

## THE MANAGEMENT OF VALUE

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*The UK economy is facing unprecedented pressures to reduce spending and at the same time increase the quality and efficiency of service and project delivery. We are not alone. The US faces similar pressures on an even larger scale.*

*In 2010 The UK Office of Government Commerce (OGC), part of the Cabinet Office commissioned the development of a new guide, Management of Value (MoV™) to join their portfolio of Best Management Practice. This paper, prepared by the lead author, outlines the development, approach and content of this guide, its application and the qualifications related to it.*

*Management of Value (MoV) is the first guide to address the application of Value Management across all sectors of the economy, across all levels of management and aimed at an international audience. It should be viewed as an evolution of Value Management rather than a departure from tried and tested practice. It provides a fresh view of the subject with inputs from an international review panel comprising some 20 individuals from a broad range of disciplines in the Programme and Project Management communities, including Government agencies, IT, Telecoms, Transportation, Management Schools, Management Accountants and Construction.*

*The paper includes examples of the use of MoV at all stages of programmes and projects, particularly where these relate to reducing public expenditure, enhancing service efficiency and eliminating waste. It also includes some examples of increasing competitiveness in the private sector, thus promoting growth.*

*One chapter in the guide is devoted to introducing and embedding MoV into an organisation. The author will touch on his past experience of doing this within Davis Langdon and, now that it has joined AECOM, the challenges of extending best practice across this global company.*

## Introduction

The Office of Government Commerce (OGC) has, for many years, been the organisation within the UK Government for promoting best practice in the management of programmes and projects. At the end of 2010 it moved from the Treasury, where it had limited powers of enforcement, to the Efficiency and Reform Group, within the Cabinet Office, where it has, through the Major Projects Authority (MPA), the power to ensure projects are set up properly and to intervene if they fail to perform.

It is within this context that Management of Value (MoV™) was launched in November 2010, complementing and enhancing many of the methods that are already available in its sister products such as PRINCE2® (Project Management), MSP® (Programme Management) and the more recently published MoP™ (Portfolio Management). Together with other products, these provide a comprehensive and consistent set of guidelines for effective management.

### Why is a new guide needed?

MoV is not written for use in any one particular sector. It is unique in that it is the first cross-sector and universally-applicable guide to the management of value and its related qualifications to be published. It is intended for use worldwide and the qualifications are available through the existing network of several hundred Accredited Training Organisations (ATOs).

Faced with the unprecedented pressures to reduce spending and at the same time increase the quality and efficiency of service and project delivery, let alone promote growth, the big dilemma is how to meet these conflicting demands. We are not alone. The US faces similar pressures on an even larger scale. In the UK, the MPA will be mandating the use of all aspects of Best Management Practice and intervening where projects are not delivering to expectations.

MoV has been written specifically to help organisations introduce and use this successful method of managing value so that they can maintain or increase benefits whilst making better use of resources. It provides an auditable way to make tough decisions based upon value criteria thus enabling, for example, cost reduction to be focused on those areas that will impact least upon the programme or project objectives. It provides an objective means to select those projects that will make up a balanced programme to maximise value added whilst eliminating those projects that contribute least. At portfolio (business) level it contributes to establishing and articulating an organisation's priorities. Across the whole spectrum of Portfolio (Business), Programme, Project and Operational activities MoV provides a means to align Business aspirations with what is delivered in the long term.

In August 2010, the UK Prime Minister, the Rt, Hon David Cameron, wrote an article to the Times Newspaper in respect of the forthcoming Comprehensive Government Spending Review, in which he said:

*“We (must) move... to taking the decisions necessary to equip Britain for long-term success. That means prioritising things like better schools.... and infrastructure improvements so that we can build a sustainable economy for the future.....*

*You start by getting the books out and scrutinising every penny spent, asking whether it is necessary, seeking out any waste you can cut ..... for the most scrupulous,*

*effective business, no detail and no sum of waste is too small to escape the microscope of efficiency.*

*Next, like any business we should ask whether there are activities we are undertaking that should not really be part of the programme.*

*If we do all this – if we cut the obvious waste, attack the ingrained waste, stop doing things that don't add value, if we are realistic about the things we can no longer afford and creative about raising revenue, we'll be able to prioritise the things we really care about .... (being) free to grow, to generate wealth, to create jobs, to compete and to prosper”.*

## **Alignment with other Best Management Practice guides**

MoV complements the suite of related Best Management Practice guidance developed by the OGC, which is aimed at helping organisations and individuals to manage Portfolios, Programmes Projects, and services consistently and effectively.

