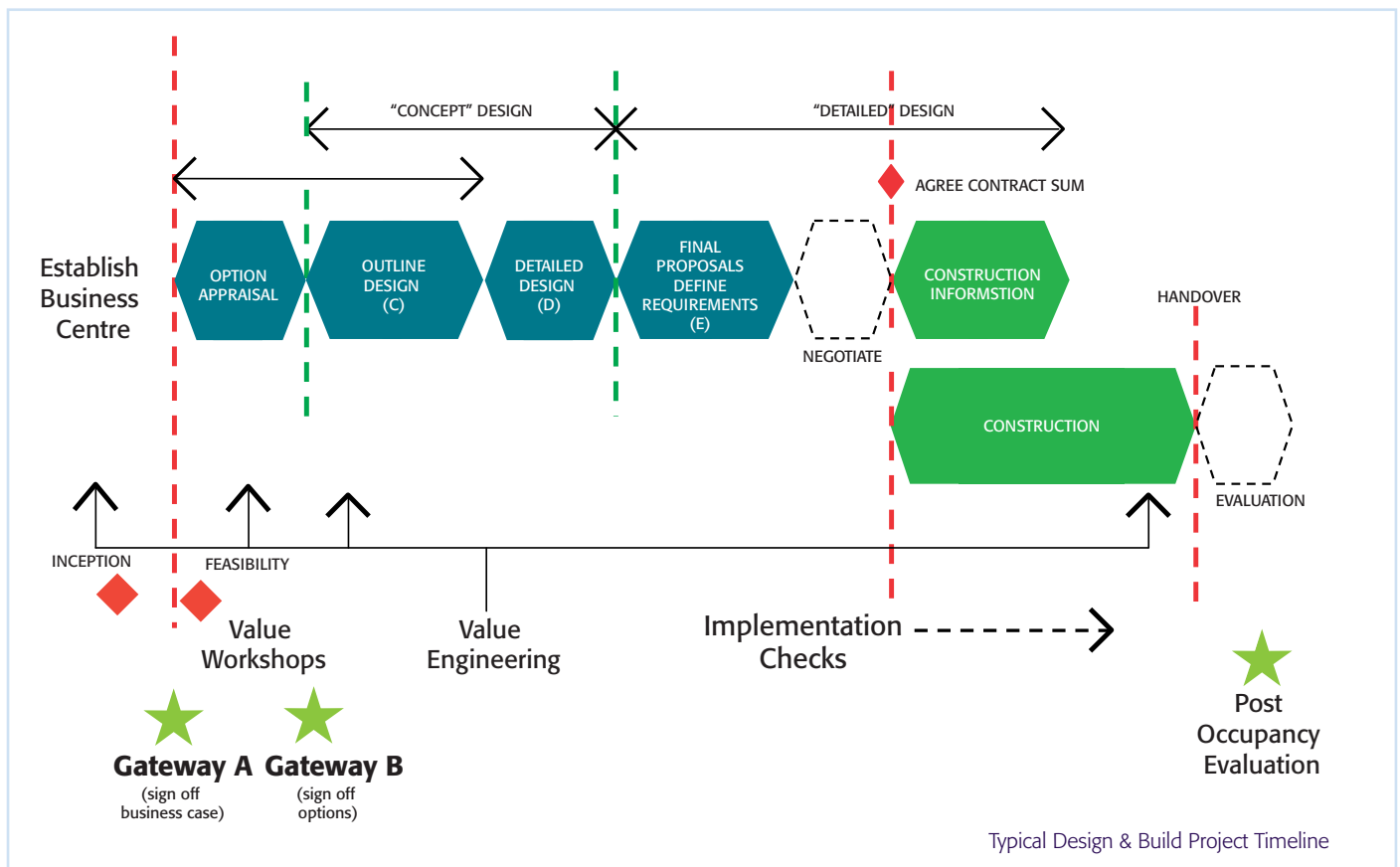
Typical Design & Build Project Timeline

What we seek to achieve

This guide aims to assist in helping users achieve a measurable Value Proposition statement for any project under consideration.

But, you may ask, why focus on value to reduce cost? Well, in its simplest form "value" can be defined as the following:

$$Value = Benefit / Cost$$

To understand what brings most benefit to a specific project we need to determine the objectives and drivers behind that project. In this way the full team can focus on maximising the allocation of funds to bring most benefit in the right areas, and reduce costs in the areas of no benefit.

