

# Cracking the complexities of hospital programmes

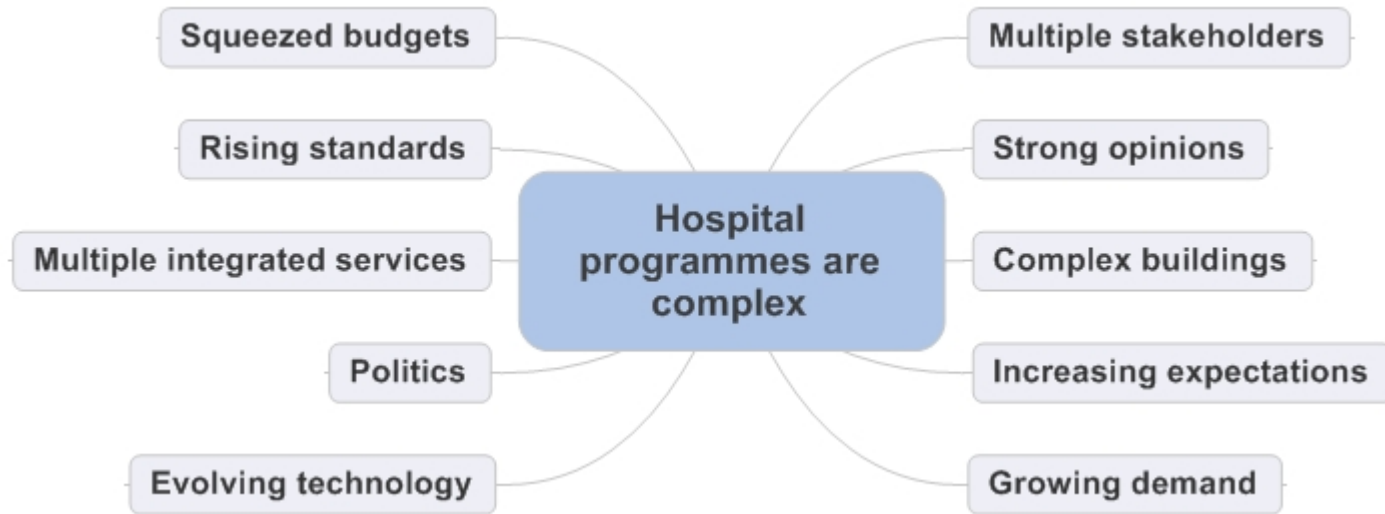
CSVA 2011 Conference  
Toronto, Ontario  
Nov 14 -16, 2011

Michael Dallas

Director APM Group Ltd.

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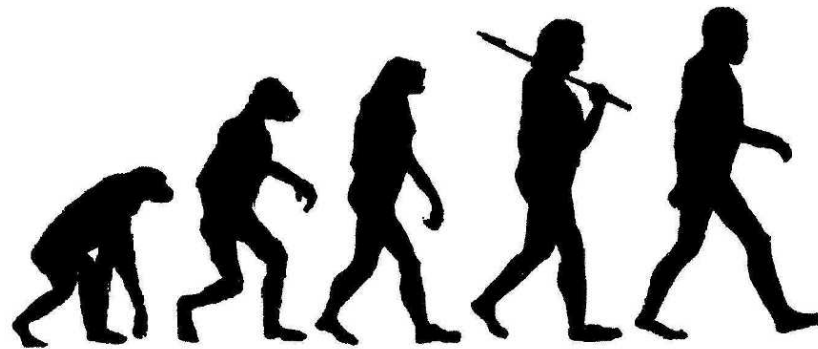
# Dealing with the complexities



