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President's Message

Nothing New Under the Sun

*"What has been will be again, what has been done will be done again;
there is nothing new under the sun."
Holy Bible, Ecclesiastes 1:9*

Many, if not all readers will be familiar with this oft-quoted saying: "there's nothing new under the sun".

Its veracity came home to me afresh during the recent *Australian Government Procurement Week* conference at which I was one of the speakers, representing the IVMA.

I had been asked by the organisers to speak about "Pursuing best practice procurement through better Value Management processes", and to specifically deal with the following topics:

- Creating a 'value culture'
- Applying the Value Triangle to all procurement activities
- Overcoming challenges
- Benefitting from showing leadership and encouraging organisational leaders to engender a 'value culture'

Regular readers of my *Value Times* articles will be aware that these are subjects that I am quite passionate about and I appreciated the opportunity to share my

thoughts on these matters with the large gathering of procurement professionals assembled at the conference.

The conference organisers, Akolade, do a great job in bringing together a wide range of speakers and audience participants from all over the country as well as some from overseas.

I got on to the subject of there being "nothing new under the sun" whilst speaking about 'value' – why *anything* has value – and quoted the famous philosopher and mathematician, Daniel Bernoulli who, in 1738, wrote "the value of an item must not be based on its *price* but on the *utility* that it yields".

The 'utility' to which Bernoulli refers is completely captured in the Value Triangle which is at the centre of the Australian Standard on Value Management (AS 4183-2007). Hence, we define 'value' independently of 'money' or 'price' and have processes in place to seek best *value for money*.

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President's Message

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But ponder, for a moment, the discussions that were taking place in 1738 about value, money and price.

What was it that prompted Bernoulli to write this 279 years ago? I suspect that people were having similar conversations in 1638, 1538 and so on, just as we are in 2017; there's nothing new under the sun!

Yet at the conference, I heard speakers refer to some procurement needs and initiatives *as though they were new*. For example, the need for procurement process that recognise that the lowest price won't necessarily give best 'value for money'; or that *collaborative approaches* are needed in procurement; or that sub-contractors need to be brought into co-operative contract arrangements; or that project charters can help co-operative contracting.

I was initially taken by surprise at the implicit and sometimes explicit claims that such things were "new", since they have been part of normal practice of Value Management practitioners for a long time, but then I reflected on the Bible verse that I quoted above – "there is nothing new under the sun".

When someone is presenting something as 'new', we should recognise that it *is* new to that person – and possibly to

others – even though you might have known it and been practising it for ages (and even if you haven't, someone else almost certainly has) – but it's certainly not new "under the sun"!

There is a dangerous trap for us all if we assume everyone is on the same page in terms of knowledge and understanding.

Here are the main points that I made at the conference – none of which are "new under the sun" – but all need to be stated and re-stated because they are new to some:

- On creating a 'value culture': "Culture eats strategy for breakfast," observed Peter Drucker and this is a crucially important aspect in seeking best value for money. As I said at the conference, *"We can improve procurement by improving our processes, but to really make a difference we need to get above process and work on organisational thinking and culture"*
- On applying the Value Triangle to all procurement activities: I re-stated the essential need of coming to agreement on the apex of the triangle - primary purpose. If only people would form the habit of asking, "what is the purpose of this?" in any procurement situation, that alone would have dramatic effect on 'value for money'. When we add the



other two factors from the triangle – beneficial outcomes and important features, then we have a Value Statement that may be used to guide all planning and design decisions and seek best 'value for money'.

- On overcoming challenges: in procurement, we have effective *processes* for developing best 'value for money', but the *big* challenge is convincing people of the importance of building *shared* knowledge and understanding amongst stakeholders and project team players. I have written and spoken about this on many occasions, but this still remains the biggest challenge and potential barrier to achieving best 'value for money'.
- On benefitting from showing leadership and encouraging organisational leaders to engender a value culture: We must encourage and nurture organisational culture through leadership and development of good habits. Leaders must step-up to do this. It will not happen without good leadership and intentional effort. The fact that we often lack a 'value culture' is evidence that leadership is lacking. Again, there is nothing new in this.