Typically a Value Management workshop will explore a diverse range of possible project objectives. There are no hard and fast rules behind the selection of these and more to the point they should be specific to that individual project.

Ideally these objectives and drivers should focus on what the end solution must deliver, rather than what the technical solution is. For example in a healthcare environment an objective might be 'provide natural light and ventilation to patient bedrooms' rather than the solution 'patient bedrooms to have windows'.

However, different types of objectives and drivers can be grouped together into a series of categories. The CABE "Value Handbook" usefully suggests 6 'faces' of value as shown below; these provide a worthwhile set of categories that cover a holistic set of benefits that might accrue to a project.

A number of these types of objectives quite clearly relate to business driven issues, such as use or exchange value, however others such as cultural or social value can be an important consideration but relate more closely to wider societal drivers. In view of this the six CABE value types have been arranged in two groups: business drivers and external drivers

Business Drivers:

Exchange Value: Considers the value of the project for each party involved from a developer's return on capital and profitability to the owners' letting/resale value and ease of renting/disposal.

Use Value: Impact of project on the organisations/individuals that use it. Its ability to promote drivers such as productivity, profitability, competitiveness and repeat business; whilst also allowing people to work and communicate effectively and encourages others to join, benefiting recruitment and reducing absenteeism.

Image Value: The project's contribution to a corporate brand or identity. Bringing a reflection of an organisations vision, reputation and its desires to be open, innovate or promote excellent design.

External Drivers:

Social Value: A project's ability to create opportunities for positive social interaction, development or reinforcement of social identities and civic pride, improvements to social health, including morale, goodwill, neighbourly behaviour and generally reducing vandalism and crime.

Environmental Value: The project's legacy to future generations, impact on biodiversity and its consumption of finite resources which in turn impact on Climate Change. This value is a whole life consideration, the reduction of maintenance, in built flexibility and robustness of the completed project; this in turn is relative to its current impact on local health and pollution.

Cultural Value: The project's contributions to its surroundings, in relation to its location and context. This measure also includes the intangibles of symbolism, aesthetics and inspiration.

Who should attend

In order to facilitate an effective Value Proposition workshop the workshop instigator should ensure that the following participants have been considered. Failure to identify key individuals will result in a skewed and unrepresentative Value Proposition.

An important first step is to appoint an experienced facilitator to manage and run the workshop.

The group numbers should be kept to a manageable level to ensure that individuals have the opportunity to contribute fully and also to help make sure the facilitator can manage the group informally. Maximum group sizes of around 12-15 have proved optimal.

Workshop Facilitator:

An experienced workshop facilitator who ideally should be Independent to the stakeholder group in order to bring a neutral perspective.

Workshop Instigator:

The individual or representative of the organisation responsible for instigating the workshop.

End-user/community representative:

In the case of projects where end-use has been identified a representative familiar with that usage should be present to provide adequate indication and consideration of "in-use" principles.

Project Sponsor/Commissioning Representative:

This should be a financially based individual within the commissioning organisation. The financial constraints of the client and the project should be well known to this person.

Design Team Representative:

Design team representatives from each discipline with skills within the project specific sector should be present to identify design scenarios. Representatives from the cost consultants should also be present.

Operational director

Responsible for operational activities

Project Manager

Both client team project manager as well as external consultant team project manager.

'Wild Card'

Sometimes it can help to have an individual from outside the project to help question issues and stimulate wider debate.

How should the
workshop be structured

Having identified and brought together the key members of the Project Team required at the Value Workshop, see previously, the Team Leader or workshop instigator should either engage a suitable agent to act as facilitator or be confident to run the workshop themselves. The primary process to identify the Value Proposition for a project is the Value Workshop.

Ideally the Value Workshop should aim to deliver a clear Value Proposition at a single session.

Objective of the Workshop

"To reach group consensus, through informal discussion, on the range of primary and secondary objectives and drivers behind a project. To set out a clear diagrammatic representation of these by way of a prioritised Value Proposition."

Once a Workshop team has been identified the facilitator or instigator should identify an agenda and chosen evaluation method. A sample Agenda has been provided below along with a summary of some basic evaluation procedures.

It can often be helpful for the facilitator to prepare a sample set of project objectives to help stimulate discussion amongst the group during the brainstorming session.

