

THE VALUE TIMES

SUMMER
EDITION
2016

Message from the President

Eating Strategy for Breakfast!

I'm rather fond of scrambled eggs and bacon — it's my breakfast of choice when I'm attending a business meeting or conference.

My regular daily breakfast — which I love — is a combination of coconut yoghurt, fresh berries and a few nuts.

In the spring edition of Value Times, there was an article about the presentation that I'd given at the Infrastructure Procurement Value Optimisation conference.

I started my presentation by describing a recent experience that involved a “scrambled eggs and bacon” breakfast and my observation that I received much better *value for money* at the Cafe where I was eating the breakfast than at the hotel across the road where I was staying.

This was because I was able to get *exactly* what I wanted at the Cafe for half the cost of a variety of offerings at the hotel.

I went on to explain that after breakfast I went back to the hotel to have meetings concerning *value for money* and multibillion-dollar mining projects; the point being that

the *principles* in determining best *value for money* for the breakfast were exactly the same as those for the multibillion-dollar projects.

The management guru Peter Drucker once said “culture eats strategy for breakfast!”

Now, whether one is having scrambled eggs and bacon, or yoghurt, berries and nuts for breakfast — most of us have our favourites; it is worth reflecting on Drucker's observation.

It is easy to be drawn into the trap of putting all one's effort and resources into strategy — including a strategy to achieve best *value for money*. The often-ignored factor is organisational culture that, Drucker so adeptly states, “eats strategy for breakfast”.

Drucker is not saying that strategy is unimportant. He is saying that strategy must take second place to culture.

Through years of research, teaching and practice of Value Management, I have observed the vital role of “organisational culture” in achieving best *value for money*.

It's easy to be drawn into the trap of seeing Value Management simply as a process or

Continued on page 3

The Purpose and Role of Value Management Champions

Message from the President

Continued from page 1

Background

With IVMA's relaunch at the procurement conference organised by Quest Events and its desire to grow awareness and application of Value Management and value for money outcomes, the idea of champions to work with and on behalf of the Institute is being explored.

This paper provides some ideas about the role of and possible activities to be undertaken by champions who are approached by the Institute to undertake the role and who take it on.

Purpose

The purpose of a Value Management champion is to actively:

- promote IVMA and its central role in value, Value Management and value for money
- explain Value Management and what it is (and what it is not)
- explain value and how to measure it
- link value outcomes to life-cycle cost thinking
- espouse the benefits to be obtained from formal Value Management processes
- promote the availability of accredited VM practitioners, what they do, and how they do it.

The role

The anticipated role of the 'value champion' is to promote value, Value Management and value for money within the sector of their expertise/activity, and other sectors that intersect with it. The champion could, for example:

- introduce the use of Value Management within their organisations and others related to it
- expand the use of Value Management — both more of what is already occurring, and into new and different areas (say, from just being part of business cases to strategic planning or organisational structure and governance)
- promote a rigorous understanding of value (as defined in AS4183)
- ensure wide and proper application of value-related activities (such as value for money determinations in tender evaluations and purchasing decisions)
- explain the benefits of the VM process
- provide real-world examples of what can be achieved, in dollar terms as well as other outcomes such as 'reduced timeframe, reduced scope' whilst still achieving required functionality, or that the wrong problem was being addressed
- direct people to the IVMA website for more details about the Institute and to access IVMA's knowledge base and reference sources.

Colin Davies
Director, IVMA

set of techniques; Indeed, this is how Value Management has traditionally been explained and marketed. Whilst Value Management does indeed bring a process and set of techniques, it's vitally important to see how that process and those techniques fit into a whole organisational context.

An organisational culture that seeks best value for money will nurture collaboration and learning — key planks of Value Management as stated in AS 4183-2007. The standard describes the first stage of a Value Management study as "Building shared knowledge and Understanding": it's a time of organisational learning as I've stated many times at IVMA and other events.

In my opinion, this is by far and away the most important part of any Value Management study, yet strangely, it is the area that I've most been asked to "cut back" or even "eliminate" to save time. I always resist this.

