

The VALUE TIMES

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Our Thank You to Roy Barton

The inimitable Roy Barton, PhD, HonLife FIVMA has announced his retirement due to ill health.

As such, Roy has withdrawn totally from his professional teaching and facilitation services, education program design and his long-held position as President of IVMA.

Roy Barton's involvement with VM can be accurately described as enormous.

His contribution over more than 40 years has encompassed policy and practice, professional development, VM training and consulting VM services.

Collectively these activities have provided guidance to project teams, companies, public sector agencies and Governments to

make better value choices with transparent understanding of what was being done and why.

Now this work will be done by those he has taught and mentored.

To begin to appreciate the depth and breadth of Roy's contributions, and to illustrate the importance of his work, the following are just some of Roy's life and career highlights:

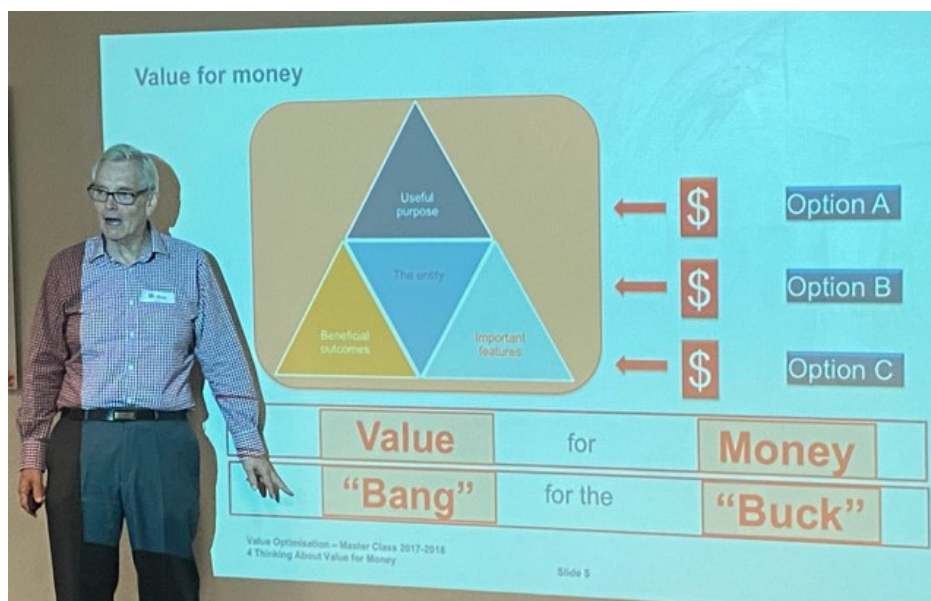
- Roy and Carol Barton arrived in Sydney, fresh from England and he gained employment as a Quantity Surveyor. He then trained as a teacher and rose to be the Associate Professor of Construction Management and Economics at the University of Canberra

Value Times Announcement

As members might be aware, the Institute of Value Management Australia has resurrected our 'open' LinkedIn page: click [IVMA LinkedIn](#) to access.

Through this link we can facilitate more frequent and direct communication to the membership as a whole or two-way communication with individual members and groups whenever required.

Considering this capability, in 2026 the Value Times will become a biannual publication with the next issue being the Spring 2026 edition in mid-October.



- He also travelled to the USA to work with some of the leaders in the field of Value Engineering
- Roy and others recognised the need to bring together like-minded practitioners in VM and in 1990, he was instrumental in restructuring the dormant Institute of Value Engineers Australia into the Institute of Value Management Australia (IVMA).
- IVMA went on to set professional standards as a basis for community confidence, to address the professional needs of people practicing VM and to advance VM and its practice in Australia

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Our Thank You to Roy Barton - continued



