The VALUE TIMES

INSTITUTE OF VALUE MANAGEMENT AUSTRALIA
Ensuring better value for money

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President's Message

Back to Basics

I've been thinking recently about the phrase 'back to basics' - where it came from and what it means.

Apparently, the term emerged in the United States in the 1950s.

Interestingly, the term was used in a recent newspaper article; "Young school teachers will be better trained in a 'back-to-basics' transformation of teaching qualifications."

The Collins English dictionary says this about the term 'back to basics': *if you talk about getting 'back to basics', you are suggesting that people have become too concerned with complicated details or new theories and that they should concentrate on simple, important ideas or activities.*

I wonder to what extent we, the IVMA, are becoming too concerned with complicated details or new theories and not paying attention to the basics?

I'm glad to say that through all the discussions about Value for Money Labs, which involve the latest video technology, we have never lost sight of the basics.

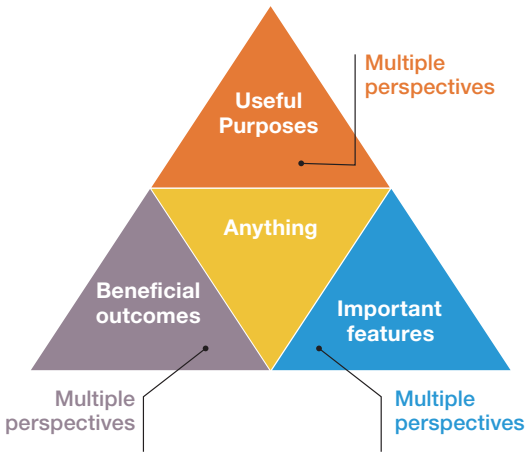
An example of this is our focus on effective facilitation as a basic requirement to improve ''value for money'.

In the last two issues of *Value Times*, I have focused on the fact that whether we're running face-to-face workshops or video conferencing, it's still skilled facilitation that makes the difference.

This is fundamental to achieving the best 'value for money'.

Another basic feature for achieving 'value for money' and which we have not lost sight of is the matter of 'value' itself.

Why is *anything* of value?



Whatever represents 'value' is a truly basic question. Are we talking about monetary value or something else? And, if something else, what is it?

Typically, definitions of 'value' specifically list items that include the importance, worth, or usefulness of something.

For many years, in fact since writing my PhD thesis, I have been guided and persuaded by the work of Daniel Bernoulli who, in 1738 wrote, "the value of an item must not be based on its price but rather on the utility which it yields".

I realised as I thought about Bernoulli's statement, that the key to defining 'value for money' is separating 'value' from 'money'. This, too, is basic to our approach.

Following Bernoulli's logic, the best 'value for money' solution will be the option that delivers the required "utility" for the lowest total cost.

Note the reference to the phrase 'value for money'. This is also basic and is what we're talking about in Value Management (VM).

We are seeking the option — from two or more feasible options — that will deliver the best 'value for money'.

So, as I said, typical definitions of 'value' refer to the importance, worth or usefulness of something. We have captured this through the Value Triangle with which regular readers will be very familiar. Here it is again:

One of the first things in running VM workshops, whether online or face-to-face, is to capture perceptions of 'value'.

This exercise always starts with the compilation of a Statement of Primary Purpose. This is a crucial step — absolutely fundamental in the context of this article.

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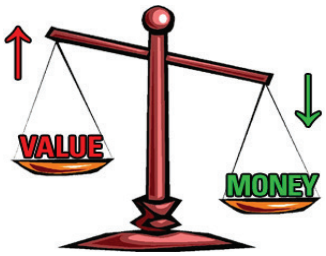
Making Judgements about Value for Money

It's a Judgement – not a calculated equation!

WHAT VALUE?

WHICH IS THE ONE THAT IS BEST VALUE FOR MONEY?



WHAT CHOICES DO I CONSIDER?

HOW MUCH TO SPEND TO GET THE VALUE FOR EACH OPTION?

There is much we can measure or calculate about the value of something, but that does not give you the complete picture about 'value for money' (VfM) or what would be considered as giving best value for money.

Judgement: the act of forming an opinion, comparing ideas or choices to elicit the reasons for discriminating between them.

The answer does not come from an algorithm — generally the decision is to be made by a group of people rather than by an individual person. For example, a Tender Committee or an Investment Committee or by a representative group of stakeholders.

