Thoughts...from the chair - Keith Owen  
Some value issues from the rail industry:
A two-dimensional model - David Worsley
Polonius...Value and the evolutionary tree
Case study: Driving efficiency in UK's water sector -
Gary Healey and Consuelo de Meyrick
Certification Board news - Michael Graham
Institute matters - Northern Branch event;
Thank you from Doug Hurst
Directory of services

Merry Christmas to all our readers!
This is my first ‘Value’ introduction since becoming IVM Chair following the AGM and I know there is a great deal of work to be done to promote the Institute over the next two years whilst in office.

I look forward to continue working alongside an excellent Executive team and welcome all IVM members to share their own ideas and suggestions on how we can best grow the membership and raise the profile of the IVM in the UK and Europe.

We have a business plan in place which includes a marketing and communications plan with owners identified and action-by dates to bring the plan to fruition. As we cannot deliver this alone, we ask that you all, as members, act as ambassadors, individually and collectively, to deliver the plan through promoting the benefits of value management within your own organisations, your clients, HM Government, Local Government and Governmental Departments, private sector clients, universities and colleges and the wider industries they work within.

I firmly believe, in these austere times, that value management has a vital role to play in assisting organisations in both the private and public sectors to ensure they maximise value for money for their respective organisations and realise the required benefits related to their individual business cases.

I look forward to working with you all to grow the IVM through our membership and to promoting the IVM’s position in the UK as the “Centre of Excellence” for all value management matters.

Thoughts ...from the chair

In his first article since becoming chairman of the IVM, Keith Owen shares his thoughts.
Some documents I have seen recently in connection with my work on rail infrastructure projects have suggested to me a method of systematically investigating different perspectives on value, and categorising these using a two-dimensional matrix. This in turn has shed some light on conflicts and issues that have occurred in my own industry. The first set of documents that inspired this article is the Department for Transport’s 2010 guidelines on building a transport business case. The key aspect of this guidance is the stipulation that during the pre-project appraisal process, potential transport infrastructure projects must pass five tests of viability: the strategic case, the economic case, the financial case, the commercial case, and the management case. The strategic case involves establishing that the project is aligned with wider...
stakeholder requirements for local or national transport infrastructure, whilst the management case requires that it can be demonstrated that the proposed project can actually be delivered from a technical and managerial perspective. Both of these requirements may involve considerations of value, but they do not necessarily lend themselves easily to conception in terms of “What you get ÷ What you give” equations.

However, the economic, financial and commercial cases can be readily conceived in these terms, as the project appraisal process involves predicting the value that a project can create from these perspectives for various stakeholders. I first became aware of the distinction between economic and financial value when working on Network Rail business cases that were produced using the Department for Transport rules known as WebTAG. The DfT requires that publicly supported infrastructure projects must generally provide a benefit-cost ratio (BCR) of 2.0 or better. The BCR is a form of value equation, as it is defined as “Net benefit to society ÷ Net cost to government”. It forms part of the DfT economic case, rather than being part of the financial case, because the benefits concerned do not involve actual monetary transactions; instead, they comprise monetised assessments of items such as the value of rail passengers’ time that would be saved by faster journeys, or the value of reduced traffic congestion attributable to transferring travellers from road to rail. By contrast, the financial case examines the relationship between the costs of a project and the revenue that might be generated by it, exclusively in monetary terms; an analogous value equation for the financial case might be “Net present value (NPV) of revenue over the appraisal period ÷ NPV of construction and operating costs over the extended project life cycle”. Provided that this value is greater than or equal to 1, then the project should require no net subsidy from the government, thereby creating an infinite BCR for the economic case. Finally, the commercial case requires that an effective contracting strategy be identifiable for delivery of the project. This could also involve issues that could be understood in terms of value equations, as contractors will expect that the potential rewards of bidding for a contract will sufficiently exceed their costs so as to offset any risks that they will be taking.