From research into emotional intelligence, we know that how people feel about working at a company can account for 20% to 30% of business performance. Obviously, this affects value for money in so many ways. But what is it that makes people feel "good" or "bad" about a company? Primarily, it's culture, which is driven by leaders.

Goleman, Boyatzis and McKee (2004), show that "the percentage of the time people feel positive emotions at the work turns out to be one of the strongest predictors of satisfaction, and therefore, for instance, of how likely employees are to quit. In this sense, leaders who spread bad moods are simply bad for business — and

those who pass along good moods help drive the business's success".

We can see from all this that there is much more to achieving value for money than applying a structured process or set of techniques.

We need strategies to achieve best value for money, but those strategies must sit within an organisational culture that promotes shared knowledge and understanding, promotes collaboration and nurtures a positive and supporting working environment.

This all takes good leadership, which is where best value for money begins.

Thanks and Greetings

Thanks for your contributions over the last year, in so many different ways. I particularly thank the new IVMA Board for their enthusiastic and positive endeavours, which I know, will lead to many beneficial outcomes.

I wish all members a joyful and peaceful Christmas, and happy New Year and leave you with words from the very first Christmas as recorded in the Holy Bible:

"For unto you is born this day in the city of David a Saviour, who is Christ the Lord. And this will be a sign for you: you will find a baby wrapped in swaddling cloths and lying in a manger. And suddenly there was with the angel a multitude of the heavenly host praising God and saying, 'Glory to God in the highest, and on earth peace among those with whom he is pleased!'"
— (Luke 2:11-14)

Dr Roy Barton
President



This all takes good leadership, which is where best value for money begins.

Project Management and Value Management

Introduction

I have worked in project management, in some form, my whole working life (i.e. over forty years), and qualified in value management (VM) in 1995. I have seen a shift in the use of (and potentially understanding of) VM within the field of project management.

“Value management (VM) cannot be divorced from the management of projects and involves mechanism for integration to improve communication and information flows. This allows the exploration and interrelationships between time, cost, quality, function and any subsequent trade-off between these.”

p.87, Thiry, Michel, *Value Management Practice*, 1997, PMI.

The above excerpt is from English project management researchers, John Kelly and Steven Male. The statement clearly identifies the importance that VM plays in the successful management of a project.

The contemporary Project Manager (PM) faces great pressure on bringing home a project, possibly more than ever. The contextual environment of project delivery has changed - the PM is exposed to external influences and internal barriers that often require a more flexible way of thinking.

In my opinion, the PM has to gain access to appropriate tools to assist in the clarification of the project. VM is one of these tools, and I would like to see the modern PM embrace VM as a core tool to support the discipline of project management.

I have noted that project managers coming from the northern hemisphere — particularly in the professions of the

built environment — have a greater understanding of the applications, advantages and use of VM in projects.

A PM wears many hats during the evolution of a project. One of the clear deliverables a PM is charged with is to seek clarity — in fact to provide and seek clarity. Again, I see VM as a key tool in establishing clarity. One would expect to see VM becoming more dominant in the toolkit of the Australian PM, however my observations are showing this not to be so.

The iterative nature of projects

The appropriate use of VM will provide the PM with valuable deliverables at all phases of a Project’s life. The timing of any study, from experience and well documented, is critical. When conducted early in the concept phase the PM will gain valuable insight into the rationale of the Project and an understanding of the ‘how and why’.

From the perspective of a PM who would not want to have?:

- Stakeholder buy in
 - Challenged and defined Objective
 - Carefully analysed and questioned assumptions
 - Determined time lines
 - Clarified Quality objectives
 - Conducted, assessed and implemented a compliant Risk Management Policy
 - Clarification and direction on the appropriate Procurement model
 - Determination and analysis of function
 - Clear direction on Value for Money and what Value means in the Project context
- ...all delivered by appropriate use of VM.

The PM no longer, if ever, works in a static or linear environment.

