

THE VALUE TIMES

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President's Message

Celebrating a Personal Milestone

With the end of 2016 came an important anniversary for me – 50 years in the construction/infrastructure industry! Consequently, in this article I'm going to indulge in a little personal reflection of those 50 years and share a couple of major lessons learnt along the way.

In 1966 I began working in this industry as a cadet quantity surveyor.

Six years later, I moved from the offices of professional quantity surveyors to a major construction company, as a quantity surveyor initially, then as an assistant project manager, and then a project manager.

It was after a spell as a project manager that I decided to try my hand at teaching. As a high school student I had, at one time, identified teaching as my preferred career but I had taken a different direction upon leaving school. And so it was, that I successfully applied for a job as a TAFE teacher in the Building Certificate program in Canberra.

I enjoyed this teaching role immensely and I was quickly promoted to Head of

Department of Building. I especially enjoyed the three-year teacher training program (Grad Dip Ed). Little did I know that all of this would be excellent groundwork for my later career as a group facilitator/catalyst.

My new-found interest in education prompted me to advance my own studies and so I took a year off to go overseas to undertake a Master of Science degree course in Construction Management and Economics.

It was while undertaking this course (in 1977-78) that I was first introduced to the subject of Value Engineering. I didn't know it at the time, of course, but that introduction to Value Engineering as part of my MSc would, years later, result in me making VM my primary area of professional interest.

This, in itself, is a huge lesson learnt – things we come across in life which might seem insignificant at one point in time morph into something highly significant later!

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President's Message

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After returning to Canberra, MSc in-hand, I was offered an exciting position at the then-Canberra College of Advanced Education, to set-up a brand-new Degree Course in Building and Quantity Surveying.

This all went very well and, later, the CCAE became the University of Canberra, and I re-structured the (formerly part-time) Degree Course in Building and Quantity Surveying into a full-time Degree Course in Construction Management and Economics.

The link between my role at UC and the VE subject in the MSc course kicked-in through quite extraordinary and providential circumstances which were instrumental in re-framing my whole career. From that time, the subject of Value Management became my primary focus of research, teaching and practice and, later, the subject of my PhD.

In my whole professional journey over the last 50 years, two lessons learnt stand-out above all (and there have been many!)

The first of these lessons is to keep focussed on purpose. I have written extensively about this in Value Times and other places yet I find the need to continue re-stating this principle in whatever environment I'm working. Whether we're running a single meeting or a multibillion-dollar project, it is essential that we begin with a clear definition of purpose and keep that purpose statement front and centre of all activities.

It's where value begins. When developing the Value Triangle, I intentionally made that definition of purpose the apex of the



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'triangle'. It is supported by the other two Value Factors – 'benefits' and 'important features'.

The second stand-out lesson learnt is that shared understanding of the Value Factors captured in the Value Triangle is crucial to deliver best 'value for money'. I think many people simply assume that 'shared understanding' exists amongst project team members but my 50-year journey has taught me that to build a shared understanding of the Value Factors will not be achieved by circulating emails and project documentation alone.

A deliberate effort is necessary to bring about 'shared understanding' amongst any group of people. I have found no better way of doing this than a facilitated, focussed, multi-disciplinary workshop.

I'm not arguing that this must be a VM workshop, but the work-plan set- out in the

Australian Standard on Value Management is certainly an ideal model: commencing with the establishment of a set of value factors.

As I reflect on 50 years in the construction/ infrastructure industry – whether at the coalface of construction projects, the study rooms of academia, the professional offices of government and consulting practices or the countless workshops that I have run – no two lessons stand-out more than the two I've just described.

If everyone could be persuaded to clearly define purpose right at the start of any initiative and build 'shared understanding' of that purpose and supporting factors amongst all team or project players, there would be immediate improvements in 'value for money'.

Thanks and Greetings

I take this opportunity to thank members for your contributions over the past year. The IVMA Board is very strongly committed to our role of helping people achieve best 'value for money' whatever their endeavour. Seemingly, everyone desires best value for money in any procurement – the IVMA has people, systems, methods and experience to help achieve this.