## ● How Value Management can help:

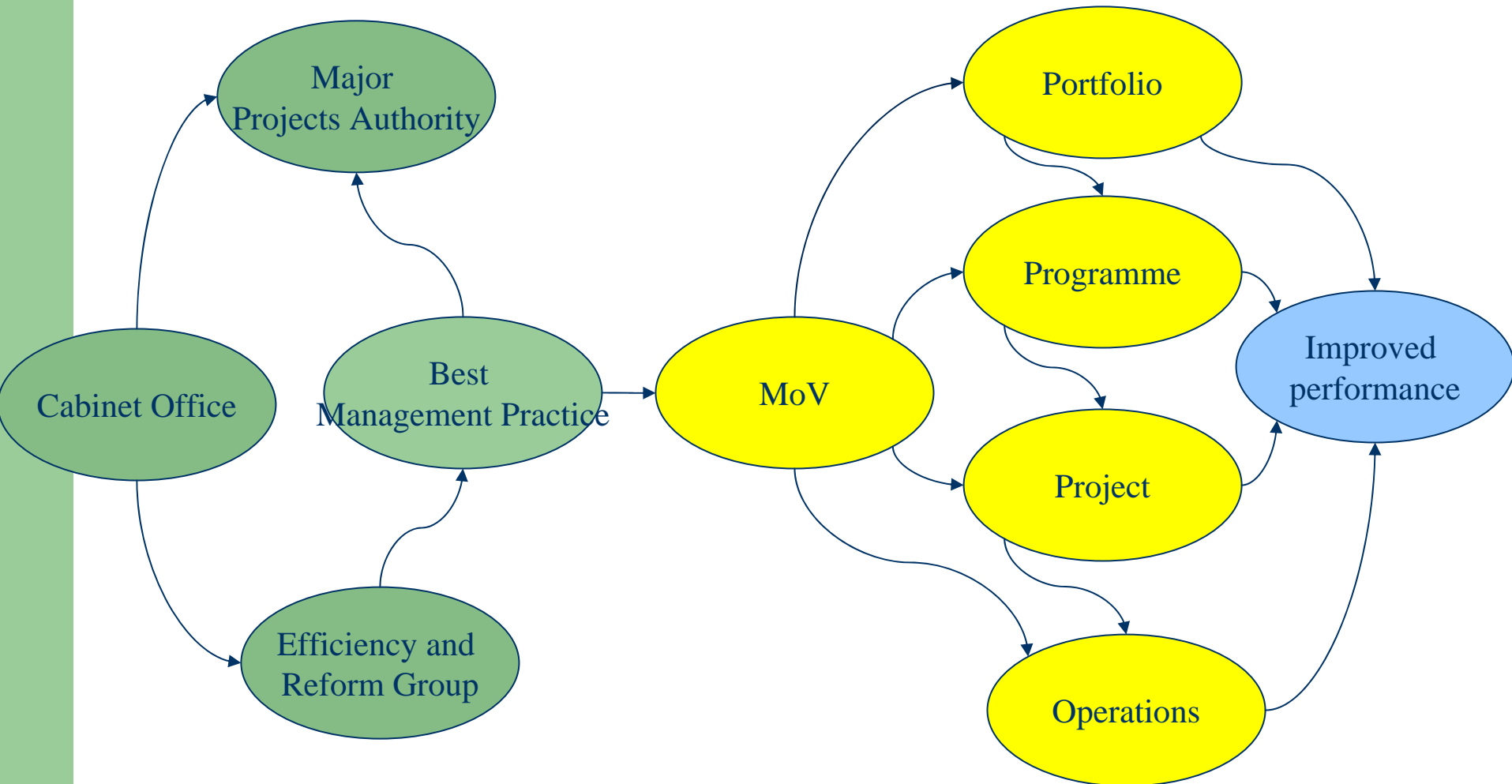
- Evolution of VM in Europe and relationship to other commonly used techniques and processes
- Some of the benefits and pitfalls
- What the UK Government is doing about it
- UK Cabinet Office Best Management Practice and Management of Value (MoV™)
- How MoV works, with real life examples, many from hospital programmes
- Getting it right from the start
- Upholding quality of delivery

# Evolution



1. **Post war supply shortages**  
=> VE/VA, FAST
2. **Consumer led demand**  
=> FCA, Value based decision making, QFD
3. **Global competition**  
=> FPS, Design to cost, Value Profiling, Lean
4. **Sustainability**  
=> Integrated risk & decision support, value propositions, robustness & resilience, Balanced scorecard, six sigma

# Economic crisis - UK



FOCUS: Spend reduction, growth, performance  
 PERSPECTIVE: Global economic crisis