### Management of Portfolios (MoP™)

MoV provides a means to articulate an organisation's value priorities to inform decision making. It also informs the development of strategy.

### Managing Successful Programmes (MSP®)

MoV provides the means to select projects within a programme, to enhance those that add most value and minimise or stop those which deliver least or which are not needed. It also supplements Benefits Realisation Management to improve the identification and enhancement of planned benefits and identify new ones.

### Managing Successful Projects with PRINCE2®

MoV™ offers proven methods of identifying and articulating a project's objectives and the essential outputs (termed Products) to deliver these. The use of VM to improve performance at project level is well known.

### Management of Risk (M\_o\_R®)

By defining the needs and enabling their delivery in a risk-assessed, cost-effective manner, MoV increases certainty of achieving expected outcomes.

## **An introduction to MoV**

MoV is about maximizing value consistent with the needs of the business, the resulting programmes to deliver those needs and projects that deliver the benefits sought by the programmes, all the time, reflecting key stakeholder requirements. It goes on to play a role in the efficient operation of or services delivered through the completed projects, to ensure that the expected benefits are delivered in the long term. It is not simply about minimizing costs.

A fundamental issue that MoV addresses is to maximise the value of necessary investments such that they deliver the required benefits, at an affordable cost, with known, manageable and acceptable level of risk?'. Because value is subjective, MoV must also seek to achieve the optimum balance between all stakeholders' needs as well as the use of appropriate resources to match the business priorities.

MoV is based around seven principles and delivered through seven key processes that are explained in the guide. MoV is a collective term embracing many processes that may contribute to the effort of maximizing value. These are explained or signposted within the guide. It is essentially the same as the widely used term Value Management, within which Value Engineering is a core process.

MoV is applicable to operational activities as well as at a business, programmes and project level

Essentially, MoV:

- Provides a means to define objectives and scope clearly in terms of the organisation's and end users' short- and long-term needs
- Supports decision-making based upon maximizing value
- Enables more efficient delivery by employing fewer resources and using these resources to better effect
- Encourages innovation that is well-aligned to the organisation's goals
- Facilitates optimal balance between investment and long-term operating expenditure
- Provides a means of measuring and auditing value, taking account of monetary and non-monetary benefits and achieving optimal balance between them, thus demonstrating that optimum value has been achieved
- Enables effective consultation and engagement of stakeholders and end users and reconciles their differing needs
- Promotes sustainable decision-making, based on adding value, by addressing both monetary and non-monetary factors.

## **How does MoV maximise value?**

Value is subjective, with different people applying different criteria to assess whether they are getting good value. It is this subjectivity that makes it essential to manage value deliberately, achieving the optimum balance between key stakeholders' needs, instead of leaving it to be a by-product of other management activities.

There are three main areas where it is necessary to strike a balance in order to maximise value. These are:

Reconciling the needs and interests of different stakeholders to optimise overall benefits

Balancing the use of resources to reflect their availability and an organisation's priorities

Maximizing the benefits in relation to the resources used to deliver them

The following is an example of use at Programme level, selecting only those projects that add most value:

*An international airport owner wanted to increase its capacity by the addition of a new terminal. The national airline was keen to occupy the new terminal but believed that the facilities proposed by the owners could not be operated efficiently. The airline's business case estimated an affordable budget of about \$1bn to upgrade the base facilities offered by the owner to service levels it required. Unfortunately end users within the business had identified a 'wish-list' of projects that would cost about*

*\$2bn. It therefore undertook an extensive VM programme to reconcile the difference. The team developed business cases for all the identified projects, embarked on extensive consultation with the end users, and then undertook a series of studies to justify the appetite for and viability of the projects or otherwise. The result of this programme was the airline was provided with an objective basis to select an affordable programme of projects to upgrade the airport owner's facilities. The programme also identified improvements to the efficiencies of its operating procedures. These combined to give the airline most of the performance improvement it was seeking and enabled it to occupy the terminal.*