The pig’s tail, on the figure to the right, reflects this iterative nature. We progress with the project, analyse our current status, evaluate possible actions (and decide) then synthesise these into our project components moving forward. VM has a part to play in the total life cycle of a project, and is key at each of these iterations.

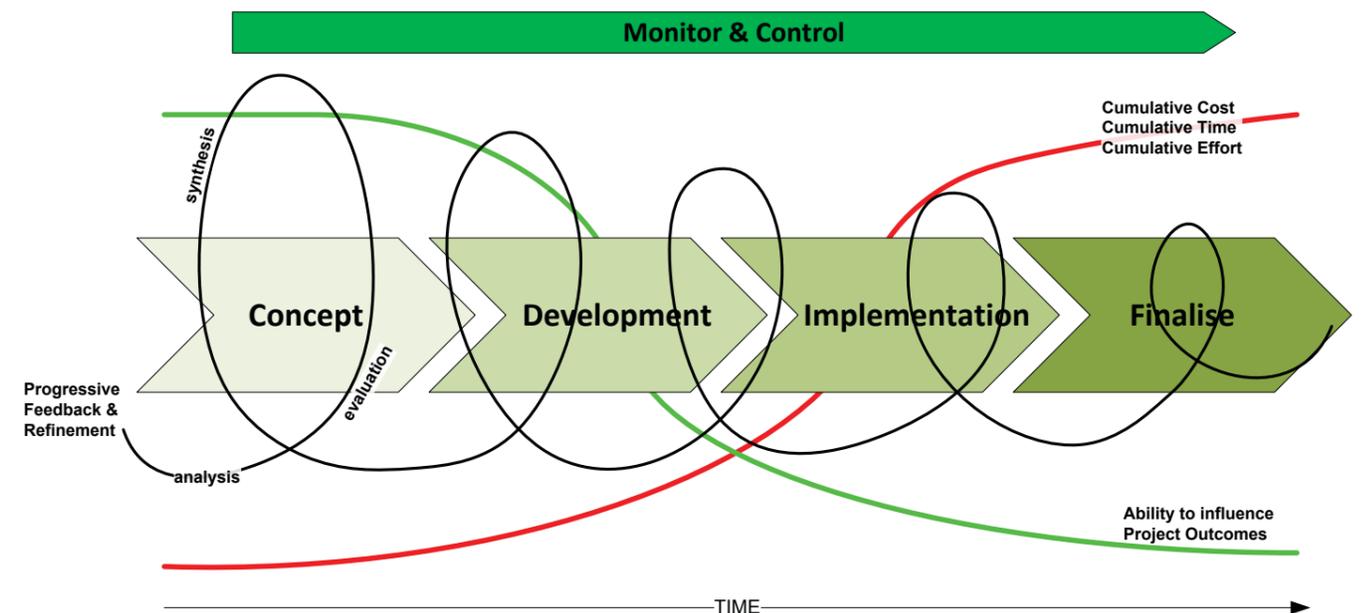
Other models have emerged to deal with project uncertainty

In the often bewildering business environment the contemporary PM is exposed to a variety of delivery models, with differing project life cycles. These delivery models have evolved as a response to the uncertainty in projects.

Traditional projects are ones where we can see both what is required — as the final project deliverable(s) — and the approach to achieving this deliverable is also quite clear. In a construction environment, where most of my project and Value Management experiences are based, traditional project management applies. This does not mean there is no uncertainty (and certainly that changes do not occur) — only that the methods and approaches used in construction are well established.

My experiences with VM in the construction environment (usually at the early stages of the project) is where the VM study will analyse the proposed approach, with stakeholders and subject matter experts, to see if there is a better, smarter, more efficient way to approach the work — while still achieving what is needed and expected within the project.

With technology projects, uncertainty can be greater — either around what is actually required (or exactly what the end-product would look like), or how to get to what is required.