These three viewpoints from which the value of a project can be viewed could be further subdivided. The economic view of project appraisal can be taken from a national or local perspective; obviously the DfT itself is mandated to take a national view, but many of the stakeholders involved in transport projects (such as local authorities or the (now defunct) Regional Development Agencies) have a geographically limited interest. A financial view would normally be taken from the perspective of an...
Some value issues from the rail industry: A two-dimensional model

..., continued from previous page

individual company, but Network Rail is obliged to assess proposals from the point of view of the railway industry as a whole, and relies on the statutory regime administered by the Office of Rail Regulation to oversee the distribution of financial rewards among the industry’s constituent companies. Meanwhile, the risk-adjusted value of a contract opportunity may look very different when viewed from the point of view of a consortium as opposed to that of an individual contractor; a consortium will be more likely to possess both the range of expertise required to effectively judge risk and the financial reserves necessary to absorb unexpected losses.

There are thus six viewpoints identified so far from which value could be viewed, and these form one of the two dimensions mentioned in the title of this article. The other dimension is provided by the Audit Commission’s “three Es” model of cost effectiveness that was enshrined in the National Audit Act 1983, and of which I first became aware when reading Sir Andrew Foster’s 2010 review of the new rolling stock project known as the InterCity Express Programme. This model disaggregates cost effectiveness into three complementary elements: economy, efficiency, and effectiveness.

Sir Andrew described the distinction between these elements of cost effectiveness as follows: “Economy is the process of acquiring human and material resources of appropriate quality and quantity at the lowest cost. Efficiency is the production of maximum output for any given set of resource inputs (or the use of minimum inputs to achieve required outputs). Effectiveness is the achievement of desired outcomes or benefits and thus relates to strategy and objectives.” It can thus been seen that the Audit Commission definition of cost effectiveness is a form of value equation, which is itself the product of three separate value equations. This is expressed algebraically above:

\[
\text{Cost effectiveness} = \frac{\text{Inputs}}{\text{Cost (\text{\pounds})}} \times \frac{\text{Outputs}}{\text{Inputs}} \times \frac{\text{Outcomes}}{\text{Outputs}}
\]

\[
\approx \frac{\text{Outcomes}}{\text{Cost (\text{\pounds})}} \approx \frac{\text{Satisfaction of wants}}{\text{Use of resources}}
\]

Some value management techniques with which we are familiar can be related to various aspects of this model. Function analysis often involves exploring the relationship between the inputs, outputs and outcomes, in order to clarify how inputs contribute to objectives. Meanwhile, criteria weighting techniques attempt to quantify how various outputs may contribute to the overall outcome, and thereby calculate which combinations of inputs and outputs offer the best value. In combination with the various viewpoints described above, these elements of the “three Es” model can thus generate a two-dimensional matrix on which value-related issues and conflicts can be plotted. I will henceforth call this an element-viewpoint grid (EVG), which can be seen on the following page.

The coloured letters and accompanying shaded areas on the above diagram indicate the location on the EVG of a number of examples which illustrate how differing perspectives on value can give rise to conflicts or philosophical conundrums. The remainder of this article will briefly describe these cases.
Some value issues from the rail industry: A two-dimensional model
...continued from previous page

### Case A: Externalities

The area covered by Case A indicates that there may be a difference between the economic and financial viewpoints on an “economy” issue. This would correspond to the textbook economics concept of externalities, or the ability of an economic agent to impose unwanted costs on others whilst reducing their own. An example may be a firm reducing its energy costs by using a less environmentally-friendly fuel, and thereby imposing the cost of cleaning up pollution on third parties (quite possibly in foreign countries). Alternatively, a firm may pay low wages and thus reduce its labour costs, but if its employees and their families suffer ill health or are tempted into crime as a result, welfare or policing costs will be imposed on the wider community. The case of externalities can therefore be located on the EVG as a difference between the economic and financial viewpoints on the element of economy.