At the heart of these decisions was the ability of VM to:

1. Determine which projects were really needed by the airline's business units by analysing their contributory functions, assessing the appetite of the stakeholders for the changes and calculating value for money taking account of both monetary and non monetary benefits.
2. Identify projects that could be removed from the scope that were not viable and/or represented individuals' wish-lists and did not have the support of the business generally
3. Halve the cost of the upgrade programme from \$2bn to \$1bn whilst retaining the essential benefits arising from it.
4. Identify operational improvements to improve long term performance
5. And thus, increase the overall benefits realised in line with stakeholder needs and significantly reduce the use of resources, thus maximising return on the investment.

## **Where and when should it be used?**

MoV is applicable to hard projects like Construction, where there is a physical output that can be seen and touched, as well as soft projects, for example, transformational change in an organisation. A major programme or project is likely to include both.

The earlier that MoV is used, the greater the opportunities to add value. This applies not only to projects but throughout the business cycle. Getting business strategy right provides the greatest opportunity to add value. Selecting the right projects within a programme to deliver that strategy is, as we have seen in the earlier example, critical to its viability. At project level, defining the project objectives and those things that it must deliver

## **Principles**

MoV is based upon seven principles that are instrumental in delivering success. These have been derived from long-standing practice. MoV principles are:

1. *Applications are fully aligned with your organisation's strategic objectives*
2. *Focus on functions and required outcomes, in terms which clearly state what value means for the organisation*
3. *Engage all key stakeholders, reconciling their objectives to balance benefits and use of resources and thereby maximise value*
4. *Apply throughout the investment decision( i.e. throughout all programme and project stages). Its focus changes as these evolve.*

5. *Tailor to suit the programme or project's environment, size, complexity, criticality and risk*
6. *Encourage learning from previous experience by creating an audit trail of decisions and actions, enabling sharing of lessons across all projects and continuous improvement*
7. *Assign clear roles and responsibilities to provide effective management, proportionate to the scale of MoV activities, and build a supportive culture*

The following is an example of the use of MoV at Portfolio and Programme level to align the programme with organisational strategic objectives

*A research organisation was consolidating its activities from over fifty sites, each with diverse operations and different standards of accommodation and ways of working, to just five locations. One of the strategic objectives was to standardise the way people worked across the whole business and their accommodation.*

*In a series of studies covering the entire programme, a standard value profile was established. This allowed the team to align each project's outputs with that at programme level from the outset, making it possible to ensure that the five consolidated operational centres were consistent, despite pressures from individual operators for different standards.*

## **Processes**

MoV is delivered through seven processes:

1. *Frame the project: this examines how MoV informs the business case, supplementing existing information via specialist techniques.*
2. *Gather information: includes procuring information relating to the project, the expectations from the MoV study, identifying suitable MoV team members, identifying and understanding stakeholders needs and other project related information*
3. *Analyse information: analysing the gathered information to form useful input to the MoV Study*
4. *Process information: working with the MoV team to use the above input information to develop innovative and value adding proposals*
5. *Evaluate and select: selecting the proposals that have most potential for practical and beneficial implementation*
6. *Develop Value Improving Proposals: working up the outline proposals into fully developed recommendations for presentation to decision-making management*
7. *Implement and share outputs: developing the implementation plan for accepted Value Improvement Proposals and monitoring progress. Gathering lessons learned and sharing with others in the organisation for continuous improvement*

An example of the application of these processes in an operational situation was within a hospital pharmacy department

A hospital sought to reduce the annual running costs of its pharmacy department, currently running at around £2m. Information gathered through consultation with end users of the service followed by function analysis helped a hospital to recognize that its pharmacy's function was not so much 'dispensing drugs' as 'managing medication'. This was relevant to the whole hospital, not only the pharmacy. Whereas the pharmacy cost around £2 m per year to run, it influenced broader hospital costs of around £19 m, enabling savings that exceeded the total running costs of the pharmacy department on its own.