Delivery models have emerged to deal with this uncertainty, for example agile or iterative approaches to project delivery. An agile approach applies when the overall goal of the project is clear, however the approach to delivery (and therefore the total cost of delivery) is unknown. With an agile approach, the project manager will scope the full work at a high level, however deliver selected functions in iterations, i.e. a workable solution (or partial solution) results from each of the iterations.

An agile approach might use a model such as “scrum” (an interesting use of language and of interest to the Value Management Training class of 95 where this concept was first coined). We also have process improvement processes (that are also closely related to PM) like six sigma, lean sigma methodologies.

I have observed many models emerge to support the delivery and decision-making on projects that, in some way, fill a role that VM might have filled. It is not to say, that the alternate processes are not valid, I just wonder why VM has not been adopted in, say, the IT project context.

Further observations

I have noticed, of late, that many clients who do request a Value Management study for one of their projects, ask if they can get it done in one day, half a day, two hours and so forth. Also, when working on the purpose of the VM study, the client and the project teams are not clear on what “value” means – to them or their client/ stakeholders. It appears the VM process is not understood, and it is (in some examples) seen as an exercise to satisfy compliance, or a stakeholder request.

Conclusion

There is no doubt that VM is an appropriate and extremely useful tool for the Australian PM. My concern is that I feel VM is not well understood by many Australian PMs and their organisations. My concern is also that PMs use “trendy” processes, that have emerged in varying industries, in favour of VM — again because VM is not well understood.

I would like project management to see VM as a core and pervasive tool for a PM.

**John Arthur
Director, IVMA**

That Elusive “Productivity”

Paul Keating remarked in the early 1990s that “every parrot in the pet shop was squawking micro-economic reform”. Now it appears that the (much older) parrots seem to be squawking “Productivity”.

The Coalition government has, in numerous statements both before and after the 2013 election, stated it will “boost productivity by reducing red and green tape cost burdens”. So what is this “Productivity” and how will reducing red and green tape improve it?

Productivity was traditionally defined as Labor Productivity; quite simply the total value of the output of a group of workers divided by the hours worked. This approach tends to focus on labour and capital inputs.

Productivity now tends to be described by the interchangeable terms Total Factor Productivity or Multifactor Productivity. This approach compares the rate of change of the value of output and the rate of change of the value of inputs and includes the impacts of innovation, managerial skill, planning and organisation.

This is all fine; basically, working smarter with an improved use of resources will deliver an improved standard of living. But will this improved standard match customer’s or user’s needs?

True value delivery to the community, value for resources used, or, more simply, value for money is best achieved by first identifying what is really valued by the community and then setting out to deliver this.

“Value” is defined in Australia Standard AS 4183 – 2007 as the **usefulness, benefits and importance** of goods or services as perceived by users and customers. **Value for money** is a measure used for comparing alternatives based on the relationship between value and cost — and the least cost option won’t win this contest if it doesn’t deliver value to customers.

The way to deliver value to customers is to understand what **needs to be done** to achieve the **usefulness, benefits and importance** valued by the customer. In Value Management this is achieved by describing what is needed in simple active verb and measurable noun terms, for example: ‘move goods’, ‘move people’. In Value Management these simple descriptions are called **functions** and the whole of the issue or project under study needs to be described in functional terms.

This is a proven approach to ensure that a multidisciplinary team can understand what is required — free of jargon.

This is an important step as a team approach with basic information is the most direct catalyst for **innovation**. Innovation often stems from what appears to be the least likely source; the marketing manager who solves a storage capacity issue in a process engineering plant, the “all seeing” electric overhead crane driver who can lead the team to massive safety and operational savings in a heavy engineering factory.

Delivering what the customer needs also require that it is **future** needs that must be satisfied. If you are just “fixing a problem” you may satisfy current and short-term needs but not the longer term.

This strategic viewpoint is critical because the customers’ needs must be satisfied over the life of the asset and, importantly, over the period in which income from the customers must pay back the borrowing.