### Case B: High Speed 2 Business Case

The difference between the economic case and the financial case for a major transport infrastructure project has already been discussed. It may therefore be useful to illustrate it with a real example, namely High Speed 2. The DfT published its initial business case for the full HS2 network to Leeds and Manchester in February 2011. As expected, the financial case was not positive. The net present value of the capital costs was estimated to be £30.4 billion, and the NPV of the operating costs over the 60 year appraisal period was cited as £17.0 billion. In return, the scheme would allow £3.1 billion of savings on forecast non-HS2 rail costs, and was expected to generate revenue with an NPV of £27.2 billion. The forecast net cost to government was thus £17.1 billion. However, an economic case for HS2 was made through the calculation of monetised socioeconomic benefits with an NPV of £43.7 billion, yielding a BCR of 2.6 (i.e. 43.7 ÷ 17.1). The DfT's own calculations thus demonstrate the difference between assessing the value of a proposed project from a national economic viewpoint, as opposed to an industry-wide financial viewpoint.

This economic case was nevertheless open to criticism, as the benefits included £25.2 billion for time savings to business travellers. The method for calculating this assumed that all of the time spent on board a train is wasted for such travellers, and insofar as this assumption is wrong, the value of this benefit would have to be reduced proportionately. The ongoing controversy over the HS2 business case thus illustrates the difficulty in assessing the value of a project from an economic rather than a narrowly financial viewpoint, whilst providing an example of a situation where the value of the output for a given input – namely the value of passenger time saved for a given journey time reduction – was open to question.
Case C: Network Rail Alliancing Strategy

A further railway industry example of different viewpoints on the relationship between inputs and outputs relates to Network Rail’s new strategy of forming alliances and other collaborative working agreements with contractors. This initiative originated in Sir Roy McNulty’s 2011 report on Realising the Potential of GB Rail. McNulty compared the efficiency of the British railway industry with some foreign equivalents, and concluded that cost savings of up to 30% may be possible. He argued that current contractual arrangements did not give Network Rail or their contractors any incentive or ability to help to manage each others’ risks; both therefore viewed their input-output relationship in isolation, and opportunities for efficiency were being missed. Accordingly, one of his key recommendations was that Network Rail should establish new working relationships with contractors, such as formal alliances which would be separate financial entities. Such arrangements were already proving popular for major infrastructure projects in Australia, and Network Rail has followed this advice. A significant example is the current project to upgrade the Great Northern/Great Eastern Joint Line (from Peterborough to Doncaster via Lincoln), which is being delivered by the GN/GE Alliance, comprising Network Rail, Inverys, Babcock and Carillion. The aspiration is that by taking a joint view on securing the desired outputs for the minimum necessary inputs, the project will be delivered more efficiently than if the client and contractors viewed the issues and risks in isolation.

Case D: High Speed 2 Regeneration Effects

A case is located at the top right of the EVG which illustrates the potential for the outcomes of a project being viewed quite differently by different stakeholders, even when they agree on the nature of the outputs. I encountered this issue of effectiveness when working in a previous role in Network Rail’s Strategy & Planning department, during which I represented Network Rail’s interests in the early development of the Birmingham to Leeds leg of High Speed 2. At meetings connected with this, local government representatives were briefed on HS2’s appraisal methodology, the forecast numbers of passengers, and the total monetised value of the time savings that were expected. Quite apart from the aforementioned disputes over the validity of this method, it was not surprising to find that what the local stakeholders were really interested in was the potential for economic regeneration that was presented by HS2, and the potential for closing the North-South divide. However, the relationship between the quantifiable outputs (such as trains per hour and passenger numbers) and the less tangible regeneration outcome is less than certain. After the government backed the initial London to Birmingham leg of HS2, respected industry expert Christian Wolmar noted in the November 2011 issue of Public Finance journal that there was some evidence that following the opening of the Paris to Lyon TGV line in 1981, a greater proportion of firms that had been considering locating an office in Lyon had chosen Paris instead. Quicker transport links can therefore lead to economic centralisation rather than decentralisation, and this possibility was lampooned by the satirical website The Daily Mash under the headline “HS2 to make London even bigger”, with the explanation that: “Research showed that shorter journey times will make it easier for talented people in Birmingham, Manchester and Leeds to spend an increasing amount of time in the capital before finally moving there permanently.” The effectiveness of the HS2 project could therefore end up being very different when assessed from a local as opposed to a national economic viewpoint.