Evaluation Criteria

To enable the Value Proposition to be used effectively at various stages of the project to test options and evaluate the success of design strategies it is helpful to identify a simple measure against each of the primary objectives.

These measures then provide clarity as to how a design can be tested to confirm its success in meeting each of the 5-10 primary objectives.

Diagrammatic Representation of Priorities

To ensure that the prioritisation of each of the 5-10 primary objectives is clear, a simple diagrammatic system such as the 'spider diagram' can be helpful. At the later stages of design or option evaluation the spider diagram can then be used as the basis for a representation of the scoring of how successful the design or option is in achieving the desired objectives.

Sample Agenda
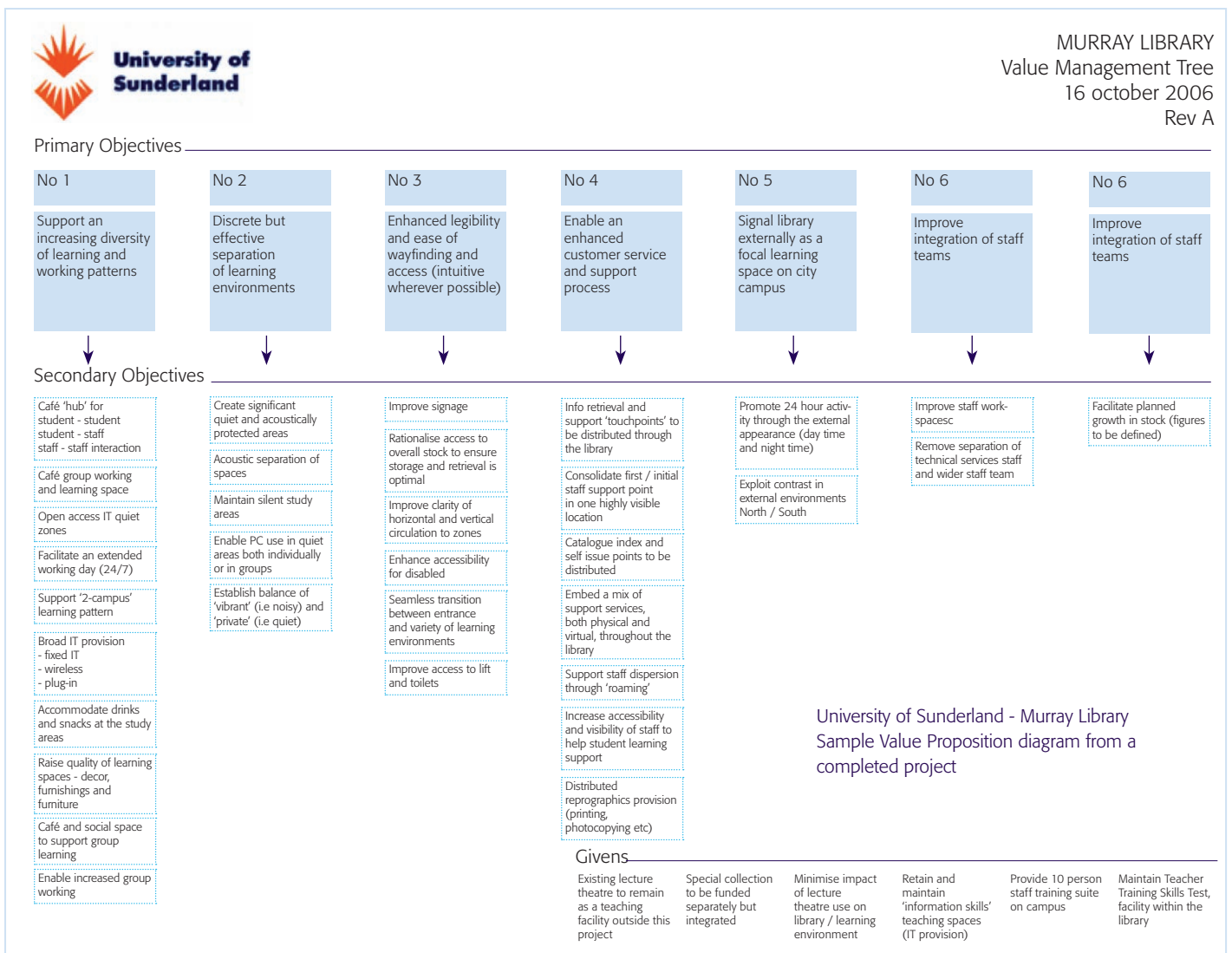
1. Introductions

2. Outline format of workshop

3. Clarify 'givens' as defined in the business case

4. Agree project mission statement

5. Brainstorm full range of project objectives and drivers

6. Structure the objectives into 5-10 primary objectives with secondary supporting objectives.

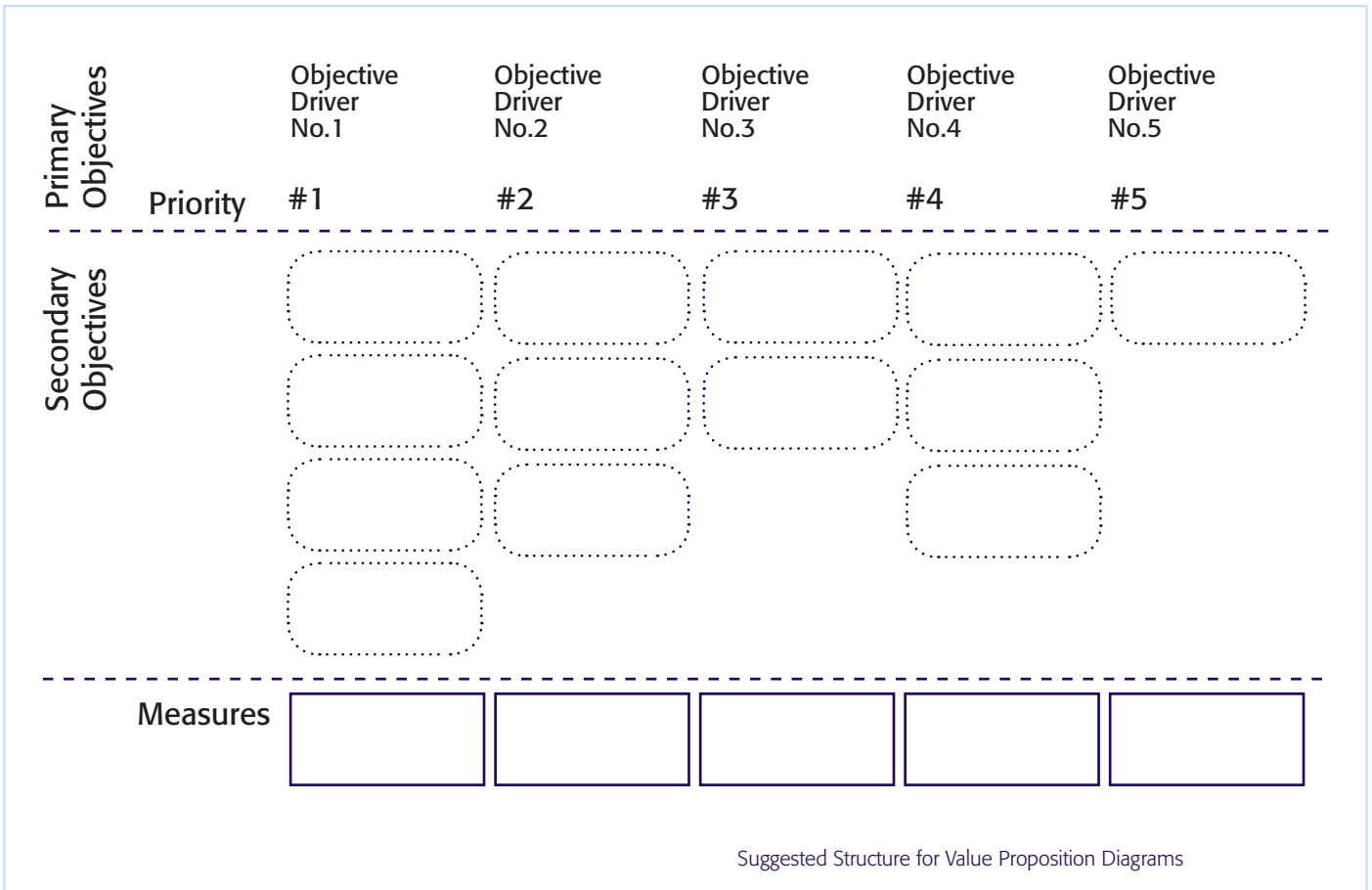7. Prioritise objectives (from highest to lowest)

What form should the output take?

