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INSTITUTE OF VALUE MANAGEMENT AUSTRALIA
Ensuring better value for money

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President's Message

More on Value for Money Labs

Hello everyone, and welcome to the Autumn 2023 edition of the IVMA's newsletter, *Value Times.*

In this edition, I'll continue chatting about the IVMA's most recent initiative, 'Value for Money Labs'.

Regular readers will be aware that we've been working on these 'labs' for quite a while and thinking about them for much longer!

In recent editions, we've given examples of our first experiences in this exciting venture.

There are so many 'plusses' from following this approach and we've highlighted some of those in previous articles.

One of those 'plusses', as my colleague Mark Neasbey wrote (*Value Times* Summer 2023 edition), is the active participation in the Value-for-Money process of the most senior people in organisations.

Our experience in running hundreds of conventional workshops in many parts of the world is that it is rare (not unheard of, but rare) to get the most senior people in face-to-face workshops – but that's not the case with video-conferences.

It's still early days, I know, but our experience has been such that we have found that the most senior people have been more than willing to participate in video-conference sessions that are designed to run for about an hour and a half.

This is really important. I say this because we can be more certain of Senior Management's 'buy-in' right from the start.

This seriously enhances the quality of the information gathered as well as avoiding situations in which senior management makes late changes to proposals with the concomitant changes to the outcomes.

Another huge plus of the video-conferencing approach is that people don't have to travel!

Certainly, there are occasions when it's really important to get people together in the same room, but during the early stages, when we're capturing needs (such as those defined in a Value Statement), givens and assumptions - usually video-conference session 1 - the Value for Money Lab system works perfectly.

So, it is clear that the Value for Money Labs approach provides a huge element of flexibility that traditional face-to-face workshops cannot do.

In the Summer 2023 edition of *Value Times*, I wrote about the fact that whether we're running face-to-face workshops or video conferencing, *'It's still skilled facilitation that makes the difference'* to the outcomes achieved.

I cannot overemphasise this. Just holding a meeting won't cut it.

Value for Money Labs (VfM Labs) require expert facilitation just as conventional face-to-face workshops do. One of the key roles of a Facilitator is to help a group develop *shared* understanding.

In the first VfM Lab, the task is to bring everyone to agreement, first and foremost, on the Primary Purpose of the entity being considered (that entity might be, for example, a new hospital, a road bridge or a mine).

Once we have a Primary Purpose, we can continue to complete the Value Statement by facilitating discussion and capturing the group's position about the benefits that the system will deliver and the system's important features.

The point that I am making is that these tasks require expert facilitation; it's not simply a matter of the group meeting together.

Capturing a Primary Purpose is far more challenging than initially meets the eye. One would think that everyone knows the 'primary purpose' of the proposed new mine, hospital or road bridge.

I agree that one would think that, but nothing could be further from the truth.

Our extensive experience in working with Project Teams, in many countries, on a vast range of project types, confirms over and over again, that people more-often-than-not simply make 'assumptions' about what the Primary Purpose is.

If the Project Team is not aligned on an agreed Primary Purpose, time and resources will almost certainly be wasted.

VfM Labs provide a way to establish the Primary Purpose (as well as other Value factors) right at the start of a project — and does so in such a way that Senior Management buy-in is assured and no one has to travel anywhere!

Excellent!

See you next time.

Dr Roy Barton
President, IVMA

"We've always done it this way!"

How often have you heard that phrase, "We've always done it this way?"

The Value Management (VM) process itself has recently undergone a significant change in delivery technique, courtesy in large part to the COVID 19 pandemic.

VM workshops have migrated from the conventional face-to-face workshop to an online Value for Money Lab (VfM Lab) format.

This in itself has taken advantage of the significant investment in the last decade of high-capacity internet connections in many nations. Articles in this and recent editions of *Value Times* have introduced readers to VfM Labs.

This article focuses on a valuable VM technique that seeks to expose what is really *needed* when we are producing a product, designing a process or developing a program or service so that everyone involved achieves a common understanding of the need.

Importantly it breaks down the functions actually needed and describes them in simple verb – noun forms.