- In 1991, Roy was invited to join the IVMA College of Fellows as an inaugural member for his services to the Institute and the profession
- Roy was a driving force for the creation of the National Centre for Value Management in 1993 which was a joint venture between the NSW Government and University of Canberra to research, teach and practice in the field of Value Management
- He represented University of Canberra in the development of the first Australian Standard for VM in 1993-94, AS/NZS 4183:1994
- Roy led the design and establishment of the first IVMA-accredited programs for developing VM professionals and facilitators
- In 1996 Roy left the University and joined the Australian Centre for Value Management (ACVM), a fledgling private sector consultancy which became the largest VM consultancy in Australia with five VM Facilitators
- In 2005, Roy completed his PhD which focused on achieving best Value. The subject of his PhD thesis was "Value Management and Complexity in Infrastructure Project Initiation"
- Roy has delivered many papers, most of these independently refereed, at every

IVMA conference and most Hong Kong Institute of Value Management conference since their inception

- Roy chaired the Standards Australia committee that reviewed the 1994 version and re-wrote the VM Standard, which was published in 2007
- Professionally, Roy has led and pioneered the introduction of applying effective VM Facilitation on major capital infrastructure projects into countries including New Zealand, China (Hong Kong), Malaysia and Argentina
- Roy has trained the majority of initial VM Facilitators accredited by the IVMA and practicing in Australia, NZ, HK and Malaysia, since the early 1990s
- Roy has pioneered a co-facilitation model for delivering VM Studies in his work with ACVM that has demonstrated extraordinary levels of increased effectiveness of participants, study outcomes and real-world results
- In the Covid-19 years, Roy and other ACVM facilitators pioneered an online delivery model for VM Studies that they named "Value for Money Labs". The structure of the Labs has encouraged earlier and more frequent participation by senior staff thus incorporating their experience and expertise from the outset

Roy rigorously maintained an action-research program that fed off his every assignment, up until he retired

- Roy Barton's comprehensive VM training videos are now publicly available online – please see the following article.

On behalf of everyone who knew Roy during his professional career, we wish him years of reflection on his stellar contribution and consistent quest for better value in every form possible.

Ted Smithies

Friend and Colleague
President, IVMA

Alan Butler

Friend and Colleague
Hon Secretary, IVMA

Achieving Best Value for Money— Online Course

In every endeavour, achieving best value for money is either expected or explicitly required.

This online course supports both personal and professional development, providing practical insights that can make a genuine difference to your understanding of value, your work and your career.

The **Ten Principles to Achieve Best Value for Money** online study course, prepared and presented by **Dr Roy Barton**, immediate past President of the **Institute of Value Management Australia (IVMA)**, is now available through the Institute.

The course includes an introduction and summary, along with a series of concise **8-minute modules** that clearly explain the **10 core principles of best practice** for delivering best value for money.



Each principle is followed by an **interactive quiz** to test and reinforce your understanding. The course content is underpinned by the **Australian Standard for Value Management AS 4183-2007**.

Successful completion of the course and quizzes satisfies the first part of the requirements for **IVMA Accredited Value Management Facilitator** accreditation. The remaining requirement relates to facilitation knowledge and techniques.

Course fee: \$1,250 (GST free)

Learn from one of Australia's leading academics and practitioners in **value management** and **value for money**.

Find out more and sign up:

<https://roybarton.podia.com/ten-principles-to-achieve-best-value-for-money>

David Baguley

Chair, Appointments & Accreditation Committee, IVMA

2026 Annual General Meeting

The Institute of Value Management's (IVMA) Annual General Meeting (AGM) is required under the IVMA Constitution and the Corporations Act.

This year it will be held on Tuesday 27th October 2026 at 4 pm AEDT.

Details to enable your involvement in the AGM will be posted in September on the IVMA website and the [IVMA LinkedIn](#) page.

Alan Butler

Hon Secretary, IVMA



Introducing new IVMA Board member Anne-Marie Turnbull

Hello everyone, I was very excited to be welcomed onboard as a Director of the IVMA on 21 October last year.

My interest in becoming an IVMA Board member stems from my experience in facilitating project coordination and value improving studies for my local water utility for the past decade.

This experience has convinced me of the value of enabling project stakeholders to clearly define the project objectives and priorities at inception.

Incorporating the value management (VM) methodology also provides the project team with a set of success factors that can be used throughout the life of the project to maintain focus and test and analyse the appropriateness of various options.