It is important that the Value Proposition should be represented in a clear diagrammatic form to help ensure it becomes an accessible and useful tool in later stages of the project.

A typical structure has been indicated below demonstrating how a Value Proposition can be structured clearly into primary objectives, secondary objectives, objective measures and an overall mission statement.

A sample Value Proposition diagram from a live project has been indicated to illustrate how this structure has been utilised successfully.

University of Sunderland

MURRAY LIBRARY
Value Management Tree
16 october 2006
Rev A

Primary Objectives

No 1	No 2	No 3	No 4	No 5	No 6	No 6
Support an increasing diversity of learning and working patterns	Discrete but effective separation of learning environments	Enhanced legibility and ease of wayfinding and access (intuitive wherever possible)	Enable an enhanced customer service and support process	Signal library externally as a focal learning space on city campus	Improve integration of staff teams	Improve integration of staff teams

Secondary Objectives

Café 'hub' for student - student student - staff staff - staff interaction	Create significant quiet and acoustically protected areas	Improve signage	Info retrieval and support 'touchpoints' to be distributed through the library	Promote 24 hour activity through the external appearance (day time and night time)	Improve staff work-spacesc	Facilitate planned growth in stock (figures to be defined)
Café group working and learning space	Acoustic separation of spaces	Rationalise access to overall stock to ensure storage and retrieval is optimal	Consolidate first / initial staff support point in one highly visible location	Exploit contrast in external environments North / South	Remove separation of technical services staff and wider staff team	
Open access IT quiet zones	Maintain silent study areas	Improve clarity of horizontal and vertical circulation to zones	Catalogue index and self issue points to be distributed			
Facilitate an extended working day (24/7)	Enable PC use in quiet areas both individually or in groups	Enhance accessibility for disabled	Embed a mix of support services, both physical and virtual, throughout the library			
Support '2-campus' learning pattern	Establish balance of 'vibrant' (i.e noisy) and 'private' (i.e quiet)	Seamless transition between entrance and variety of learning environments	Support staff dispersion through 'roaming'			
Broad IT provision - fixed IT - wireless - plug-in		Improve access to lift and toilets	Increase accessibility and visibility of staff to help student learning support			
Accommodate drinks and snacks at the study areas			Distributed reprographics provision (printing, photocopying etc)			
Raise quality of learning spaces - decor, furnishings and furniture						
Café and social space to support group learning						
Enable increased group working						

University of Sunderland - Murray Library Sample Value Proposition diagram from a completed project

Givens

Existing lecture theatre to remain as a teaching facility outside this project	Special collection to be funded separately but integrated	Minimise impact of lecture theatre use on library / learning environment	Retain and maintain 'information skills' teaching spaces (IT provision)	Provide 10 person staff training suite on campus	Maintain Teacher Training Skills Test, facility within the library

Primary Objectives

Priority	Objective Driver No.1	Objective Driver No.2	Objective Driver No.3	Objective Driver No.4	Objective Driver No.5
	#1	#2	#3	#4	#5

Secondary Objectives

Measures

Suggested Structure for Value Proposition Diagrams

Benefits

The development of a clear Value Proposition provides significant benefits to a project.

Soft benefits

- Clarity of project objectives is gained through concensus with stakeholders
- The chosen solution is supported by key stakeholders
- All parties have a common understanding of project objectives

Harder benefits

- Clear audit trail to support investment decision
- Chosen option selected on 'best value'
- Project outcomes focussed on client needs
- Provides clear basis on which to make value engineering decisions and the detailed design stages

References

Publications

Be Valuable. Constructing Excellence, 2005

The Value Handbook. CABE, 2006

Value Management in Construction: A Client's Guide. CIRIA Special Publication 129. 1996

Value in Design (VALiD) - www.valueindesign.com.

Papers

Case Studies: Value Management in Construction, OGC, 2007

Value Management Workshop , East Riding of Yorkshire Council , Pocklington Library and Resource Centre, 2007

Value Management Workshops - Summary Report

University of Sunderland Student Gateway, 2005

Organisations

Institute of Value Management   www.ivm.co.uk

SAVE   www.value-eng.com

Acknowledgements

University of Sunderland Sports & Social Centre

"Value Management has helped the University develop robust Value Propositions for all our major projects ensuring that designs focus on bringing maximum benefit whilst still delivering exciting results within budget and time constraints"

University of Sunderland Facilities