## **Linking to Business/organisational goals**

An underlying principle of MoV is that all activities must be aligned with the objectives of the organisation. This is illustrated by the value cascade.

This shows that every component or product which forms part of a project must be there for a reason that ultimately contributes to the overall organisational objectives, which are themselves reflective of the organisation's aspirations and values.

Within MoV, if a part or component is not contributing effectively to achieving the organisation's objectives, an alternative should be sought that delivers its function more effectively. If its function is unnecessary, it should be eliminated.

Example of the use of a value cascade

*The principles of MoV were key enablers in delivering timely progress and value for money for a £5 billion investment in housing services over seven years. National legislation imposed a new duty on local government to create a housing policy. Local housing strategy was developed to implement that policy. MoV principles, processes, and techniques were used to appraise options, stimulate public engagement and debate, and develop local housing strategies for every local authority in the country. Specific local programmes and projects were then delivered using these methods to improve social housing services and the standard of public and private housing stock. This was achieved through staff development, organisational change, and appropriate contract procurement*

## **Key Techniques**

MoV is a collective term that embraces many processes that are aimed at maximizing value. A key differentiator between MoV and other management methods is that it focuses on function- what things do to contribute to the output of a programme or project, rather than products, or what things are, that make up the project. Function Analysis, analysing what things do rather than what they are, provides the key to gaining a better understanding of a programme or project, making decisions based on value and generating innovative proposals to improve value.

The process makes it possible to:

- Establish an organisation's value priorities at strategic/portfolio level
- Clarify and validate a programme or project brief
- Guide objective decision making, such selection of options, based on value
- Stimulate creativity and innovation
- Redistribute resources where they can be used most effectively
- Assess and reconcile compliance with key stakeholder requirements, and

- Measure value for money.

It is this approach enables MoV to improve benefits and reduce expenditure without impacting essential project scope or service quality.

There are several types of Function Analysis. All are based on the same logic: Exploring how something is done and, conversely, why it is done. The two most commonly used techniques are Function Analysis System Technique (FAST) and Value Trees.

### **FAST**

There are several types of FAST, but Customer FAST is most commonly used for Portfolios, Programmes, Projects and operational MoV studies. Because FAST is widely known and used in the USA, I do not propose to dwell on this technique in this paper.

### **Value Trees**

A Value Tree is a diagram that shows the relationship between value drivers and their hierarchy (Value Drivers are those functions that must be delivered to achieve a project's objectives). The mere process of developing and validating a value tree with the project team members, greatly assists in gaining a common understanding of the project imperatives.

Not only does the Value Tree provide an excellent description of the project, thus informing the project brief, but it provides the basis for generating innovative alternative solutions to improve value.

### **A Value Profile**

Prioritising the Value Drivers to align with the key stakeholders' requirements and reconciling the differences between them gives rise to a Value Profile.

At Portfolio level this technique provides a method of articulating an organisation's value priorities.

At project level it makes it possible to redistribute the use of resources to where they will add most value, whilst retaining other essential features.

### **The Value Index**

The product of the value driver weighting (reflecting its importance to achieving the objectives) and the performance rating (how well the project, in its current state of development is likely to deliver individual value drivers) provides a number which is known as a value score. The sum of all value scores across all value drivers is the value index. This indicates how well a project satisfies key stakeholders' needs. The value index is sometimes known as the performance index.

The value index does not, however, indicate whether the project represents value for money.

### **The Value for Money Ratio**



Dividing the value index by the total estimated project cost, preferably in whole-life terms, yields the value for money ratio. A project with a high value index may not give best value for money if it costs significantly more than an alternative that provides lower, but acceptable, performance.

The higher the value for money ratio, the greater is the value for money. It provides a measure for value for money for both monetary and non monetary benefits.

### **Value Engineering**

Value Engineering is the original technique from which MoV has evolved. It has been used in almost most sectors of industry and commerce to great effect for about 50 years. It is still one of the most common techniques in use today for optimising the value delivered by projects.

### **Other Techniques commonly used in MoV**

There many other techniques which may be used in the application of MoV. Details of many of these may be found in the Guide and on the TSO on line repository at [www.best-management-practice.com](http://www.best-management-practice.com).