Case E: The Value of a Statistical Life

A final issue related to project effectiveness that recently caught my attention is the perennial and difficult topic of the “value of a statistical life” (VSL) - the methodology that allows government agencies and others to place a monetised value on health or safety initiatives that avoid human fatalities. At the recent annual conference of the Economic History Society in York, I heard Martin Chick of the...
Some value issues from the rail industry: A two-dimensional model
...continued from previous page

Reading the many online publications of VSL expert Kip Viscusi of Harvard Law School has made me aware that such anomalies do not just apply to transport safety. Viscusi's 2002 research paper The Value of a Statistical Life: A Critical Review of Market Estimates throughout the World (written with Joseph Aldy) revealed that the UK Health and Safety Executive was at that time placing a higher value on the avoidance of cancer-related deaths than on those from other causes. This was consonant with the economist Richard Revesz's view that a “dread effect” means that “individuals may be willing to pay more to avoid dying of cancer than to avoid an instantaneous accidental death”. It can therefore be seen that what might have been assumed to be an outcome of equal value, namely saving a human life, could in fact be regarded by a stakeholder as an output which has variable value depending upon criteria that one may have thought irrelevant. This ambiguous relationship between outputs and outcomes could obviously have an impact on project appraisal.

Conclusion

All value management practitioners will be aware that equations used to calculate value are varied, subject to the general form of “What you get ÷ What you give”. However, developing this two-dimensional model has helped me to situate various value-related issues that I have encountered recently on a spectrum, as defined by the various viewpoints from which value can be assessed and the three elements of overall cost effectiveness. Some projects or proposals that are unproblematic when assessed from one particular location on the element-viewpoint grid may be very difficult when analysed from another. It is my hope that the EVG may thus be useful as a tool which can inspire VM practitioners to identify where value-related conflicts may arise. Different stakeholders will probably be focussed on different locations on the grid, and this may explain their varying attitudes. Of course, there are doubtless other dimensions to the concept of value that could be used to create further models, but by combining ideas originating at the Department for Transport and the Audit Commission I have found one that has proved particularly useful for categorising value issues arising on the railway.

Dr. David Worsley is Risk & Value Manager for Network Rail's London North Eastern Route, and was previously Senior Strategic Planner for the East Coast Main Line. He is also a Visiting Lecturer on Newcastle University's new M.Sc. in Rail Freight & Logistics, for which he is developing a module on railway project risk and value management.
Polonius...Value and the evolutionary tree

VM, like quality, is seen in isolation and not as part of the wider economic policy scene. The IVM could usefully explore how VM and other productivity topics link together.

Those who have watched the programmes of Sir David Attenborough on the animal kingdom will know how animals are divided into genus and species and how they fit into an evolutionary tree first developed by Darwin. The classification, or taxonomy, of flora and fauna is vital for those who study botany or zoology. Simply to list the members of the animal kingdom in alphabetical order is clearly not good enough. Yet this is what happens with the topics that relate to productivity and this is highly damaging.

In the May edition of the Chartered Quality Institute’s monthly journal Quality World, Chief Executive Simon Feary reported that a news editor had told him, “We can’t sell the quality angle. No one knows what quality is and if they don’t know we can’t sell it. Quality just isn’t sexy.” This blunt truth is painful reading but it holds lessons for VM. Remember too that quality is better known and better supported than is VM, not least due to ISO 9001.

The irony is that both quality management and value management are at the core of a range of operational performance skills that could be game changing in terms of the national economy. Yet, the media and those in government seem out of tune with the needs of a competitive technocracy. So what can be done to get the message across? There surely needs to be a taxonomy of productivity topics that has its origins in applied economics.