My career has been varied and interesting and I enjoy bringing different perspectives to the VM setting.

My initial qualification was in Civil and Environmental Engineering and following this I commenced work as a Water and Wastewater Network Modelling Engineer with Hunter Water Australia.

I enjoyed the mathematical challenges of engineering but also had a desire to pursue teaching, so I completed my Diploma in Education and spent four years teaching primary school in inner city Newcastle.

Eventually I returned to engineering and have been working to incorporate the People Management skills in my work ever since.

I have spent most of the last two decades creating systems and processes to support the Asset Management lifecycle, developing teaching programs for engineers, and facilitating multidisciplinary teams working on water infrastructure projects, championing collaboration and clear communication.



Anne-Marie Turnbull

I have been amazed to realise that an industry that attracts so many people with maths and science skills is actually one of the professions where success lies so much in our ability to collaborate, creating teams where people work to their strengths, and our ability to communicate what it is we are trying to achieve and how to create a decision-making framework that supports our values along the way.

My career has been varied and interesting and I enjoy bringing different perspectives to the VM setting.

During my time as a facilitator it has been rewarding to witness project teams engaged in hearty debate which has led to a deeper and more holistic appreciation of project goals and potential impacts.

I have also seen teams struggle to find ways to account for the complex nature of multi-layered positive and negative impacts and have appreciated having the VM framework to help guide these conversations.

Finally, an interest in Business Management led me to complete my Master of Business Administration in 2023.

I achieved this qualification slowly thus allowing me to absorb the richness of each subject, and the new perspective on how the business world works.

As a newly minted Director of the IVMA, and an employee of IVMA Corporate Member (Beca), I am looking forward to learning from the wealth of knowledge already embodied within this organisation.

I can see that Australia is at the intersection of several major shifts in the engineering landscape, with a need for climate resilient infrastructure.

Simultaneously we have the potential to harness big data and AI to benefit the decision-making process.

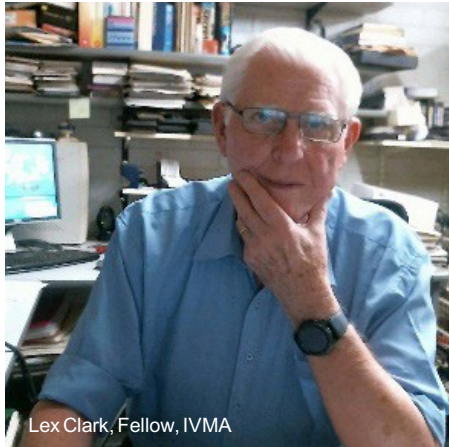
My experience tells me that the VM methodology should be more broadly used to help us manage scope, costs and value of major investments.

I look forward to contributing to the team to make this a reality.

Anne-Marie Turnbull
Board member, IVMA

Value Management Reminiscences

– Lex Clark



Lex Clark, Fellow, IVMA

In this article I refer to Value Analysis (VA), Value Engineering (VE) and Value Management (VM). The differing names have historical, national and work culture origins but all encompass a similar suite of value-improving practices now referred to generically as Value Methodology.

My working life commenced as an apprentice sheet metal worker for De Havilland Aircraft Pty Ltd in 1954. Remember that in those days aircraft were still made of wood and aluminium, but composites such as carbon and fibreglass, were developing.

Shortly after I joined De Havilland at Bankstown Aerodrome in Sydney, I gained a cadetship with the company and subsequently obtained, part-time (as was often the case then), a Bachelor's Degree in Industrial Engineering and eventually a Master of Engineering Science Degree while still completing my 5-year apprenticeship.

As apprentices and cadets, we participated in the last Australian production of the British designed DH115 Vampire Jet Trainer which, in World War II, was a development of the second Allied jet aircraft (DH100 Vampire Fighter) designed in 1943 to fight the Germans. It had a wooden fuselage and aluminium alloy wings and tail booms.