As always at this time of year, I hope all members had a joyful and peaceful Christmas, and I wish all a happy New Year.

Dr Roy Barton
President, Institute of Value Management Australia (IVMA)

Government Procurement Conference, Sydney, 6 – 8 December 2016

IVMA President Dr Roy Barton represented the IVMA at the third GovProcure Conference held in Sydney in December

Dr Barton gave a presentation on the opening day of the 2016 conference before some 80 delegates

Roy took the opportunity to share lessons learnt about value for money from his 50 years (1966-2016) in construction/ infrastructure procurement, emphasising the need to get above “processes and techniques” and into organisational cultures that think and promote ‘value for money’. He made reference to recent comments by the present and former heads of the Reserve Bank of Australia to the effect that the government should consider borrowing to fund good infrastructure projects that provide a solid public benefit in returns for the investment. Roy made a direct link between the IVMA-promoted ‘value for money’ model and the comments of the two governors.

Roy’s presentation was enthusiastically received by delegates and there were several follow-up enquiries.

In promoting the conference, Quest Events said that:

“GovProcure has established itself as the place that Procurement Managers from all levels of government want come to meet, engage and build the skills that they need to continue to deliver efficient, effective, ethical and economical goods and services.

Procurement in the public sector is undergoing a transformation in which it is evolving from a ‘back office’ function to a strategic capability. Innovative procurement strategies, improved systems and processes and the uptake of cutting-edge technology are driving this.

For Procurement Managers, this means a constant need stay up-to-date on the latest strategies, technology and opportunities for improvement. Attending the GovProcure conference is your opportunity to do just that with access to some of the brightest minds and most innovative case studies in public sector procurement today”.

Dr Roy Barton
President, Institute of Value
Management Australia (IVMA)

FACILITATOR'S CASEBOOK

Functional Review of Organisation Structure

Achievement of 'Value for Money' using the Value Management process is most often applied to physical elements such as infrastructure projects and programs and products.

It is, however, a very effective method of examining and significantly improving processes. Importantly, application of this methodology to processes can be a particularly effective use of staff-time because an independently facilitated, structured multi-disciplinary workshop can break down organisational 'silos' to achieve common ownership of the solutions developed.

Over 25 years David Baguley has facilitated hundreds of Value Management workshops. In this article David demonstrates the versatility of the Value Management process and its application to improve the efficiency of an organisation.

Situation:

When external consultants are engaged to review an organisation, their initial task is to gather information about the current situation, develop an understanding of the key organisation outcomes and identify duplications and inefficiencies.

This is usually achieved by interviewing managers, staff and clients, observing processes and studying policies and procedures. Depending on the size of the organisation, this can take a significant amount of time and the consultancy budget; especially when different sources provide conflicting information. During this phase the consultants might also collect a list of suggestions for improvement from interviewees.

One human resources consultant faced with such an assignment, decided to use a

facilitated Value Management workshop to improve the efficiency of the process.

Process:

1. A specialist Value Management facilitator was engaged to run a two-day workshop with a cross-section of management and staff, observed by the HR Consultant. The workshop consisted of the divergent phases of the Value Management work plan:
 - a. Share information,
 - b. Develop Understanding and
 - c. Generate Ideas.
2. Phase 1 examined the current operations of the organisation – What? Why? How? This functional analysis led to a consensus on how the various activities contributed to organisational outputs and strategies.
3. Staff estimated how much of their time was spent on each of the activities and what was the relative value of the outcomes being delivered.
4. The final session involved the staff contributing ideas for improvement.
5. The workshop outputs provided the HR Consultant with a rapid understanding of how the organisation currently operated, where staff resources were concentrated, areas of concern and duplication, ideas for improvement and a consensus on the relative value of the various organisational outcomes.
6. The consultant was also able to observe where there might be organisational and interpersonal tensions.

Outcome:

The HR Consultant completed the information-gathering phase of the project by conducting short interviews with



functional analysis of an organisation is a powerful tool for getting a rapid understanding of the current situation

stakeholders to explore gaps, conflicts and ideas that arose in the workshop. Instead of weeks of scheduled interviews and focus groups, these interviews were conducted over a few days and the whole phase completed in less than a third of the normal elapsed time for similar assignments.