Starting with Adam Smith, who in The Wealth of Nations described how pin makers had eighteen separate process operations to mass-produce pins, it could be shown how Frederick Winslow Taylor later developed methods for process analysis that were transferable to all forms of activity. From this an evolutionary tree could be developed covering the work of Henry Gantt, Frank and Lillian Gilbreth, Deming, Juran and the post World War Two development of TQM, quality systems, value management, lean, six-sigma and so on. In other words the taxonomy of the genus and species of quality and productivity management.

This would help to discourage organisations from producing toolkits that set down a mixed bag of topics in alphabetical order with little reference to how each relates to the other. The evolution of VA into VE, then into corporate VE using process maps and on into re-engineering itself is of interest. Not having a wider evolutionary perspective leads to gaps in the narrative and silo thinking. It disconnects the family of productivity topics from things that people understand and so VM, like quality, is seen in isolation and not as part of the wider economic policy scene.

The IVM could usefully explore with other bodies the development of a model that illustrates how VM and other productivity topics link together. The state of the UK economy demands that there is narrative that is understood by news editors and politicians. If not, topics vital to our economic wellbeing will remain invisible to those able to marshal opinion and take action.

Polonius is an occasional article written for Value by a member of the IVM and the views expressed here are those of the writer and not the IVM.
Southern Water, one of the UK’s major water companies, has implemented a value management framework as a key mechanism for driving savings on its capital programmes while at the same time continuing to deliver their AMP 5 efficiency targets. Southern Water’s vision is to be recognised as the UK’s leading water company as judged by its customers, stakeholders, shareholders and the regulatory body, Ofwat. To become an industry leader, Southern Water needs to improve performance significantly and become more efficient in delivering its capital expenditure programme, measured by achieving an 8.6% improvement in capital unit costs.

The first step was for Southern Water to better understand its current asset base and take a value-based approach to prioritising capital delivery schemes. Drawing on experience from across the water sector, a value management process and framework was developed, established and implemented. This framework has become a key part of Southern Water’s project delivery cycle with an agreed 5% reduction in capital spend targeted for 2013/2014 and further savings of up to 10% to be targeted in future years.

The process implemented is based on the classic 4 stage value management cycle. Each of the value management...
Case study: Driving efficiency in UK’s water sector...
...continued from previous page

Central to the approach taken at Southern Water has been the objective of building intellectual capacity and establishing a culture of continuous improvement. While the value management framework was developed and implemented by Turner & Townsend, the implementation programme had full time sponsorship within Southern Water and a plan to transition the framework to Southern Water ownership was agreed at the outset. Further engagement was achieved through rolling out a communication piece alongside the framework which focused on creating an awareness of value management and the savings it can deliver within Southern Water.

During March 2013 pilots were conducted with the Southern Water teams responsible for the design and delivery of these pilot projects. Following the pilot, the framework has been refined and Southern Water facilitators trained. Facilitators will be supported by a risk and value manager responsible for rolling out the value management framework across the business. Placing importance on educating and engaging project teams, who will ultimately be responsible for implementing the opportunities identified through the interventions, the value management framework will quickly become business as usual.

The value management framework established at Southern Water will facilitate the delivery of a large proportion of the company’s efficiency targets. Furthermore it will increase the knowledge and learning within Southern Water such that it will be considered a high performing water company when assessed against Ofwat’s long term trends and targets.

Gary Healey is Associate Director Risk and Opportunity Management Consulting at Turner & Townsend and Consuelo de Meyrick is a Senior Consultant in Programme and Change Consulting team at Turner & Townsend.

For more information contact Gary or Consuelo:

t: +44 (0) 20 7544 4000
m: +44 (0) 7960 018027
http://www.turnerandtownsend.com
**Certification Board news**

This year has seen good progress: a substantial increase in the number of newly qualified PVMs compared with last year and we now have a good interest in applying for the new qualification QVA, which is discussed below.