This has the immediate advantage that all participants involved in a workshop have a common understanding of the requirements of the entity being studied – free of technical jargon.

The functions identified can either be listed or placed in a Function Diagram which permits the inter-relationship of the various functions to be easily understood.

Three examples demonstrate the significant benefits that can result from the application of this technique.

Radio Broadcasting 'Localisation'

All networked broadcasters globally, (i.e. national broadcasters), have the same requirement: how to 'badge' generic radio programs as though they emanate from the local State or Regional radio station to provide the audience with the local identity.

"What was perhaps most surprising was that such a complex system could be described in just five functions"

They also have legal obligations to broadcast information and safety messages not just to a State or Region but also to specific radio transmitters in the case of extreme weather or other catastrophic event.

Most private radio stations broadcast to a limited regional area and do not have any nationwide involvement.

Previously the only system these national broadcasters had to transmit these highly selective messages was a very complex method of daily preparation of the messages with significant input by technicians to set up the necessary transition systems and programming of 'firing' of the messages to air.

To try to plot what was actually happening in the Australian Broadcasting Corporation's localisation network process would have been very complex and time-consuming — and would not have told us what was really required in any case.

It would only tell us that the job was being done 'this way'.

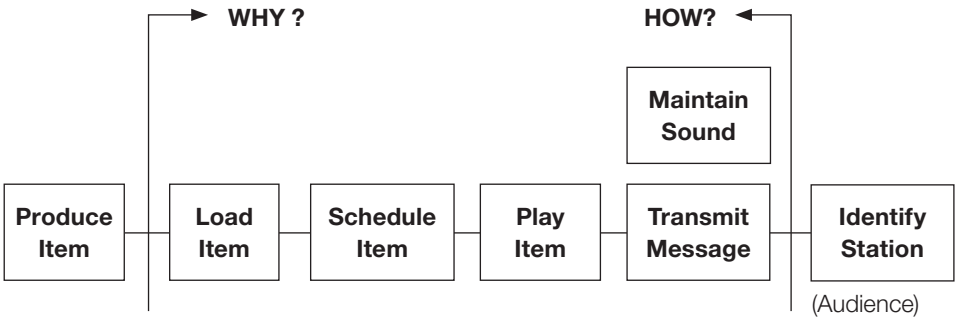
Prior to the study, a small group identified the Function Diagram, which was presented and explained to the 14 study participants who accepted this summary as the real requirements of the system.

What was perhaps most surprising was that such a complex system could be described in just five functions — those between the 'Why?' and 'How?' vertical lines.

The upshot of the two-day VM workshop was that a completely new localisation process was developed which 'piggy-backed' on an initiative of a previous VM study that enabled switching all ABC transmissions from analogue to digital.

Since this localisation change primarily involved software development, installation and training of operators, it was implemented within a year: representing a significant 'cost saving' to the Corporation.

Perhaps the largest benefit from the change was that the skills of very experienced radio technicians could be put to far better use within the Corporation by developing further technical improvements to its production and transmission systems.



ABC – 'Localisation' Function Diagram

Asian Chemical Production Facility

The client company was the 'lead' in a Joint Venture to construct and operate a large chemical plant in Asia.

The VM study was conducted with the objective of optimising the operation of the plant —particularly bearing-in-mind differing climatic conditions from those experienced in Australia.

In this case, an extensive Function Diagram was prepared prior to the VM workshop and the Estimated Capital and Operating Costs of each function were identified.

Following the identification of the 'givens', 'assumptions', 'issues' and 'concerns', and using this source information, the study group generated ideas to address the issues raised specifically in the categories defined by the identified functions.

The team reviewed the ideas generated and it became clear that there were two streams of ideas: those that applied specifically to the Asian project and those that would apply generically to future projects of a similar nature wherever they were located.

The outcome of the study was that a number of improvements that addressed 'operational', 'chemical' and 'waste' disposal issues were adopted for the Asian plant.

The team recognised that a 20% increase in proposed plant capacity could be supported by market demand at marginally increased Capital and Operating costs. The VM study resulted in an estimated net (including engineering costs) Capital Cost saving of between 5 and 10%.