A judgement about VfM involves comparing options or choices to decide which one to accept.

Some of the 'value factors' will be able to be expressed numerically whilst others may not be able to be quantified.

This is especially so at early concept stage when the key 'value factors' are usually recognised — because it is these 'value factors' that drive the investment thinking, planning and analysis that will generate and test options and inform the later decision-making.

The reason why it is a 'judgement' that is to be made (rather than simply making a computation) is because most of the 'value factors' are qualitative.

To converge on a single, agreed perspective of these 'value factors' requires discussion of the investment context, future

Back to Basics

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Once we've secured agreement to a Statement of Primary Purpose, we can proceed to find out and build Shared Knowledge and understating of the other parts of the Value Triangle.

What's important to one part of an organisation might be of no importance whatsoever to another part of that same organisation. It's crucial that we build *Shared Knowledge* and understanding of such situations.

We place all of this information into a Value Statement that will serve as a basic reference point for all future decisions that are taken.

Once we have a Value Statement, we can proceed through each step of the work plan (as described in the Australian Standard for Value Management) right to the point of deciding, from the defined options, which option will deliver the best 'value for money'.

This, as Mark Neasbey explains in the following article, is not a matter of calculation but one of judgement. The facilitation process must incorporate steps to help people make such judgements.

So, thinking again about getting 'back to basics', I am really pleased to report, as President of the IVMA, that the basics of VM are alive and well in contemporary practice.

See you next time.

Dr Roy Barton
President, IVMA

thinking, organisational priorities, alternative investment proposals (i.e. competition for the available resources) as well as the measurable outcomes and resource requirements of the options.

Some Examples:

Investment choices can also involve choosing to deliver a lesser value for a substantially lesser cost. Why? Because the best VfM in such a context could be to realise benefits earlier at a lower cost or perhaps even to use the saved funds from one investment to advance other objectives or proposals concurrently. This is not to be confused with cost minimisation.

An Investment Committee might decide to spend more money up front than the proposed option in order to realise better overall service delivery outcomes for a broader group of clients or to be better positioned in the overall market.

A Tender Committee may recommend a more expensive tender price to better manage the overall performance and delivery of the intended outcomes, based on qualitative characteristics of the tenderer and perceived risks.

It might also wish to get a new entrant into an already busy market for overall program delivery and future competition.

Any group of stakeholders brought together to recommend an option will have varied perspectives on the important features that form an integral component of the investment's 'value factors'.

On some of the 'value factors' there could well be differing views as to their merits; such differences can be internal to a client as well as across external stakeholders.

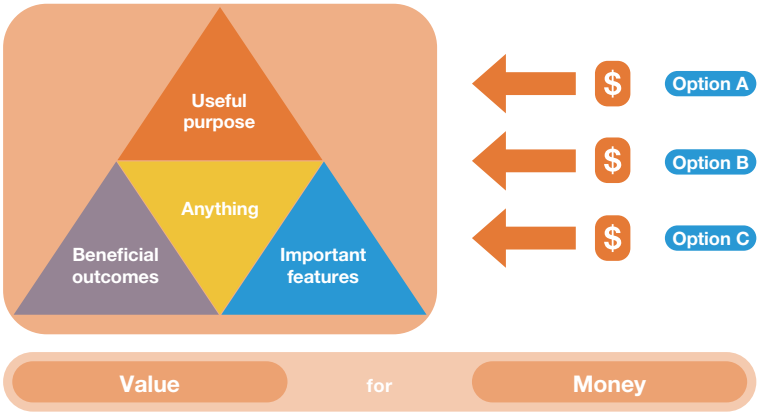
These differences can only be reconciled through a facilitated discussion and collective judgement to arrive at a consensus position. It cannot be derived from a calculated algorithm.

So beyond the price factors there are other 'value factors' that form the basis for the judgements of Investment or Tender Committees or stakeholder groups.

Summary: FACILITATION OF THE PROCESS TO JUDGEMENT IS CRUCIAL

Judgements about VfM are best achieved when representatives of all key stakeholders to a proposed investment participate in a skillfully facilitated workshop to arrive at a consensus on what constitutes best VfM – as perceived by those stakeholders.