A draft set of recommendations for changes was developed to align with the value framework developed in the workshop and based on the consultant's experience from other organisations. The Change Management process included presenting these recommendations back to the workshop participants for feedback before finalising the report for management.

Lesson Learnt:

7. The functional analysis of an organisation is a powerful tool for getting a rapid understanding of the current situation. In one organisation it was discovered that almost 50% of staff time was devoted to continue being a Business Excellence Awardee!

8. The workshop process allows conflicting views between stakeholders to be discussed and resolved, or identified for further investigation.
9. Staff estimates of their amount of time spent on different activities was compared with an in-depth analysis of job sheets and found to be fairly accurate.
10. The workshops became an integral part of the Change Management process with staff becoming aware of inefficiencies and duplications of effort. In fact, the staff actually implemented some changes even before the report was finalised.
11. The 'value framework' developed in the workshop was used to evaluate ideas for improvement and to ensure recommendations delivered 'value for money' outcomes.

David Baguley
Chair, Appointments and Accreditation Committee, IVMA

70 Years of the Value Methodology



Value Methodology (Value Analysis, Value Engineering and Value Management) has been delivering better Value for Money for clients and users for 70 years since its inception in General Electric Corporation in 1947.

Since its inception the Value Methodology has developed significantly, adding new techniques and widening its application to virtually all situations when you need to get from 'A' to 'B' with multiple users and when a variety of disciplines are involved in achieving the required results. The Value Methodology is in-use in many countries worldwide including China and India.

The Society of American Value Engineers International (SAVE International) is celebrating this achievement with the Value Summit 2017 in Philadelphia, PA from August 27 to 30, 2017.

The focus of this conference is:

- Infrastructure and Services: Demonstrate the power of Value Analysis and Risk Analysis in infrastructure case studies
- Manufacturing: Highlight the power of Value to achieve innovative solutions in product development and manufacturing and equipment development

- Value Enhancing Methods highlighting the combination of other techniques with Value Management eg: LEAN, Six Sigma, etc.

Participants in the conference can expect to hear examples of improved achievement of users' needs and 'value for money' from many nations – not just from the USA

Further conference information at:
<http://www.valuesummit2017.org/>

Further information on SAVE International:
<http://www.value-eng.org/>

Reducing cost whilst increasing value?

How a soft situation was turned into a hard solution

Seems a bit of a conundrum doesn't it! In fact it's the classic task of many Value Management (VM) studies.

In this case a project that could potentially cost 30% more than the approved funds and was at risk of not meeting its delivery timeline.

The problem was how to bring the works and their cost back into alignment with the funds available whilst delivering the required levels of performance – both initial cost as well as ongoing operating and future maintenance costs – and to be on time?

Context:

The original project strategy was allocated an approved budget, based on an agreed scope and program for the delivery of the infrastructure and facilities. It's important to note that, for this project, there was an absolute critical timeline that had to be realised.

A couple of years down the track, as detailed planning and consultations progressed and a fresh cost plan had been developed, the project was suddenly paused, reviewed and refreshed. At this point serious concerns were raised about meeting the completion timeframe.

The client opted to use VM to get the project team and key stakeholders together to review all aspects of the project.

This step involved as many as 35 people from three design consortia and their associated engineering and other specialist consultancies together with the two clients.

So how did VM make a difference?

- stepping the client and the consultant team and selected stakeholders through a structured workshop process – a job plan that allowed time for information sharing, joint analysis, ideas creation

and evaluation, solutions development and strategy endorsement – all within the workshop process over a 3-day period

- preparations that focussed on the relevant information and sharing it with the stakeholders to stimulate their awareness and thinking – which included some new information being presented at the workshop
- ensuring that judgements were withheld until all the relevant information had been presented, queried and its implications appreciated – whilst ensuring adequate time and encouragement for questions to be asked
- directing the group through a process of developing ideas without constraints and exposing these to the whole group for clarifications and evaluation
- helping the group to appreciate impacts on capital and operating/maintenance costs by working with the cost planner in the workshop process
- keeping an 'open book' of the progressive results of the agreed ideas against the budget – a highly visible reality check on how well they were going, and
- progressively building confidence in the team that they were not compromising the important values for the client as each change in the design was considered.