### **Approach to implementation**

The approach taken in implementing MoV for a project should be scaled to suit the size and complexity of the challenges presented.

The approach comprises seven components.

1. Plan the activities
2. Understand and articulate value
3. Prioritise Value
4. Improve Value
5. Quantify Value
6. Monitor improvements in Value
7. Learn lessons

### **Interacting with the environment**

MoV policy, strategy and plans need to take account of factors over which the MoV team have little or no control. These may arise from external or internal causes as well as the scale, complexity and strategic importance of the projects to which they are to be applied.

1. External Factors

Business models and plans will include responses to the influences arising from the external environment.

2. Internal factors

An organisation's own policies and programmes will give rise to internal influences which must be taken into account. These in turn may have been shaped and influenced by the external factors.

### 3. Portfolio considerations

All the activities needed to achieve an organisation's strategic objectives should be contained in its portfolio. Therefore, every programme must relate back to and reflect the strategic intent of the portfolio

## **Embedding into an organisation**

Some organisations prefer to introduce MoV on a project-by-project basis, at least initially, to convince senior management of its effectiveness or because anticipated demand does not warrant setting up internal delivery capability. Many organisations, particularly smaller ones, may not wish to invest in setting up their own delivery capability but rather rely on external providers. If the number of MoV studies becomes large and frequent, it may be justifiable to develop internal delivery capability. Organisations should introduce and embed MoV in a manner that is consistent with their other processes so that it becomes a cost-effective part of the way in which they conduct business rather than a bolt-on extra. The guide describes a process for doing this, which should be scaled to reflect the scale of MoV activities.

The following example summarises the author's own experience in embedding Value Management, using the principles of MoV, within Davis Langdon (DL), now an AECOM company, with significant presence globally.

*Initially my remit, established at a workshop with about fifty UK Partners, was to build a culture across DL, based on value rather than cost, and at the same time train a number of consultants, from different business units across the UK, to deliver the service to clients. We also introduced the service to our overseas offices, particularly in South East Asia. Over the next few years this strategy achieved mixed success, with some business units thriving and others withering. To overcome this disparity, we formed a single central team, to become the centre of excellence and provide support to dedicated regional consultants. At the time our scope was limited to Value and Risk Management delivery, with some thirty trained and qualified consultants. The offering was expanded to include Programme and Project Controls as well as Management Consultancy by a consolidation of several internal units and, later, a merger with DEGW, who offer People, Place and Performance consulting. This team now forms the basis of DL's Consultancy offer across the whole of AECOM.*

## **Health checks, maturity and competence**

To sustain and enhance the delivery and culture of MoV it is advisable to undertake regular refreshes of the processes that have been put in place. Such regular health checks may also be used to assist increasing organisational maturity and individual competences.

The guide introduces the concept of maturity models with particular reference to the OGC P3M3 model. Organisations should tailor and develop these models as they gain

experience in the use of MoV. P3M3 relates to the maturity of portfolio/programme/project processes as applied across an organisation.

A similar approach may also be used to assess the competence of individual MoV study leaders.

## **Executive Guide to Value Management**

Whereas the full MoV guide contains guidance on implementing MoV, we have developed a pocket book sized Executive Guide to Value Management, aimed to inspire senior managers to use MoV within their organisations.

This provides a brief overview of MoV plus compelling reasons why the organisation with which the senior managers work will benefit from the introduction of MoV regardless of the type of business in which they are involved.

## **Qualifications based upon the guide**

The MoV guide provides the body of knowledge that forms the basis for a Foundation and Practitioner level qualifications. These qualifications are accredited and administered internationally on behalf of the OGC by the APM Group. The Foundation level qualification is already available. The Practitioner level is under development and will be launched as soon as demand warrants it.

The Foundation level qualification is intended to raise awareness and understanding of Value Management across all types of public and private business activity and provide an acceptable entry to more advanced practitioner training offered by the professional institutions.

Accredited training courses are developed by individual Accredited Training Organisations (ATOs), of which there are several hundred around the world.

Copies of the MoV guides are available from TSO ([www.best-management-practice.com](http://www.best-management-practice.com)) or APM Group ([www.apmg-businessbooks.com](http://www.apmg-businessbooks.com)).

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