This facilitated process ensures that the VfM judgements are transparent, traceable and achieve the right balance of qualitative and quantitative considerations, as defined by the stakeholders.



"On some of the 'value factors' there could well be differing views as to their merits"

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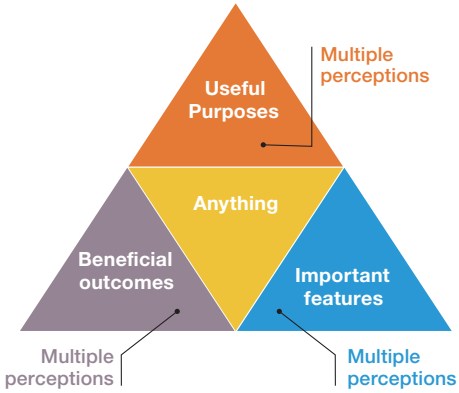


Value is *not just* a reference to monetary worth (price, cost etc.). Rather, as set out in the Australian Standard for Value Management (AS4183-2007), value is defined by three key aspects: Useful Purpose, Benefits and Importance as shown in the 'Value-Triangle'.

To judge 'value for money' we separate the consideration of value from the consideration of money (or cost) to highlight what value we obtain from each option and what each option will cost.

Note that cost is ideally based on life-cycle analysis, not just initial capital or purchase cost — and also considers future maintenance, replacement, operation and revenue that the investment would entail.

A listing of IVMA accredited facilitators can be found at **www.ivma.org.au**

Mark Neasbey
Chair Education Committee
IVMA

Tesla flags paradigm shift in vehicle manufacturing as it looks to halve cost of EVs

The following article about a fundamental change in vehicle manufacture technology was published in 'The Driven' on 2 March 2023. It provides inspiration on the step changes that will be required not just in industry but also our daily lives as decarbonisation of the planet accelerates.

Tesla has flagged a paradigm shift in the way cars are built, saying that manufacturing improvements can lead to a 50 per cent reduction in production costs and pave the way for a 'new generation' of electric vehicles, including the long hinted at 'low cost' Tesla.

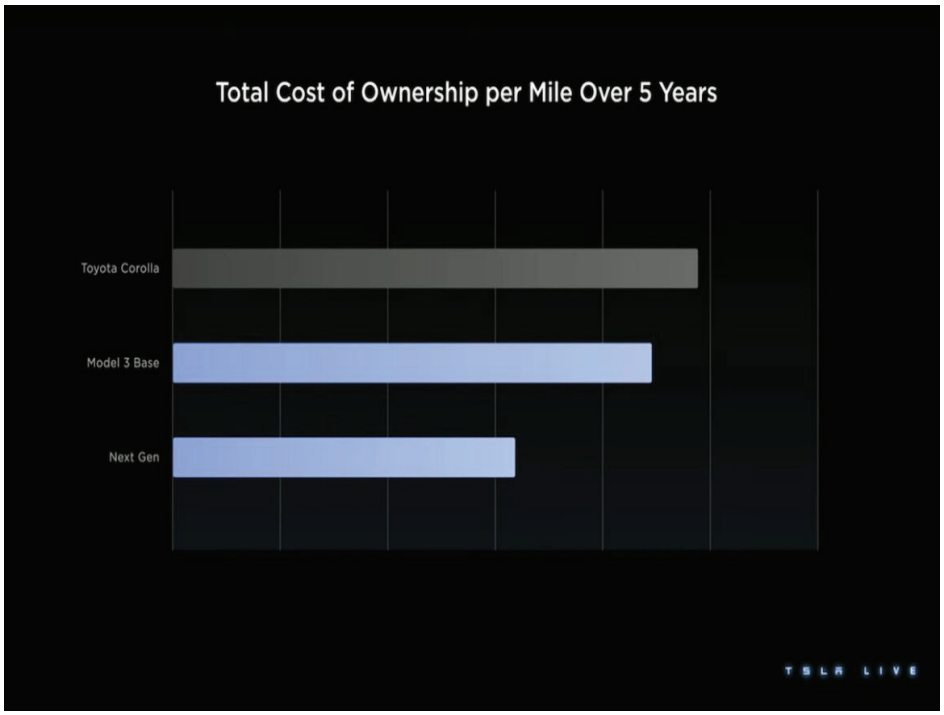
In a four-hour presentation that began with a look at **how the global economy can switch to electric from combustion engines,** and save money and resources, Tesla outlined how it plans to massively scale its electric vehicle and stationary battery storage production to accelerate the world's transition.