# Complementary methods

- Benefits Management
- Lean
- Six Sigma

# Benefits Management

- Use of Value Management in conjunction with Benefits Management will:
  - Improve benefits mapping
  - Identify additional benefits
  - Enhance identified benefits
  - Justify the viability of delivering the expected benefits
  - Demonstrate value for money
  - Provide a proven robust mechanism for delivering enhanced value
  - Give an improved process early in programme and continued effort after programme or project is complete

# Lean thinking

- Evolved from VM
  - Target costing and design to cost using VE & VA
- Essentially VM applied to processes rather than projects
- Customer focus
  - product design and supply process pulled by customer
- Main focus on eliminating waste and processes that add no value
  - Over production, inventory, transport, waiting times over processing, defects
- Not good at enhancing value particularly in design
  - VM used widely in design and production
- Focus on eliminating waste along entire value streams rather than isolated points
  - But not good at eliminating waste in design
- VM can enhance lean by developing proposals to improve value e.g. Lean Enterprise Value process
  - Not a clear process and seldom applied rigorously
  - Value stream mapping similar to value profiling

# Six Sigma

- Method of identifying and removing causes of defects
- 6 Sigma equivalent to 3.4ppm defects free
- Defect = that which does not meet customer expectations
- Delivers measurable and quantified returns
  - Payback about 10:1
- Based on verifiable data
- Often combined with Lean to increase reliability of streamlined process
  - But must be the **right** process
    - VM good for identifying what customer needs
- If VM focuses on the macro, Six Sigma focuses on the micro, sharing many of the techniques



# Value management and Six Sigma

## - Illustrating the difference for a chemical factory project

- The challenge: need to reduce capex for new factory in far east.
- 6 Sigma been applied over six months to streamline the process, achieving nominal cost savings.
- Target: Use VM to reduce capex by 6%
- The process: three 4 day VE studies on separate parts of the overall process over a two month period.
- The outcome: Capex savings of 9%, 26% and 46% achieved



# Benefits realised through Value Management

- Addresses a need
- Increased stakeholder commitment
- More effective use of resources
- Better control over delivery
- Means to identify and cancel projects that do not add value
- Improves responsiveness to business environment
- Improved returns on investment



Source: Best Management Practice White Paper, September 2011,  
Business benefits of implementing MoV™

Plus:

- Provides a process for more informed decision making and improved performance and
- Additional opportunities for consultants in delivery and training through MoV



# Private Finance Initiative (PFI)

## Some problems



Report 13 October 2011 – 50 hospitals struggling financially



Royal London & Barts – Huge debt



One hospital will cost £1.2bn, 10 times what it is worth

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taxpayer owes a total of £121.4 billion on public projects which are worth only £52.9 billion



# Paddington Health Campus

## Pitfalls to be avoided



- ❑ Quotation from the UK's National Audit Office's report into the Paddington Healthcare Campus Scheme, London, May 2006:
  - ❑ "the Campus partners were unable to agree a deliverable scheme"
  - ❑ "The Project Director made a deliberate decision not to embed management processes as the scheme did not have sufficient resources or capacity to do it!"
- *Reasons for undertaking the project were unclear*
- *Not possible to establish a viable business case*
- *Master plans contained over-optimistic expectations of land availability, external stakeholder interests and town planning constraints.*
- *There was no clear management structure or strong leadership in place*
- *Communication between team members lacked openness.*
- *The scheme was unable to demonstrate good value for money*
- *Although risks were rigorously analysed they were largely ignored and not managed*

# NHS Connecting for health project



- Integrated IT infrastructure to provide connectivity across the whole NHS
- Fraught with problems during development
- Scrapped on advice from Major Projects Authority
- Estimated waste £12bn

# University Hospital of North Staffs

## Reducing the Unitary payments on a PFI scheme



- **The challenge:**
  - Estimated annual overspend £52m capped annual “unitary payments”
  - Unaffordable
  - Primary causes, increase in capital cost estimates and perceived clinical scope creep
- **The process**
  - Two three day workshops involving key hospital staff, consultants and preferred PFI bidder
- **The outcome:**
  - Initial 4.5m per annum savings identified
  - Further £8m per annum savings on second study