Recently I was teaching a two-day course in Value Management basics for Facilities Managers. As part of the course, we video-linked my ACVM colleagues Alan Butler and Mark Neasbey who shared their experiences and insights into achieving best 'value for money'. I had asked Alan, beforehand, to share his journey from a cadet architect with NSW Public Works, through to his role as head of the Product Evaluation Unit (NSWPWD), and eventually to Managing Director of ACVM.

Amongst many valuable insights that he shared with the group was the lament that so many of the practices that we directly initiated in Government during the 1990s and continued into the early 2000s (which had remarkable effects in improving 'value for money' for government procurement), are no longer in place. The 'champions' of these initiatives have long-since retired and the corporate knowledge of those initiatives has gone with them, meaning that the people who replaced those former champions start all over again – the same problems exist – there is nothing new under the sun! This has profound effects upon achieving best 'value for money' in government procurement.

The national 'pink batts' scandal comes to mind. The former Public Works people would have handled that program with ease, properly managing risks and seeking best 'value for money'. But those people had all gone! There was no public works department left to do it and the consequences were catastrophic in terms of loss of life and disastrous in terms of monetary loss. No value for money there.

Whilst we may lament this passing of knowledge and experience, there is a bright side to it. At two recent conferences (including the one mentioned above), my presentations about the Value Triangle and associate processes in achieving best 'value for money' have been greeted with great enthusiasm and applause – *as if they were new!*

And this is the point – they *are* new to these young audiences. We may be encouraged that there is a new generation of procurement professionals who will face the same challenges as their predecessors,

who are seeking help in getting best 'value for money' from all procurement activity.

And so the cycle goes through another iteration and generation. There truly is nothing new under the sun.

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

IVMA 2017 Annual General Meeting

Under our Constitution there are critical time bars for essential activities in the management of IVMA that relate to the date for the AGM. This year's planning has been around an AGM being held at 3pm on Thursday 12th October 2017 and has seen:

- 29 June 2017: Call for Nominations for Member Directors issued by email and placed on the IVMA website;
- At the earliest, 3 August 2017 and at the latest 5 September 2017 Nominations for Member Directors must be lodged with the Secretary IVMA;
- 15 September 2017: a formal Notice of AGM, Proxy voting forms, Nominations and return details will be issued.

Four of our current Member Directors will be standing down and may consider re-nomination, should they like. These are: **Alan Butler, Ted Smithies, Colin Davies and John Bushell.**

Other members might also like to consider nominating and they should consult the details issued in the Call for nominations to see if they are eligible first, then certainly lodge a nomination.

Participation in the AGM is easy. If you cannot attend in person at ACVM's offices, 55 Albion Street Surry Hills, you can send a Proxy with your wishes or join in by video conference using Zoom, a free application. Details of the Zoom access code will be advised.

All members will be welcomed.

Alan Butler
Secretary, Institute of Value Management Australia

Performance Management Framework

Introduction

In the Value Times Summer (2016/17) Edition article "Resetting a failing project and ensuring 'value for money' I identified the importance of applying a Performance Management Framework (PMF) to ensure VfM.

In this article an explanation of a PMF will be provided together with an account of 'learnings' from the progress of an infrastructure project in accordance with a typical government delivery process.

However, before this explanation I will consider what relevance AS 4183 – 2007 Value Management applies to performance management and review the typical features of Government infrastructure investment performance management.

AS 4183 and Government Performance Management

AS 4183 Section 5 Embedding Value Management provides a brief but strategic commentary about organisations embedding value management into their culture and being applied at all levels of decision-making. The commentary recognises that most organisations will have existing practices that aim to achieve best 'value' and 'value for money'.

AS 4183 Section 5 provides guidance on enhancing the Value Management 'culture'

and building on existing practices. The guidance recommends an organisation should critically review and assess those elements of Value Management that may already be in place.

It states the review should include a structured appreciation of seven specific items and the review should form the basis for the development of a Value Management plan covering the development, implementation and sustaining phases as Value Management is introduced and becomes embedded in the organisation's culture.