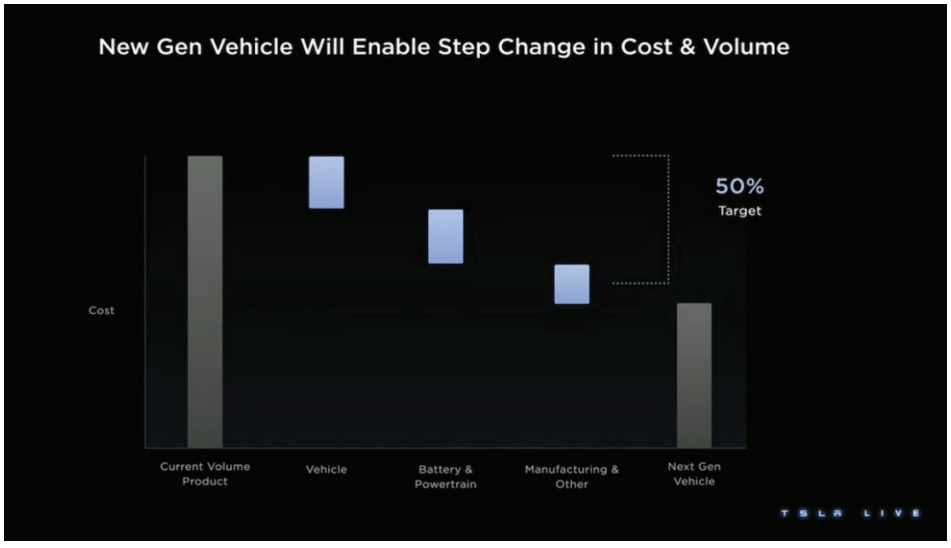
Tesla was coy about the timing, and design of the next generation vehicle, but outlined how streamlining vehicle design, battery and powertrain improvements, as well as revolutionary manufacturing techniques, will deliver a paradigm shift in the way cars a made.

That, of course, has major implications for the legacy car industry, including leading car makers such as Toyota. Tesla singled out that company's best selling car, the Corolla, to show how the **Tesla Model 3 already beats it on cost per mile,** and how that gap will grow as the costs of production falls.

Tesla made frequent references to its "next generation" model although it declined to give details.

But the implications are clear: with a current cost of production per vehicle of $US39,000 a 50% reduction in cost for the next generation model would get cost per



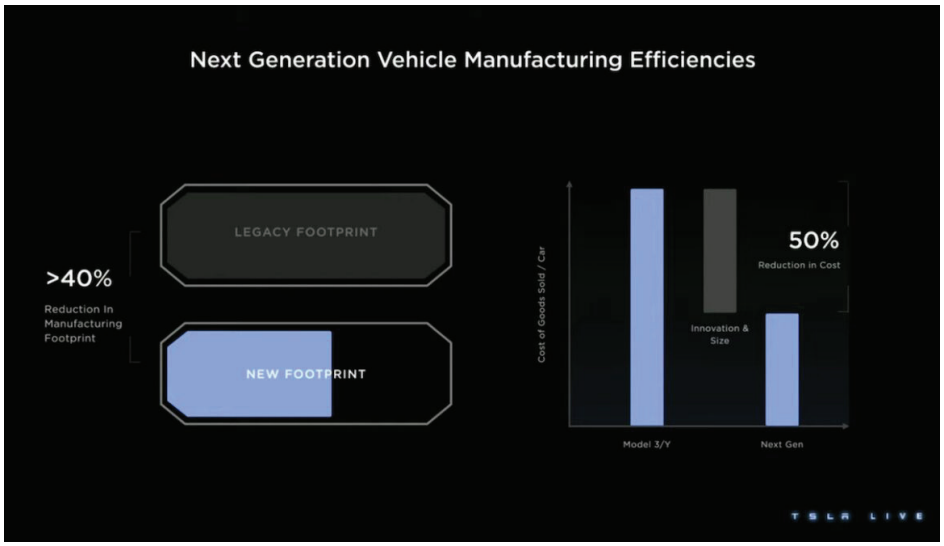


vehicle below $20,000. This would enable the production of a $25,000 model while maintaining an industry leading gross margin of 20%.