With acknowledgements to

# Some current UK initiatives to improve performance

There is lots of demand to deliver improved value

**HM TREASURY** **BIS**  
Department for Business, Innovation & Skills

**The Plan for Growth**

**HM Government**  
Low Carbon Construction  
Innovation & Growth Team  
Final Report

**Realising the Potential of GB Rail**  
Report of the Rail Value for Money Study  
Summary Report

**HM TREASURY** **CabinetOffice**  
Major Project approval and assurance guidance

**HM TREASURY** **Infrastructure UK**  
Infrastructure Cost Review:  
Main Report

**CabinetOffice**  
May 2011

**Efficiency and Reform Group**  
The Efficiency and Reform Group brings into one place the expertise and capabilities from across Government to tackle two key priorities:

1. Making Government more efficient: reducing operational overheads to give taxpayers better value and allow resources to be focused on key priorities; and
2. Radically reforming the way public services are provided to ensure they meet rising public expectations: using transparency to improve accountability, shifting power to people and creating the Big Society.

Apr

December 2010

# Major Projects Authority Strategy

## 1. Key tools

1. Portfolio
2. Integrated Assurance and Approval Plans
3. **Power of intervention**

## 2. Methodology

1. Change mindsets
2. **Policy delivered through projects**
3. Get it right from the start

## 3. Leadership capability

1. Academy for SROs
2. Exposure to world class leaders
3. **350 world class SROs**



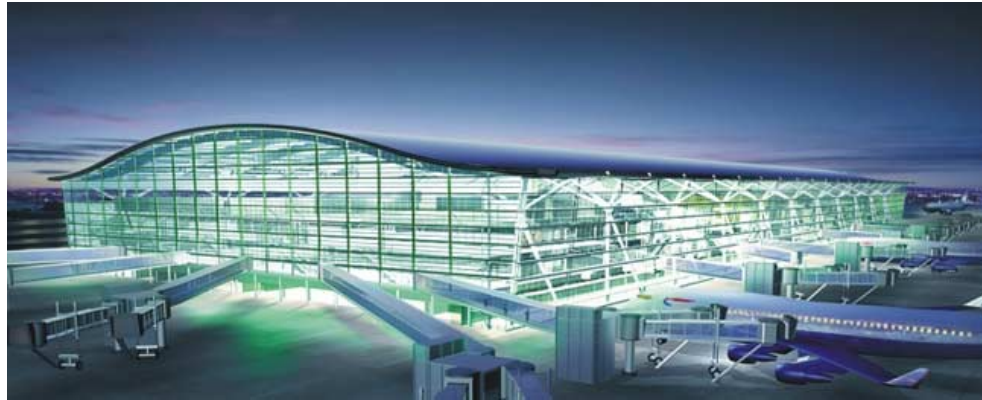
# Improving performance on major projects

- Addressing spending reductions and growth
- Mandatory process for all major projects
- Established Government major projects portfolio
- Reduce current slippage (approx 4%) to deliver what is needed to stimulate growth
- Closing projects that add no value or are performing badly (e.g NHS connecting for health project)
- Developing world class project leadership capability
- Working to **mandate** Best Management Practice (BMP) when capability in place
  - Note BMP is mandated in parts of Australia



# Selecting projects that add most value

Deletion of unnecessary projects, improvement of retained projects



## The challenge

- Airline seeking exclusive use of new airport terminal
- Could afford \$1bn upgrades to improve operational efficiencies
- Estimated cost of upgrades \$2bn

## VM programme

- extensive programme to reconcile the difference.
- The team developed business cases for all the identified projects
- Then undertook a series of studies to justify their viability or otherwise