An example of an organisation with Government practices in relation to best 'value' and 'value for money' is the independent statutory body Building Queensland (BQ) which has been established in Queensland to provide independent expert advice to Queensland Government agencies, government-owned corporations and selected statutory authorities to enable better infrastructure decisions.

The BQ business case development framework (BCDF) introduction states that infrastructure investment decisions have direct impact on the economic and social domain and good decision-making relies

on quality proposals, well developed business case documentation and effective review processes. The foundation for the BCDF is the Queensland Government's project assessment framework (PAF). The PAF involves the typical stages of a project lifecycle and includes a Gateway process (i.e. Gates 0, 1, 2 and 3).

Performance Management Framework And Measurement System

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 maintained to ensure 'value for money', what is needed is the establishment of a comprehensive performance management and measurement system (i.e. PMF). A graphical outline of a PMF is shown below.

The approach to performance must recognise that achieving 'value for money' is an 'outcomes focussed' process and success is judged in terms of impact on society. Therefore, performance should be defined by measures of the effectiveness of outputs produced. This approach to performance is consistent with the AS 4183 Value Management definition of value.

The features of this PMF are like the typical Government frameworks referred to above. However, the PMF has an emphasis on a VfM test milestone, a procurement option test milestone and appropriate points to assess the progress of VfM outcomes. It is contended that the PMF should be overlaid on the typical PAFs and project delivery gateway processes. A brief explanation of important elements of a PMF follows.

The Value Management study process is critical to the VfM test milestone and defining performance (i.e. what good performance looks like). The plan for measurements should be developed at the VfM test milestone. The procurement option test is about determining best-fit procurement and selecting the mode of procurement that will deliver the most 'value for money'.

In accordance with the measurements plan actual performance should be assessed against 'what good performance looks like' to draw conclusions and recommendation. Performance should be assessed in terms of outputs (and outcomes) and operating and maintenance cost.

Project Performance Management Experience

Three relevant and important observations about infrastructure projects include:

- competition for project funding,
- some projects fail to pass gates
- ultimately some projects fail to achieve intended performance outcomes.

The competition for project funding means that at the business case (i.e. study phase)

stage projects must demonstrate their value and benefits to society and therefore substantiate their priority for funding or otherwise the funding would be allocated elsewhere. Most Government infrastructure projects are implemented in accordance with stipulated frameworks and delivery processes. So why do some projects fail at gates in the gateway process.

Drawing on current project experience with a gateway process I will offer potential reasons for failure at gates in a gateway process. One likely reason would be uncertainty of study scope which can be problematic in the early/business case stages of a project.

In a current project the Government client had identified for a future stage further investigations to confirm environmental impacts and offsets, land acquisition and associated compensation, and contractual liabilities and risk allocation. However, at a strategic review workshop, the workshop participants had identified the need for environment, heritage and community engagement activities to be more detailed than desktop assessment to ensure robust outputs for achieving the gate requirement. This change was accepted and a potential flaw for the gate was avoided.

A second aspect, which was recognised as important to passing the gate, was financial and economic analysis requirements. The financial and economic outputs would be critical to resolving competition for project funding and prioritising projects. However, a review had identified that the scope for economic benefits and the inputs required for the

financial and economic analysis had not been confirmed.

The review also identified other aspects that were challenging for the study outcomes including the write-up of cost-benefits, that uncertainty was not understood for all project elements, long term planning had not been fully resolved and the scope and assignment for producing gate documentation had not been confirmed.

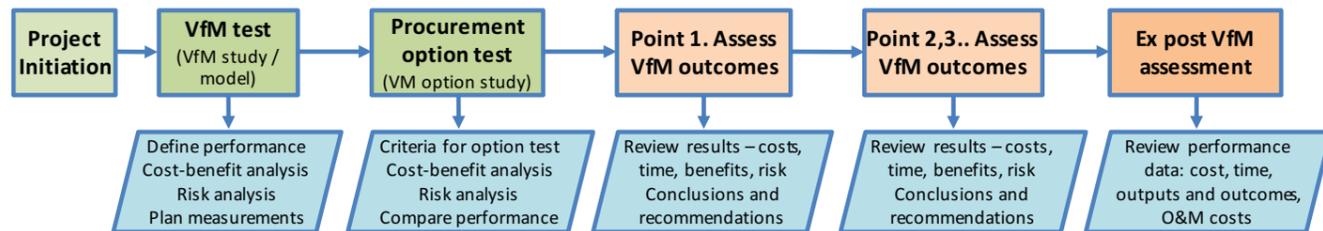
Noting the issues discussed above it can be seen why some projects might fail at gates if such aspects and issues are not resolved satisfactorily before the gate. Further, for such aspects, if the outputs are not robust the project ultimately might not achieve intended performance outcomes.