The outcomes:

The multi-disciplinary VM group agreed:

- to re-affirm the project scope that responded to the agreed 'values' as confirmed by the client and stakeholders,

- actions to amend the plans,
- an updated cost plan (with the cost back to within 5% of the original budget),
- a number of ideas and proposals for the team to further consider and adopt to yield a design that would also help reduce life-cycle costs for the client.

Immediately following the VM study the client was able to confirm that additional capital funds required would be provided which enabled confirmation of the delivery strategy and timetable developed in the VM study.

Importantly, final delivery was achieved within the originally approved budget, on time and the facility performed as required by both clients.

What was the project?

The new Sydney Showground – used for a classic Sydney Royal Easter Show and then immediately afterwards it was used for the Sydney Olympics 2000. It continues to be the home of Sydney's Royal Easter Show and many other events.

Mark Neasbey
Director and Chair, Education
Committee, IVMA



Resetting a failing project and ensuring 'value for money'

Introduction

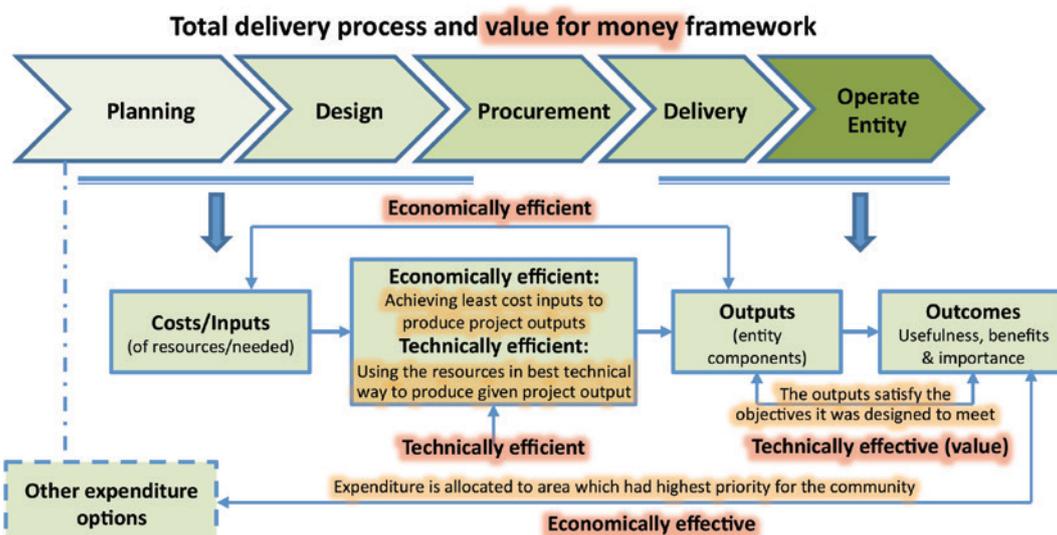
Recently I was part of a review team tasked to advise on the appropriateness, robustness and feasibility of a new project delivery plan for a major project and to recommend any improvements to the proposed delivery plan that may lead to improved outcomes. The project had developed a reset delivery plan in response to the project not achieving the set objectives.

In this article three main observations prompted by the project review about ensuring better 'value for money' will be analysed. The first observation is about an example of an approach or methodology applied to managing 'value for money' requirements, the second will consider how 'value for money' was addressed on the project (which I assert is typical of most projects) and the third observation will highlight what should be done to ensure 'value for money' on projects and/or programs.

Approach for managing 'value for money' requirements

In a paper I presented at the Procurement in Infrastructure and Capital Works, August 2015 Conference, "Applying 'value for money' methodologies in the total delivery process to improve decision making and enhance performance", I recommended a 'value for money' (VfM) concept applied in a total delivery process. The VfM concept combines the AS 4183 Value Management definition of value and an international Organisation for Economic Cooperation and Development (OECD) VfM framework.