The company's board agreed that there was sufficient information from the study to justify the appointment of additional technical expertise within the company to develop the generic improvements to future similar projects.

Water Purification Chemical Production

A new product was proposed to affect the purification of water to make it fit for human consumption. The Process Flow and indicative site layout had been completed and a combined VM and Risk Management study was held to optimise the process.

Agreement of the Function Diagram enabled the team to address the 'givens', 'assumptions', 'issues' and 'concerns and the costs associated with performing each function.

The team identified a number of process improvements that would be incorporated in in the new plant plus other initiatives to improve the site layout from a Safety, Capital and Operating Cost perspective.

In the Risk Management section of the study, it became apparent that storage of the raw material for the process presented a significant fire hazard and the team questioned whether this was the right process.

Specialist technical advice was available in the study and it became evident that an alternative process was available that would produce the same result but with no ongoing risk related to storage of raw material.

The VM section of the study was concluded on the basis of the newly introduced technology.

This study emphasised the importance of incorporating Risk Management into VM studies, particularly when the risks include possible loss-of-life or loss of a major asset. By using the combined Value/Risk Management Process there is great potential to 'design out' risks at project inception

And the relevance today?

Australia currently faces significant long-term climate and energy challenges and it will need significant Political, Industry and Community consensus and effort to successfully surmount these challenges.

The challenges include:

- The global Cross Dependency Initiative (XDI) advised recently that the Australian States of Victoria, New South Wales and Queensland are within the top 10% of parts of the world negatively impacted by global heating (climate change).
- In May 2022 Australia's Climate Council released a report that found that by 2030, one in every 25 properties across Australia will be uninsurable by today's standards, categorised as 'high risk' because of soaring annual damage costs linked to extreme weather and climate change. The report confirmed XDI's conclusion that Australia's most acute vulnerability is on the east coast as a consequence primarily of the existing cycle of weather variability, the Southern Oscillation Index (El Niño and La Nina).
- The United States Geological Survey has found that sea levels in the western Pacific Ocean are rising at almost two to three times the global average rate. This coupled with warmer weather and higher humidity will result in an increasing frequency of stronger storms with a potential for higher flooding along the Australian east coast.

Australia has belatedly recognised the need for rapid reduction in its greenhouse gas (GHG) emissions, that will, amongst other things, require sustained reduction in these emissions arising from electricity generation whilst increasing the quantity of electricity produced to replace the combustion of coal and methane gas.

As a consequence of these rapid transitions the Australian Energy Market Operator (AEMO) has warned that there could be gaps in reliable electricity supply from 2025 onwards.