Ensuring Performance

I contend this article highlights what is important to ensuring performance including applying a structured PMF during the project delivery lifecycle, that the Value Management study process is vital to ensuring performance, and in particular for passing a VfM test milestone and the importance of assessing VfM progress and outcomes at appropriate points in project delivery.

In closing, I suggest there is an opportunity to review AS 4183 Section 5 Embedding Value Management to strengthen AS 4183's contribution to industry for performance management processes and outcomes.

Michael Ord
Director, Institute of Value Management Australia



Australia's Electricity Future

A longer, referenced, version of this article is available on the IVMA website: www.ivma.org.au > THE KNOWLEDGE BANK > MEMBER PAPERS

"A talent for following the ways of yesterday is not sufficient to improve the world of today" King Wu-ling, Zhao, north-east China, 307BC

Background

For decades Australia has had some of the lowest electricity prices in the world.

In the last decade however typical Australian electricity prices have doubled and there have been a number of incidents of poor reliability and supply interruption.

As a consequence, in October 2016 the Council of Australian Governments (COAG) commissioned an independent review of the national electricity market to take stock of its current security and reliability and to provide advice to governments on a coordinated, national reform blueprint. Dr Alan Finkel, Commonwealth Chief Scientist, led this Review.

What was Dr Finkel asked to do?

The purpose of the Review was to develop a 'National Reform Blueprint' to maintain energy security and reliability in the National Electricity Market (NEM), for consideration by the Council of Australian Governments through its Energy Council.

The Blueprint was to "outline national policy, legislative and rule changes required to maintain the security, reliability and affordability of the NEM in light of the significant transition of the Australian electricity market, including due to rapid technological change, the increasing penetration of renewable energy, a more decentralised generation system, withdrawal of traditional baseload generation and changing consumer demand".

The results of the Review need to be consistent with Australia's ratification of the

United Nations "Paris Agreement" of 12 December 2015 that committed to: "Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change." Australia's has committed to a 26 – 28% reduction in total greenhouse gas emission on a 2005 base by 2030.

The Agreement further commits the parties to achieve no net manmade emissions of greenhouse gases in the second half of this century.

What did the Finkel Review recommend?

The Review's Final Report, "Blueprint for the future", containing 50 recommendations was issued in June 2017. As of August 2017 COAG and the Australian federal government have adopted 49 of these 50 recommendations. The only recommendation not adopted was the approval in principle and then the setting of a specific "Clean Energy Target" (CET).

However in the Report's "Vision for the electricity market" the "emissions reduction trajectory" is 26–28% of **electricity emissions only**. Since electricity emissions constitute 35% of Australia's total greenhouse gas emissions (and no target is proposed for the remainder of the economy) a 28% reduction of electricity emissions only would constitute just a 10% reduction of the nation's **total** emissions.

Thus the Report's proposed "trajectory" falls well-short Australia's commitment to the Paris Agreement. The final setting of the CET must ensure that Australia meets its Paris commitment at the minimum.

The Real World

Currently manmade carbon dioxide (CO₂) emissions have levelled out since 2014 despite growth in the world economy and are now at 32 billion tonnes CO₂ per annum. Global surface temperatures continue to rise. The National Oceanic and Atmospheric Administration reported that the first half of 2017 was the second-warmest January-June on record for Earth, exceeded only by 2016, which was boosted by one of the biggest El Niño events on record.

Where is Australia heading now?