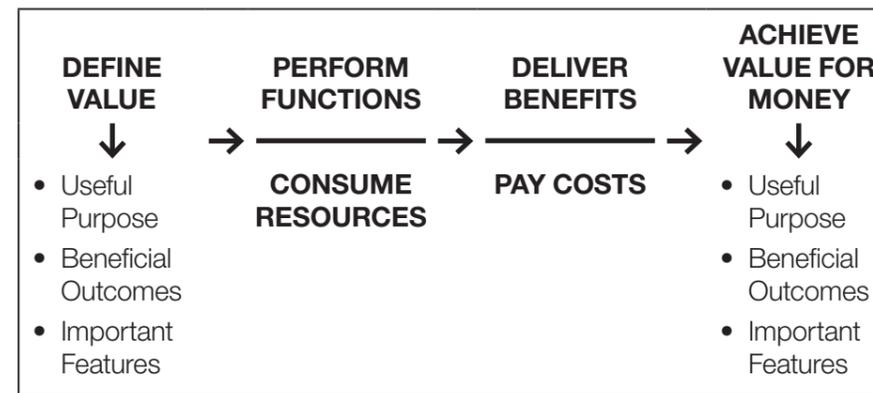
In this regard it is interesting to note economist Ross Garnaut’s opinion that as a consequence of ignoring external factors “a very large part of a quarter of a trillion dollars invested in expansion of the resource sector since the China model changed in 2011 will never return the cost of capital”.

Innovation created within the Value Management structure has the potential to deliver just what customers need with the optimal use of resources. Isn’t this what total factor productivity aims to achieve?

Of course you actually have to deliver the benefits and pay for this delivery but if you had done the upfront “hard yards” you will do this at the lowest cost.

A critical factor is that there must be no “cheapening” of the product or service: the quality and standards required by customers must be determined and adhered to in developing and delivering the final product.

Closing the circle between defining the value in the first place and actually achieving it is shown in the following diagram. Quite simply, the smarter the method of performing the Functions, including innovation, the lower is the consumption of resources and the lower is the cost of this denominator in the equation — leading to lower costs when the benefits are delivered.



Achieving Value for Money

The key is understanding what is valued by consumers then innovating to deliver it reliably to the required quality at the lowest cost.

So if you really want to deliver increased productivity the concepts of value and value for money are core to achieving total factor productivity because not only do they capture all the related costs (which includes all resources used) they also ensure that the use of resources are directed to delivering what has actually been identified as being of value.

As Alexander Field, Professor of Economics at Santa Clara University says: “if a country wants its standard of living to rise over the long run, the bottom line is that its labor productivity has to go up. And for that to happen, it either has to invest more or innovate.”

This sentiment is echoed by former Treasury Secretary Michael Keating who admits that “there is scope for improved labour relations to make a modest contribution to improved productivity by improving workforce development and the

use of existing skills, but the main responsibility for improvements in that regard lie with employers themselves”.

Robert Reich a policy maker in the (U.S.) Ford and Carter Administrations and President Clinton’s Employment Secretary places an even greater emphasis on forward thinking and innovation in achieving a competitive economy and growing standard of living: “National competitiveness is thus less dependent on the quantity of money that a nation’s citizens save and invest than it is on the skills and insights they potentially contribute to the world economy.”

So just how will the Coalition’s proposed “cutting of red and green tape” improve productivity? I wouldn’t be holding my breath. A more focussed approach may be to directly address the creation of value for money relevant to current and future human needs by adopting a direct value for money approach using Value Management as the tool.

John Bushell
Chair, Publications and
Events Committee, IVMA

The way to deliver value to customers is to understand what needs to be done to achieve the usefulness, benefits and importance valued by the customer.

It's time for Construction Clients to pay attention

Getting on-site ready saves money.

Traditional construction procurement and on-site work methods are slowly changing. The rate of change is mixed depending on the level of engagement or denial of parties involved.

This photo was taken recently on a NSW Public School site. It shows the joinery being delivered when less than 30 percent of the project was waterproof.



Modern Construction (MC) is a term that describes the systemic changes that are occurring in construction today. Often terms such as BIM, DfMA, Off-site, Prefabrication and Lean Construction are offered as the embodiment of these changes with each potentially representing the new construction paradigm.