**New developments in training and certification**

As some of you will be aware the IVM has recently been piloting new developments in our training and certification system, Value for Europe. The primary reasons for the updates:

- New European Standard published in 2013 (EN16271) and anticipated to be published in 2014 (EN1325) - these augment the main reference standard for Value Management EN12973 which was published in 1999
- New certification level introduced - QVA - (Qualified Value Associate)
- Learning objectives are being updated generally to reflect experience of applying the first edition of Value for Europe
- Operating guidance and requirements are being added for National Certification Organisations to help support the European market for professional services

The pilot period runs to the end of this year. The European Governing Board which supervises this system met in Nov 2013 and confirmed that the new qualification, QVA, will be launched across Europe in the New Year. Practitioners who have completed initial training at foundation level (VM1) can now apply for registration as a Qualified Value Associate after passing the QVA exam and gaining practical experience through at least two studies.

Any new practitioner in value management who has completed foundation level training may contact Trish McAll, IVM Secretary, to apply for this qualification and to sit the exam. The new qualification QVA is a lifetime qualification. There is no requirement for annual returns or other periodic re-certification.

The qualification level Professional in Value Management is unchanged with developments in Value for Europe. However the requirements for ongoing learning and current practice have been strengthened by developments in Value for Europe.

**Re-certification for PVMs**

PVM remains the lead international qualification for competent professionals in value management.

All current Professionals in Value Management (PVM) will be required to seek re-certification over the next 30 months and all current Trainers in Value Management (TVM) will be required to update and resubmit training materials for ongoing accreditation. Re-certification is intended to support individuals in maintaining current competence in dealing with value management practice. There is currently no cost for recertification — it is included in the annual fee. I hope that those of you who have not experienced the pilot programme will find this re-certification process quite beneficial.

All trainers will receive a separate notification of the detailed nature of the changes when the updated edition of Value for Europe is distributed.

**Candidates needed for BSI group**

The next three years will see further standards development. If you are an experienced practitioner who is interested in joining in this work you should find the work challenging but enjoyable (at least some of the time!). Please contact Trish McAll, Secretary to the Certification Board, stating your credentials if you wish IVM to consider nominating you to the working group convened by British Standards Institution.

Merry Christmas and Happy New Year

Michael Graham
In March, the Northern Branch met in Leeds to discuss another topic relating to the application of Value Management to share and improve knowledge. The topic covered was, “Value Trees How to Take your Clients with you”.

It was an interactive session hosted and chaired by Tim Hess from the Built Asset Consultants EC Harris. The premise of the discussion was that some clients and/or project teams are reluctant to spend the time required to complete a full analysis of Value Trees or FAST diagrams, in order to define the client’s Value Drivers/Client Value System.

Practitioners potentially fear that project teams won’t have enough time to complete a Value Tree or FAST diagram, or that the team won’t fully engage in the exercise. The ability to complete these successfully is dependent on the experience of the practitioner and the willingness of the client and project team to spend time focusing on what value means in the context of their project/organisation.

In the construction property sector particularly, clients wish to dive straight into Value Engineering, without due regard to what they wish to achieve from their building. It is our role as practitioners to adapt to the needs of the client whilst maintaining the principles of Value Management.

In the discussions two principle elements capture how we addressed the matter.

Firstly we confirmed what we achieve through Value Trees.

**Why? ---- Why do we need Value Tree/FAST diagrams?**

- It helps us articulate and capture key objectives of the project/enterprise
- It questions the importance of project objectives relative to each other and forms a hierarchy
- Helps focus thinking on the desired quality of products that are required and what the success criteria are
- Defines what products/deliverables are important for achieving the product/project functions
Institute matters...
...continued from previous page

Secondly we looked at other techniques to define client value systems as a team:

How? .... How can we achieve the same outputs as using other techniques?