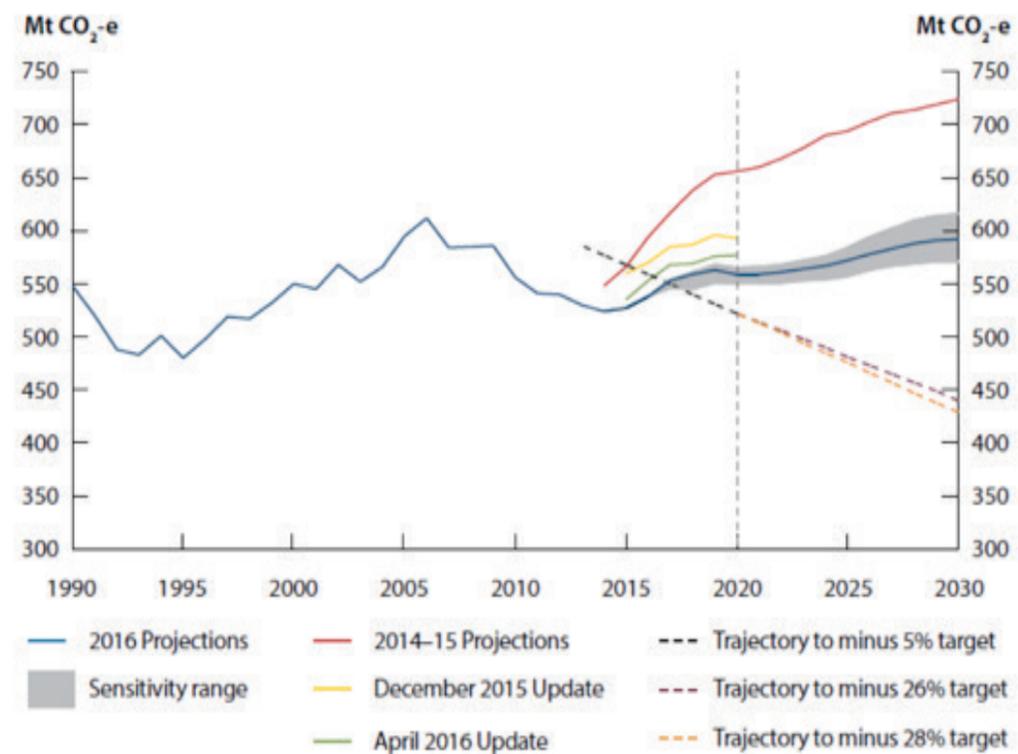
The graph on the right demonstrates that on current information and policy settings Australia will not be able to meet its modest Paris Agreement of 26 to 28% reduction in greenhouse gas emissions target by 2030. The Climate Change Authority has proposed a preferred emissions target for 2030 of a 40 – 60% reduction below 2000 emissions levels. If this target were to be adopted then Australia's emissions in 2030 would need to be between 330 and 220 million tonnes carbon dioxide equivalent (Mt CO₂-e).

What are the implications of meeting our Paris Agreement obligations?

Energy and emissions advisory firm RepuTex modelled the effect of a CET that



(based on current information)
Australia will not be able to meet its modest Paris Agreement of 26 to 28% reduction in greenhouse gas emissions target by 2030



Australian Emissions Projections 2016 (Mt CO₂-e) Dept. of the Environment

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Australia's Electricity Future

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cut emissions from the electricity sector only by 28% (like that modelled in the Finkel Review) and found that prices would drop to under \$40 / MWh around 2023, and then rise to nearly \$60 / MWh by 2030.

It also modelled a CET consistent with meeting Australia's Paris Agreement which would cut emissions from electricity by 45% below 2005 levels by 2030 and found that this would drive prices down a little slower, but then keep them down for longer, stabilising at about \$40 / MWh to \$50 / MWh for most of the 2020s. It found both scenarios caused wholesale prices to drop significantly compared to doing nothing, with the more ambitious CET scenario resulting in lower wholesale prices between 2025 and 2030.

In the 'business as usual' scenario, RepuTex found wholesale prices would hover roughly around the current price of \$100 / MWh.

Therefore the more ambitious the CET, the more competition in the renewable energy market which drives down prices and reduces the market power of expensive gas generators who would less often be able to set electricity prices.