In 1945 in Britain, De Havilland had also



DH115 Vampire Jet Trainer

commenced design work on the world's first passenger jet aircraft, the DH106 Comet.

With four De Havilland designed jet engines and a seating capacity of 36, the Comets had a range of 1,500 miles and a top speed of 460 miles per hour.

This was nearly twice the speed and a far smoother ride than the then conventional piston engine propeller driven passenger aircraft used throughout the world.

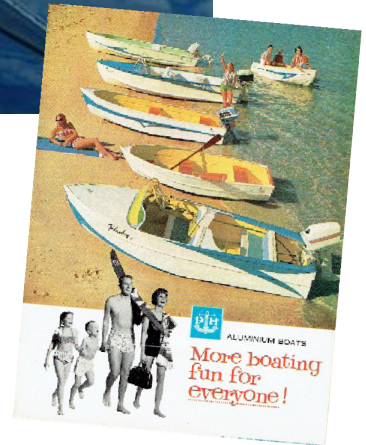
The American Boeing 367-80, first commercial jet concept aircraft of the Boeing 707 flew in 1954, but the prototype Boeing 707 did not fly until 1957.

Production of the DH115 Vampire aircraft for the Royal Australian Air Force was scheduled to finish in 1960, by which time De Havilland Aircraft in the UK had been taken over by the Hawker Siddeley Group and the Australian company became Hawker de Havilland.

There was a search for new products and services that would utilise the skilled workforce and wide range of facilities and equipment available. Manufacture of aluminium boats was decided as a possible option.

Topper Aluminium Boats

In the early 1960s I moved from the Aircraft Division to the new and rapidly expanding Marine Division which had commenced



manufacturing a variety of small aluminium boats under the brand name Topper.

Shortly after, Hawker Siddeley in the UK took a significant step to improve the operation of its now worldwide activities by introducing Value Analysis to employees in all its global operations.

In Australia this was carried out by Richard Bullman from the UK who ran special live project courses which were delivered in 5-day workshops (run one day per week so as not to disrupt manufacturing activities) on actual work projects.

Fun – Asking Why? before How? in Industry

This experience was an eye-opener for me!

We learned to ask 'why' we were doing what we were doing on a particular project — instead of just doing it.

For example, we asked 'why', did we introduce a different aluminium extruded gunwale every time we designed a new

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Value Management Reminiscences – Lex Clark

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boat. The gunwale was the top edge of the sides of a small boat that were all basically the same size and shape.

Why didn't we restrict the design to the one(s) that worked best? The reason was that Engineering Design did not talk to Production Control!

We found the Function Analysis Systems Technique (FAST) Diagram particularly useful. It broke a project or system into functions that were described in very simple 'verb-noun' terms that allowed people from very different backgrounds and disciplines to understand the functions that a particular endeavour must perform.

This opened-up the subject matter to more alternative, innovative methods to perform those functions.

The fun part was, because we understood and controlled the whole marketing, design and production processes and could answer the 'why?', often with sometimes considerable embarrassment, the results were often impressive; both in cost reduction and product performance.

Frustration – Asking Why? before How? in Defence

In 1971 the Department of Navy — as it was known at the time — offered me a position in Canberra specifically to introduce Value Analysis to naval procurement and operations as the Director of Value and Industrial Engineering (DVIE).

Why? — basically because the United States Navy ran a Value Engineering Program and the Australian Naval Technical Service (some 400 Engineers and Technicians) and others were continually being criticised for cost overruns and delayed projects, particularly by politicians and the media, as they still are today, even though much has been privatised.

On taking up the position, I discovered that the first issues in Navy lay in industrial engineering. Specifically, Industrial Engineers and Work Study Practitioners

and Teams were driven by asking **How?** can the costs and procurement times be reduced by analysing the causes of the excessive costs and delays.

No one had been introduced to the philosophy and techniques of Value Analysis or Value Engineering, even though many had been sent on training courses and projects overseas in the UK and US.

In 1975 the Army, Navy and Air Force were integrated under a single Department of Defence, and I became the Director of Industrial Engineering and Value Analysis (DIEVA) for all three services.