Tesla also says that its new manufacturing paradigm will result in a 40% reduction in manufacturing footprint. This is due to a range of new manufacturing techniques such as Tesla's single-body castings which enable it to make the 'body-in-white' with three huge single piece castings replacing what normally requires hundreds of individual parts to be welded together with an army of robots.

It's estimated that the revolutionary single-body castings, which Tesla produce

using the world's largest die-cast machines, **save 35% of factory space** compared to traditional methods.



"It's a whole different manufacturing philosophy"

Vice president of vehicle engineering Lars Moravy said "The traditional way of making a vehicle is this, you stamp it, you do build a body-in-white, you paint it and you do final assembly."

"And what's interesting is these shops are dictated by the organisational structures that exist and they're dictated by the boundaries that exist in the factories that are laid out." he said.

Tesla's organisational structure is also revolutionary, with design, engineering, manufacturing and automation teams all working together. In legacy automotive companies these departments are all separated which stifles communication and slows innovation.

Just this week Toyota executives praised Tesla's approach saying, "It's a whole different manufacturing philosophy"

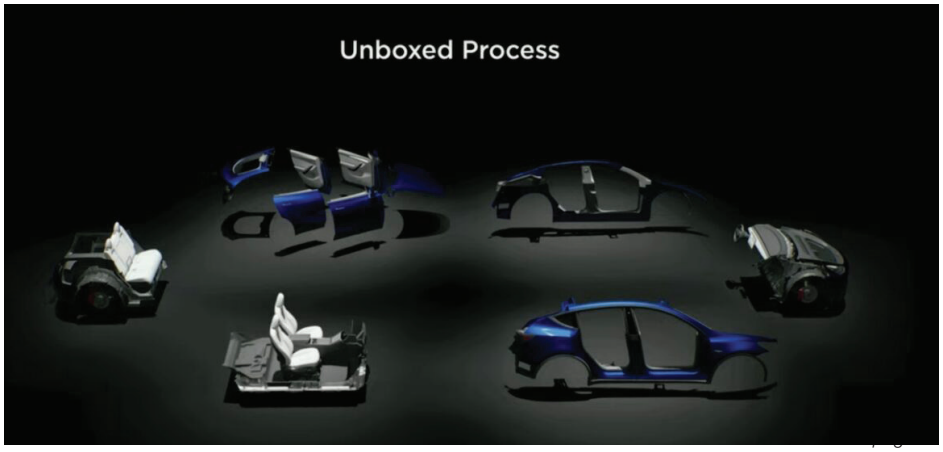
Lars Moravy outlined the huge shift in thinking from traditional mass production saying "Henry Ford first invented this assembly line in 1922. It's been 100 years and it's really hard to make a change after 100 years. And when you watch it happen, it's really really silly to a guy like me." said Moravy.

During the presentation, Moravy used a fascinating animation to show how Tesla's new vehicle assembly procedure compares with how traditional car makers have been assembling cars since the days of the Ford Model T.

Termed the "unboxed process" instead of starting with a full body-in-white and fitting thousands of parts into and around it, the new method essentially builds major sub-assemblies for the front, rear, floor (including seats) and side panels.

This process is made possible with the huge single-body castings and the 4680 structural battery packs.

The sub-assemblies are brought together and the structural battery pack including the seats is raised up from underneath into position.



Tesla flags paradigm shift in vehicle manufacturing as it looks to halve cost of EVs – *continued*

This is just one of many huge technological breakthroughs that were presented during the event all with the goal of achieving Tesla's mission to accelerate the world's transition to clean technology.

The presentation not only outlined Tesla's strategy but also provided hard numbers on how the world can develop and roll out the technology to completely decarbonise our society.

As part of his opening remarks Tesla CEO, Elon Musk, said, "What we're trying to convey is a message of hope and optimism, and optimism that is based on actual physics and real calculations. Not wishful thinking."

"The world can and will move to renewable energy economy and will do so in your lifetime."

"The world can and will move to renewable energy economy and will do so in your lifetime."

Daniel Bleakley

Daniel Bleakley is a clean technology researcher and advocate with a background in engineering and business. He has a strong interest in electric vehicles, renewable energy, manufacturing and public policy.