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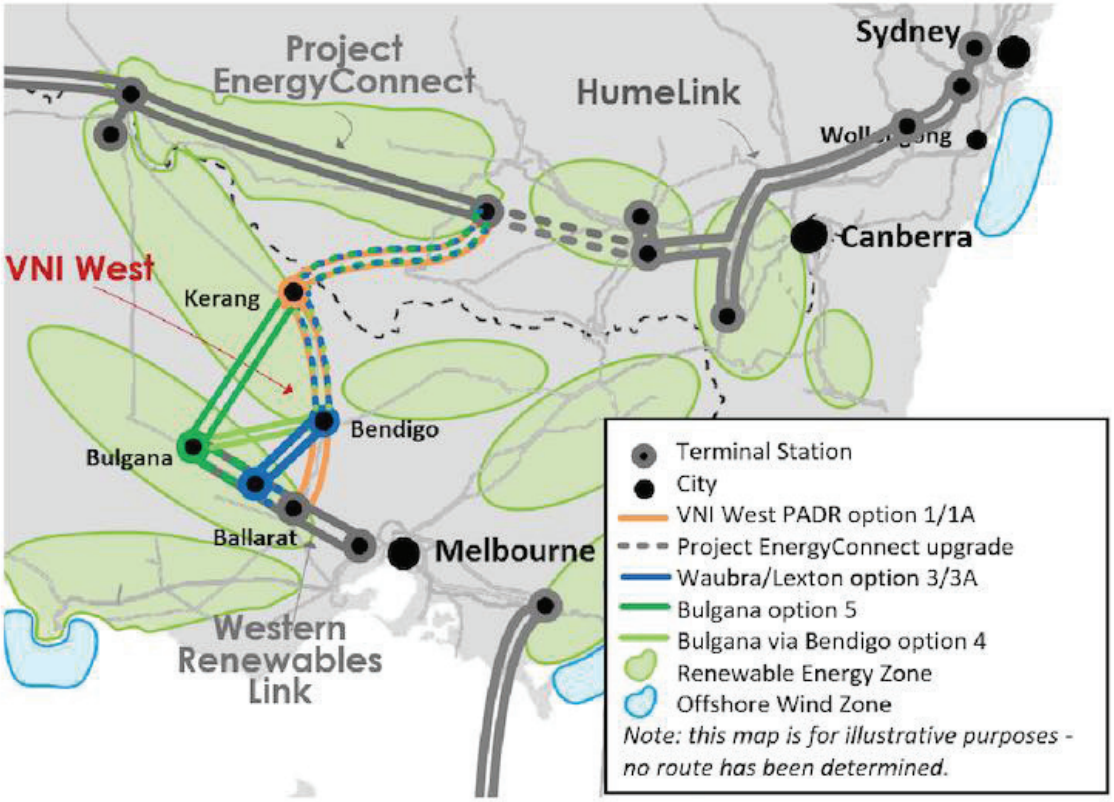
Figure 1 Credible options assessed



The main cause is that more than five coal–fired electricity generators that currently account for about 13% of generation for the main energy market are scheduled for retirement in the short to medium term.

However there is an indication that industry could do far better than it has done to-date to reduce GHG emissions.

In February 2023 the Australian Industry Energy Transitions Initiative demonstrated that Australian Industry could reduce 92% of is GHG emissions through technological process changes. The remaining 8% of reductions can be achieved through verifiable, high-quality offsets.

To achieve this there needs to be an unambiguous emissions reduction target of zero net emissions by 2050 and a confirmed commitment by all parties to achieve this target.

Is there light at the end of the tunnel?

The transition to a net zero economy will need a massive, concerted effort by the whole of society.

A recent example of Industry, Government and Society working together — is the planning for the Victoria to NSW Interconnector West undertaken by AEMO Victoria.

The local community was unhappy with the proposed new, high-voltage power line route and the client agreed to involve the community in resolving a route acceptable to all stakeholders.

The upshot of the consultation was a preferred route (**Option 5** on the map above) which delivered the following improvements when compared with the previously developed route options:

- Higher consumer benefits
- Fewer social and economic constraints
- Improved social, environmental and cultural heritage factors
- Lower cost
- Better delivery timeframe

The solution will solve problems of an unreliable grid in the area and when completed will permit up to 19 renewable energy projects in the region to proceed. This will add at least 10 gigawatts of power to the grid.

Clearly expansion of this consensus approach could be of great assistance in addressing Australia's now urgent supply side problems described by Ross Gittins in the following article.

John Bushell
Chair Publications & Events Committee
IVMA

RBA warning: Our supply-side problems have only just begun

This article from Ross Gittins, Economics Editor, was published in the Sydney Morning Herald on 23 December 2022.

In one of his last speeches for the year, Reserve Bank governor Dr Philip Lowe has issued a sobering warning.

Even when we've got on top of the present inflation outbreak, the disruptions to supply we've struggled with this year are likely to be a recurring problem in the years ahead.

Economists think of the economy as having two sides. The 'supply side' refers to *our production* of goods and services, whereas the 'demand side' refers to *our spending* on those goods and services; partly for investment in new production capacity, but mainly for consumption by households.

Lowe notes that, until inflation raised its ugly head, the world had enjoyed about three decades in which there were few major "shocks" (sudden big disruptions) to the continuing production and supply of goods and services.

When something happens that disrupts supply, so that it can't keep up with demand, prices jump – as we've seen this year with disruptions caused by the pandemic and its lockdowns, and with Russia's attack on Ukraine.