- Review of Objectives v Simply analysing the project / product objectives and confirming which are the key objectives
- Requirements Management v The process of documenting, analysing, tracing, prioritising and agreeing on requirements and then controlling change and communicating to relevant stakeholders. It relates to deliverables not why we're delivering the project / product
- Review Assumptions and Constraints ¡V Reviewing these parameters will capture to the most part considerations that take place when developing Value Trees
- Needs / Wants Analysis V a shorthand approach to capturing and prioritising objectives
- PESTLE Analysis - A review of the Political, Economic, Social, Technological, Legal and Environmental drivers which allow all wider projects needs to be considered
- Customer Value Analysis – using a pared comparison technique of 8 key Customer Needs (Values) as determined by research (CapEx; OpEx; Utility, Esteem; Environment; Political (acceptability to Sponsor); Resale; Time) to identify the needs and weight them based on their relative importance to obtain a rating of criteria for options selection purposes.

Finally, we looked at methods to build value trees in a more efficient manner. This would help in situations when there is a need to build the value trees quickly. Suggested approaches:

- Use pre-prepared “post its” to give you the structure of the value tree and use these as a starting point amending them as they are presented
- Work off Excel using each cell to capture high and low order objectives / functions. These can be cut and pasted to move them to create the Value Tree / Fast diagram

The conclusion was that we need to educate our clients / organisations to ensure they understand that Value Management is much more than Value Engineering. Even though there are quick methods to produce Value Trees or Fast diagrams, we should always be maintaining the expectation that completing a Value Tree or Fast diagram is something that shouldn't be rushed and thorough thinking, preparation and implementation is required.

Tim Hess, EC Harris

Thank you from Doug Hurst

I have had withdrawal symptoms after stepping down as the Admin Secretary, but these are diminishing as I see Trish our new secretary making a good and fresh approach to the task.

There were few small tasks remaining for me to complete when I returned from Turkey in mid October. The most difficult of these being the archiving of hardcopy paperwork and 16mm films I have collected going back nearly 50 years.

The presentation at the AGM of a woodlands wall sculpture was welcome and it is now mounted in our entrance hall.

Thank you in particular to all who contributed to the collection: I put the surplus money towards a new boom for my windsurfing rig in Turkey.

Doug Hurst
Advanced Management Skills

Training, Facilitation, Coaching and Consultancy

Contact: Mark Law TVM Clive Bone TVM Laura Robertson TVM

Tel: 020 8883 1423
Email: info@amskills.com
www.amskills.com

Penspen Limited

VMVE for major projects ($30M to >$500M), especially O&G, with large mixed multi-discipline teams.

Contact: John Downer PVM

Tel: 020 8334 2765 Email: j.downer@penspen.com
www.penspen.com

Turner & Townsend Management Solutions Ltd

Turner & Townsend provide a full range of performance improvement services designed to deliver effective solutions for clients in any area of private and public sectors.

We provide highly experienced consultants to facilitate Workshops & Programmes in Risk, Value Management, Process Improvement, Cost Reduction, Partnering, Change Management, and Strategy & Planning.

Turner & Townsend provides both consultancy advice and delivery support services.

A quality driven, international construction and management consultancy with a global network of 56 strategically located offices.

Contact: Daniel Granger Tel: 0207 544 4000 Email: daniel.granger@turnerandtownsend.com
www.turnerandtownsend.com

Davis Langdon LLP

Public and Private Construction, Oil and Gas, Process Improvement.
Programme and Project Value Management, Value Improving Processes; Risk Management; Partnering; Facilitation; Consultancy; Training.

London based Centre of Excellence; Fully qualified professionals; Fully staffed offices worldwide.

Contact: Mike Jefferyes Tel: +44 (0)20 7061 7000 (Switchboard), +44 (0)7770 640018 (Direct)
Email: Mike.Jefferyes@davislangdon.com
www.davislangdon.com

Michael Graham Consultancy

Developing Skills for Continuous Improvement. Network support for Best Value, Partnering Advisor, Accredited Training, Facilitation.

Contact: Michael Graham PVM TVM
Tel: 01786 463165 Email: vm.training@ukvaluemanagement.co.uk
www.ukvaluemanagement.co.uk

Value

Services directory

To advertise please contact us by email: secretary@ivm.org.uk or by telephone: 01531 631 444