The OECD VfM framework included a common 'value for money' definition involving the three E's – economy, efficiency and effectiveness and the related term 'technical'. The framework structured as either economic or technical groups analysed for efficiency and effectiveness results in the terms – Economic Effectiveness, Technical Effectiveness, Economic Efficiency and Technical Efficiency.



Resetting a failing project and ensuring value for money

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The diagram on the previous page defines the above terms and their 'fit' with the total delivery process.

Project 'value for money' processes

Many projects fail to fully realise their set objectives. One common project objective is to achieve VfM. However, in preparing the paper referenced above, a review to improve the practice of VfM assessment was found which indicated the VfM concept has often been applied either *vaguely*, (so meaning different things to different people), or *narrowly*, (defined as relating simply to cost). Unsurprisingly, this was the situation found in the review of the reset project referred to above.

In the projects reset delivery plan, the VfM term was mentioned over 50 times. Examples of the plan's sections where the term 'VfM' was specified involved headings including – Key Messages, Lessons Learned, Project Baseline, Committed Works, Procurement, Planning and Scheduling, Key Changes, Savings, Assumptions, Assessment of Options, Project Aims and Objectives, Opportunities, Project Delivery System, Stakeholder Views and so on.

It was clear the VfM requirement had been specified outside of any formal structure and it meant different things in the different references in the document. An analysis of the context of VfM identified the following snapshots including the term VfM:

- “support for scope to deliver VfM savings”
- “primary criterion of VfM savings”
- “meet clear VfM and risk transfer criteria”
- “tendered price does not represent VfM”
- “target works providing greater VfM”
- “unfavourable VfM metrics”

- “VfM cannot be established”
- “project VfM outcomes”
- “delivering VfM solutions”
- “prioritisation based on VfM savings”
- “poor VfM risk transfer”
- “appointing contractors to a panel on a VfM basis”
- “assess tendered prices for VfM”
- “target works providing greater VfM”
- “provide VfM for investors”
- “maximises VfM”
- “more efficient VfM solutions”
- “level of VfM under the approved solution”
- “re-scope to solutions delivering greater VfM”
- “clear and primary focus on VfM of works”.

It is concluded from this brief analysis what is typical of most projects and/or programs – that references to VfM are usually just ‘motherhood’ statements and there is no formal structure or plan for achieving VfM in project plans.

Ensuring ‘value for money’

So what should projects and/or programs do to achieve VfM? Firstly, they should adopt a formal structure for VfM such as the approach introduced above. Having adopted a formal structure, the next step is to implement knowledge areas and activities to achieve VfM. Combining the AS 4183 Value Management definition of value and the international OECD VfM framework leads to the knowledge areas/activities shown in the following jig-saw puzzle figure. Using the jig-saw puzzle analogy – all the pieces of the puzzle must be in place to achieve VfM.

In addition to implementing the knowledge areas/activities to achieve VfM, it is important to apply a Performance Management Framework to ensure VfM is achieved.

An explanation of a Performance Management Framework will be considered in a future Value Times article.

Michael Ord
Director, IVMA

Knowledge areas / activities to realise a project

TECH EFFICIENCY Use the resources needed (inputs) in the best technical way to produce a given project output (entity components)	PMBOK integration, scope, time and cost	ProgMan financial, stakeholder & governance	Planning and design	Best delivery model	ECONOMIC EFFICIENCY Achieving least cost inputs (least cost of resources needed) to produce the project outputs
	PMBOK quality, comms, risk, procure'nt	TechTools Digital Eng... Asset Man...	Risk allocation	Approvals IR Environ	
TECHNICAL EFFECTIVENESS The project outcomes - features of usefulness, benefits and importance are realised	Value management	Cost-benefit analysis	Value management	Cost-benefit analysis	ECONOMIC EFFECTIVENESS The project expenditure could not have been allocated to another area which had a higher priority for the community
	Risk analysis	Stakeholder engagement	Risk analysis	Strategic/long term planning	