What changes occurred over the three decades were mainly favourable: they involved increased supply of manufactured goods, in particular, which put gentle downward pressure on prices.

This made life easier for the world's central banks. With the 'supply side' behaving itself, they were able to keep their economies growing fairly steadily by using interest rates to manage demand. Put rates up to restrain spending and inflation; put rates down to encourage spending and employment.

> *"What's got Lowe worried is his realisation that a lot of the problems headed our way will be shocks to supply."*

The central banks were looking good because the one tool they have for influencing the economy – interest rates – was good for managing demand.

Trouble is – and as we saw this year – managing demand is the *only thing* central banks and their interest rates can do.

When prices jump because of disruptions to supply, there's nothing they can do to fix those disruptions and get supply back to keeping up with demand. All they can do is strangle demand until prices come down.

So, what's got Lowe worried is his realisation that a lot of the problems headed our way will be shocks to supply.

"Looking forward, the supply side looks more challenging than it has been for many years" and is likely to have a bigger effect on inflation, making it jump more often.

Lowe sees four factors leading to more supply shocks.

The first is 'the reversal of globalisation'. Over recent decades, international trade increased significantly relative to the size of the global economy, he says.

Production became increasingly integrated across borders, and this lowered costs and made supply very flexible. Australia was among the major beneficiaries of this.

Now, however, international trade is no longer growing faster than the global economy.

"Trading blocs are emerging and there is a step back from closer integration," he says. "Unfortunately, today, barriers to trade and investment are more likely to be increased than removed."

This will inevitably affect both the rise in standards-of-living and the prices of goods and services in global markets.

The second factor affecting the 'supply side' is demographics. Until relatively recently, the working-age population of the advanced economies was steadily increasing.

This was also true for China and Eastern Europe – both of which were being integrated into the global economy.

And the participation of women in the paid labour force was also rising rapidly.

"The result was a substantial increase in the number of workers engaged in the global economy, and advances in technology made it easier to tap into this global labour force," Lowe says.

So, there was a great increase in global supply. But this trend has turned and the working-age population is now declining; with the decline projected to accelerate.

The proportion of the population who are either too young or too old to work is rising, meaning the supply of workers available to

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RBA warning: Our supply-side problems have only just begun

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meet the demand for goods and services has diminished.

The third factor affecting the 'supply side' is climate change. Over the past 20 years, the number of major floods across the world has doubled and the frequency of heatwaves and droughts has also increased.

This will keep getting worse.

These extreme weather events disrupt production and so affect prices — as we know all too well in Australia. As well as lifting fruit and vegetable prices (and meat prices after droughts break and herd rebuilding begins), extreme weather can disrupt mining production and transport and distribution.

The fourth factor affecting the 'supply side' is related: the transition from fossil fuels to renewables. This involves junking our investment in coal mines, gas plants and power stations, and new investment in solar farms, wind farms, batteries and rooftop solar, as well as extensively rejigging the electricity network.

"Lowe foresees the inflation rate becoming more unstable through two channels"

It's not just that the required new Capital Investment will be huge, but that the transition from the old system to the new won't happen without disruptions.

So, energy prices will be higher (to pay for the new Capital Investment) *and more volatile* when fossil-fuel supply stops before renewables supply is ready to fill the gap.

Lowe foresees the inflation rate becoming more unstable through two channels:

- First, shocks to supply that cause large and rapid changes in prices.
- Second, the global supply curve becoming less 'elastic' (less able to respond to increases in demand by quickly increasing supply) than it has been in the past decade.

Lowe says bravely that none of these developments would undermine the central banks' ability to achieve their inflation target "on average" - that is, over a few years – though they would make the bankers' job more complicated.

Well, maybe. As he reminds us, adverse supply shocks can have conflicting effects, increasing inflation while reducing output and employment. The Reserve can't increase interest rates and reduce them at the same time.

As Lowe further observes, supply shocks "also have implications for other areas of economic policy". Yes, Competition Policy, for instance.

My conclusion is that managing the economy can no longer be left largely to the central bankers.