This acronym was soon reduced to the Director of Engineering Analysis (DEA) along with others by the Secretary Sir Arthur Tange to simplify the understanding

The Colonel's Bench

The culture and traditions of Defence, both military and civilian, are widespread and deeply ingrained.

*Simply asking **Why?** in an organisation that has traditions often dating back hundreds of years while also buying and operating much military equipment designed and manufactured overseas in many countries is commonly a most difficult and frustrating experience.*

This can be simply demonstrated by the story of an old "Colonel's Bench" which stood adjacent to the parade ground in an Army Barracks.

During each parade the bench was 'guarded' by two soldiers for the

duration of the parade. But nobody knew why.

Several suggestions were made as to what to do with the bench, including repairing it and putting a plaque on it to fallen soldiers.

Then someone had the bright idea to contact the Colonel who had originally ordered the 'guard' — who was now long retired. This issue occurs frequently in Defence because projects can last many years.

When contacted and asked about the guard on the bench the Colonel replied, "What, do you mean the paint is still wet?"



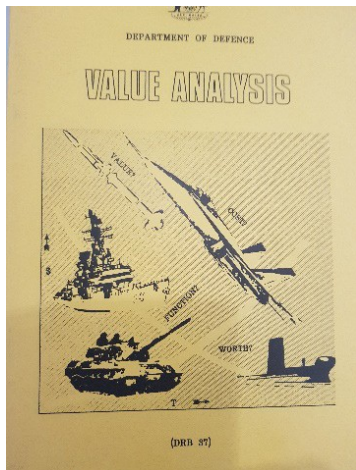
of the many annoying and little recognised acronyms that Defence loves creating.

Total Quality Management

With a limited staff, both Military and Civilian, operating out of Canberra but with individuals and teams interstate, the ability to conduct Value Management Projects across Defence and in the Defence Industry was impractical.

This was particularly so in a department already rampant with so called 'auditing teams'.

So under the principles of the Total Quality Management (TQM) movement which was being introduced throughout Defence, and in which DEA was participating, the basic philosophy and principles of Value Engineering (for engineering staff and projects) and Value Analysis (for everyone else) were introduced and promoted widely across Defence at all management levels under the encompassing title Value Management (VM).



The Defence Value 'Bible'

This required a standard publication that could be used across Defence and Contractors as a reference for techniques and terminologies.

This became Defence Reference Book 37 (DRB37) Value Analysis.

This book became a standard Defence

each of the VA study teams made a presentation of their workshop findings on their 'live' projects to senior staff

reference text and was utilised in a series of 5-day VA workshops, 3-month IE/WS courses and Value Management Incentive Program introductions across Defence. It became known as the Yellow Book.

For example, we introduced a 3-month, live-in, productivity improvement course based in the Royal Australian Army Ordnance Corp, Bandiana Military Area, in Albury Wodonga.

This was for Defence personnel, both military and civilian, employed in the industrial engineering and equipment procurement areas and was targeted at improving performance and value-for-money.

This course included the 5-day Value Analysis workshop, similar to the VA/VE workshops being run across Defence in a series of Defence, Army, Navy, Air Force Defence Science establishments.

In these Defence courses, that typically involved about 20 participants in four teams, each of the VA study teams made a presentation of their workshop findings on their 'live' projects to senior staff at the conclusion of the workshop.

Understanding the functionality of a particular piece of equipment and the components within that equipment could lead to significant savings, not only in cost but in production time and resource utilisation.

For example, German examination of Russian weapons and weapons platforms

yielded that much of the construction of non-tolerance critical items was quite 'rough' whereas tolerance-critical essential components such as weaponry were made to appropriately fine tolerances.

To achieve the required functionality and best value-for-money it is therefore necessary that procurement specifications be based on the currently required functional performance of discrete sections of any system rather than on blanket historical precedent.

As the functional improvements and cost-savings became increasingly apparent to the Department of Defence, it was decided to incentivise both Defence staff and contractors to initiate functional and cost improvements and to be rewarded for their initiatives.