The reality is that these applications are only parts of the story.

MC requires a new approach to project formation, procurement, assembly and acceptance. Quantifiable improved outcomes must be the product of **MC**.

An example of the quantifiable improvements that **MC** should be able to deliver include;

- 20% reduction in the initial cost of new built or repurposed assets
- 30% productivity improvement in the use of on-site workforce inputs
- 50% reduction in the insurance costs of on-site injuries and lost time
- 40% reduction in the overall time, from inception to completion of projects
- 50% reduction of on-site produced construction waste going off site
- 80% improvement to constructed quality and compliance

- 30% reduction in the embodied energy used in constructing new assets
- 50% reduction in operational greenhouse gas emissions of new build
- 30% reduction in 10 year projected asset maintenance costs,

Measures such as these must evidence the productivity, effectiveness and value for money goals sought.

If you cannot measure systemic improvement, then there are in effect no improvements. It's time for clients to pay attention.

Universal commitment to pursuing these outcomes must define **MC** behaviours across the entire construction value chain.

Construction is becoming part of the digital economy; it is becoming industrialised and it is most certainly part of a global market place where construction services and goods now move freely across multiple jurisdictions.

MC will always require a level of onsite activity, while on-site fabrication is progressively reduced by the introduction of value added components manufactured elsewhere. How the sum of the parts is defined and brought together in this context will test **MC** effectiveness.

There are observable dysfunctions occurring on projects where one element of **MC** is being pursued without a whole of system or sum of the parts approach.

For example, a 30% reduction in on-site workforce inputs and a 40% reduction in overall construction time requires a level of project integration not normally applied in Traditional Construction (**TC**).

And it would not be possible to embed a full understanding of **MC** unless equal weight was applied to reducing injuries, reducing waste, lowering embodied energy, lifting compliance levels and lowering operational costs.

Industrialising construction is about all of these. Achieving on-site readiness to optimise construction's off-site counterparts now becomes the main game for Modern Construction Projects (MCPs).

Modern Construction Enterprises (MCE's) will be the heart of **MC** success. They are both inextricably linked.

Measuring MC performance offers clients a tangible new line of sight to see which constructors are getting the MCE + MCP equation right.

David Chandler OAM
www.constructionedge.com.au

Federal push to grow 'big cities'

Federal cabinet has signed off on plans to use \$6 billion in annual infrastructure spending to strike new deals with the states to grow the nation's big cities, including a proposal to set up legislated authorities to take politics out of planning.

The decision clears the way for a push to set-up major projects as independent agencies to prevent politicians scrapping work already funded by Canberra, an attempt to prevent a repeat of the cancellation of the East West Link in Melbourne.

States would also have to commit to integrated planning to justify federal support for projects such as motorways and metro rail, as part of an agenda that could favour urban density over suburban sprawl.

The decision represents a radical departure in federal activity in urban planning

suggesting greater support for public transport and a bigger say in urban planning.

The new federal agenda includes financing options such as drawing on the commonwealth balance sheet to encourage private investment into projects.

The next step will see the release of a discussion paper in early March to canvass ways the federal government could improve urban planning — a new move by Canberra into areas once left to the states and territories.

Minister for Cities Jamie Briggs will meet with state and territory planning ministers early next year.

About \$6bn is paid each year by the commonwealth towards infrastructure in the big cities.

IVMA Comment

NSW had a good history of rational public infrastructure decision making from 1990 when the Unsworth Government introduced the Total Asset Management Policy that included the application of Value Management, Risk Management and Economic and Financial Evaluation of Projects and Programs. Other Australian states subsequently introduced similar programs. In recent years the use of this discipline has reduced which has resulted

in calls from the Productivity Commission, Department of Urban and Regional Development and the B20 Group (who support the Global Infrastructure Hub) for greater transparency and financial discipline in public sector investments.

John Bushell
Director IVMA
Chair, Publications and Events
Committee, IVMA