As to electricity system reliability the CSIRO has said at the Senate select committee into the **Resilience of electricity infrastructure in a warming world** that "there is no apparent technical impediment to reaching 100 per cent renewables for the national electricity grid, and levels of up to 30 per cent renewable energy should be considered as just 'trivial' in current energy systems"

Existing fossil fuel electricity generation will be useful in a 'run off' as renewable technologies are introduced but their



Achieving zero net greenhouse gas emissions from human activities by the second half of this century is a huge challenge

emissions profile eliminates new investment as their emissions would continue some 50 years into the future – past the time when zero net emissions must be achieved. From Appendix D of the Preliminary Finkel Review we learn that the estimated operating emissions as generated (kg CO₂-e / MWh) are as follows: Ultra-supercritical black coal (the 'cleanest' coal) = 700; Combined Cycle Gas Turbine (the 'cleanest' gas) 370, Hydroelectric, Solar and Wind, all = 0.

How do we achieve Value for Money?

Today's CO₂ emissions will be with us for millennia so we can ill-afford to put more in the atmosphere. For each tonne of CO₂ emitted today 300 kg will still be in the atmosphere in 2117 and 190 kg will be in the atmosphere in 3017.

The more CO₂ in the atmosphere, the higher will be global temperatures resulting in shrinking availability of cultivatable land and the more destructive climate events. "The climate math is brutally clear: While the world can't be healed within the next few years, it may be fatally wounded by negligence until 2020," concludes Hans Joachim Schellnhuber, Director the Potsdam Institute for Climate Impact Research.

Achieving zero net greenhouse gas emissions from human activities by the second half of this century is a huge challenge going well beyond decarbonising the electricity system.

Our success in achieving this goal will impact 'stakeholders' on planet earth for millennia and will require the 'functions' we carry out now to be performed in significantly different ways in future than they are now. Also it is clear that we have no time to waste in significantly accelerating reduction of manmade greenhouse gasses.

Application of value management with its transparent multi-disciplinary approach can significantly assist with this essential transformation whilst delivering best 'value for money' through effective management of human and physical resources. As with all 'value for money' initiatives - the earlier you start work, the more effective will be the result – so don't wait to take the initiative.

"Men argue, nature acts"
Voltaire (1694 – 1778)

John Bushell
Chair, Publications and Events
Committee, IVMA

Value Management Implementation in Malaysia

Sharing Of Some Success Stories

This is a brief summary of an informative paper on the extensive use of value management in Malaysia by IVMA Member Sr Dr Mohd Mazlan Bin Haji Che Mat, CVM, JMK. *The full paper is available on the IVMA website: www.ivma.org.au > THE KNOWLEDGE BANK > MEMBER PAPERS.*

The paper compares the effectiveness of the application of Value Management to projects with the more 'siloed' approach that occurs in the traditional briefing and design project development process.

In Malaysia there are three large groups of owners who have benefitted from the application of Value Management:

- Government Projects over AU\$15 million capital cost
- Government Linked Companies
- Private Sector Organisations.

Value Management in Malaysia has been applied at the strategic, space planning management, schematic and detail design levels of project development.

There are a wide variety of projects in which Value Management has been incorporated in the budget planning and assets procurement process including procurement of Fire Engines for an Airport, to Airport Planning, Planning of Highways, Mixed Housing Development, and many others.

Value Management has been used to great benefit on new projects and also on existing buildings where minimising disruption to existing inhabitants is important.

Sr Dr Che Mat provides summaries of the application and results of Value Management on three projects:

- A new education facility for training senior school staff including headmasters,
- An existing laboratory complex that had to cope with educating undergraduate students as well as investigative and commercial research and development,
- Consolidation of a University Faculty of Education into a single location including a new building and refurbishing an existing building to a new use.



Three large groups of owners (have) benefitted from the application of Value Management

Whilst capital cost savings of up to 40% were made on projects, the key benefits experienced were a "focussing or distilling objectives and priorities, and in generating alternative solutions".

John Bushell
Chair, Publications and Events
Committee, IVMA