Based on similar incentive programs running overseas, particularly in the US Department of Defense, this included the 'Value Management Incentive Program (VMIP) clause' included in many Defence procurement contracts.

This enabled savings resulting from proposals made by a tenderer or a contractor that were accepted by Defence to be shared between the two parties.

My Directorate, DEA, also managed the Defence Suggestion Scheme which was utilised to provide a financial incentive for Defence personnel, particularly civilians, to look for better value-for-Money alternatives and ideas by sharing in the savings.

Allocation of savings in Defence was a particular problem as some savings were potentially so large it became an embarrassment.

Other Defence 'Why?' Issues

A critical issue in Defence is that of determining who the next potential enemy is likely to be, and in turn, much analysis as to how the suggested battles might be fought.

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Value Management Reminiscences – Lex Clark

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A starting point is how the last battles were fought! Of course, this will be based on both technology, training and commercial arrangements which may have changed significantly over long periods of time.

Military equipment and systems are commonly designed under peacetime conditions that may render them unviable in wartime.

One important factor is the life-expectancy of a particular piece of military equipment. Some equipment, by virtue of its operational environment, has a very short life indeed.

For example, during the Second World War the average life of a Lancaster bomber was 21 sorties which might be 2 to 3 months. In the same conflict 12,200 Spitfire fighter aircraft were lost in battle (and more were lost because of accidents); an average of 47 aircraft per week destroyed in conflict.



British-built Supermarine Spitfire

Remarkable production rates in defence procurement resulted in the manufacture of 300 Spitfire aircraft per week at the peak during the Battle of Britain in 1940.

This production was distributed in factories throughout the United Kingdom which contributed to the total production of 20,334 in the life of these aircraft.

Also, during the Second World War, 18 shipyards in the United States produced a total of 2,710 Liberty Ships at an average of 1.5 ships per day.

However, as German U-Boats sinking of civilian cargo ships increased, so did the production of Liberty Ships so that in

Military equipment and systems are commonly designed under peacetime conditions that may render them unviable in wartime.

December 1943, their production exceeded 4 ships per day with an average build-time per ship of 42 days.

Interestingly, British shipyards in 1942 needed on average of about 336,000 manhours per Liberty ship produced. This can be compared with the minimum figure of 486,000 manhours per similar (British designed) ship by the reputedly more efficient and much larger US shipyards.



US-built Liberty Ship

Culture has a significant impact on 'the way we do things' and therefore how much it costs to own and operate equipment and facilities.

Of course, keeping defence equipment in good working order is essential as history has demonstrated the impossibility of predicting when the next defence emergency might arise.

Having the knowledge and experience to inspect, maintain or modify your equipment is a distinct advantage.

In the case of the Australian owned, German-built, Leopard tanks wisdom had it that they were so superior that they could

only be overhauled or modified in Germany.

Defence questioned this and sent a German speaking service staff member to the manufacturer to examine the tanks there with local service personnel.

It was revealed that the nature of the construction was not out of the ordinary and that maintenance and modification could be performed in Australia and that transfer of responsibilities was enacted.

During World War II Australia, with a population of around 7 million, developed extensive wartime defence industries including aircraft, weapons and munitions that greatly supported the war effort of the Allies, particularly Britain.

Australia now has a population of around 28 million.

The present development and operation of weapon systems, often utilising apparent stealth and artificial intelligence characteristics, results in weapon systems that include the one-billion-dollar B-21 Raider stealth bomber and the wide variety of around 100-dollar drones that the Ukraine war has proven to be highly effective.

The Australian Defence establishment, and taxpayers, have received considerable benefit from the application of the Value Methodology over decades but from recent Federal Government inquiries (reported in Value Times AUTUMN 2024, p4 and SUMMER 2024, p3, p9) enthusiasm for rigorous and structured self-examination by Defence has waned in recent years.

A return to earlier times regarding rigorous examination and development of Defence acquisition proposals could result in significant benefit to Australians, particularly in view of mounting uncertainties in the international defence environment.

Lex Clark, Fellow, IVMA

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