## The outcome

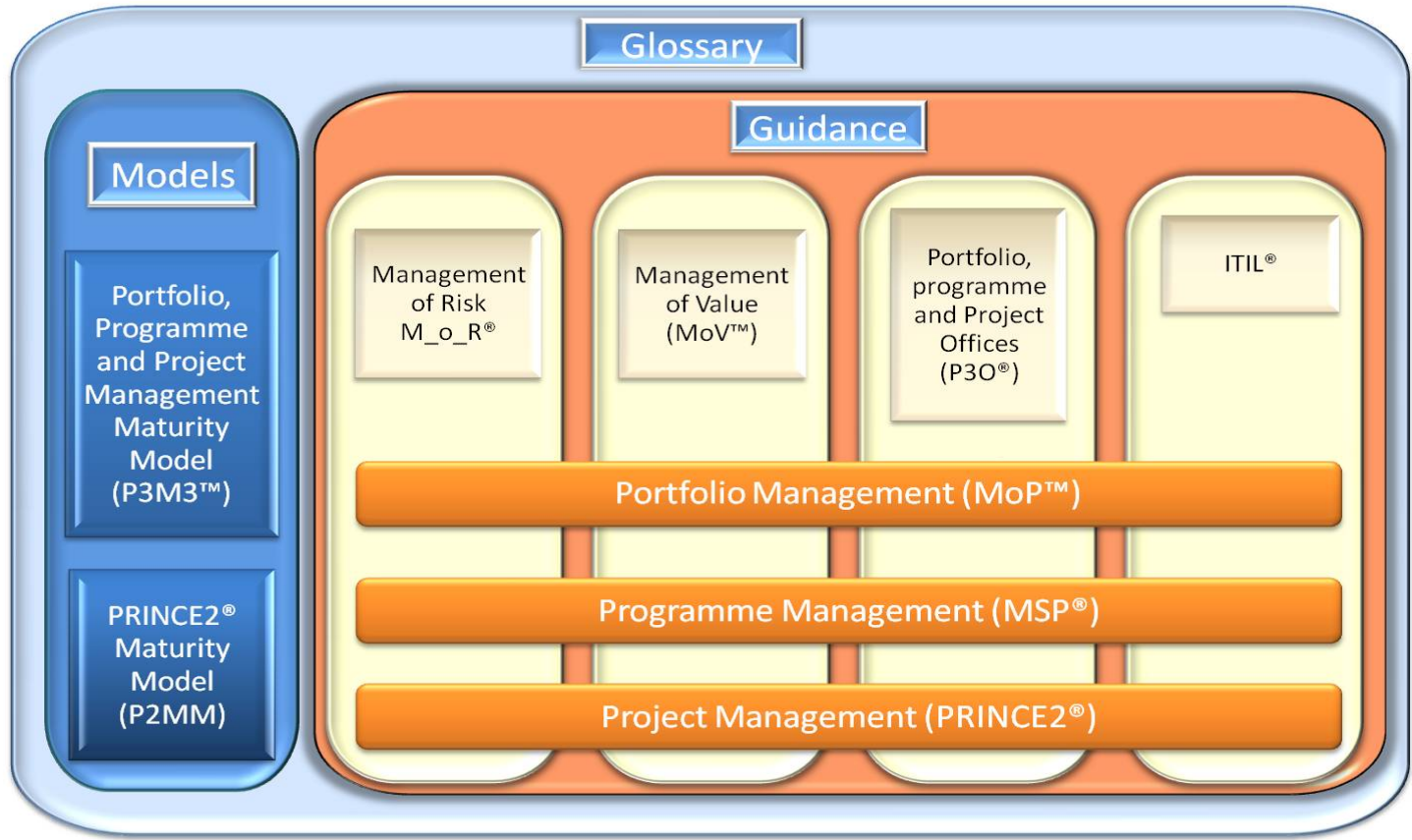
- Determined which projects were really needed taking account of both monetary and non monetary benefits.
- Identified projects that could be removed from the scope that were not viable
- Halved the cost of the upgrade programme from \$2bn to \$1bn whilst retaining the essential benefits arising from it.
- Balanced the overall benefits realised with the use of resources by optimising the value for money ratio.

With acknowledgements to

# Cabinet Office Best Management Practice Portfolio

An integrated set of methods for Programme & Project Managers

## Best Management Practice Intellectual Property



# Best Practice Showcase - Ottawa

- Scheduled for February 7, 2012 at the Sheraton, Ottawa
- Speakers and break out sessions focused on Project and Program Management including;
  - Overviews of PRINCE2, MSP, P3O, MoP, and MoV
  - Moving to the Cloud with PRINCE2
  - Implementing PRINCE2 into a Change Management Process
  - MSP Experience at Siemens US
  - Strategic Advantage of linking P2 and MoP
  - Do's and Don't's to Implementing PRINCE2 Improving PM Maturity with PRINCE2
- Target Audience: Senior decision makers from Canadian government, financial sector, and consulting community

# Outline of Management of Value (MoV™)



A Guide



An Executive Guide



A Qualification

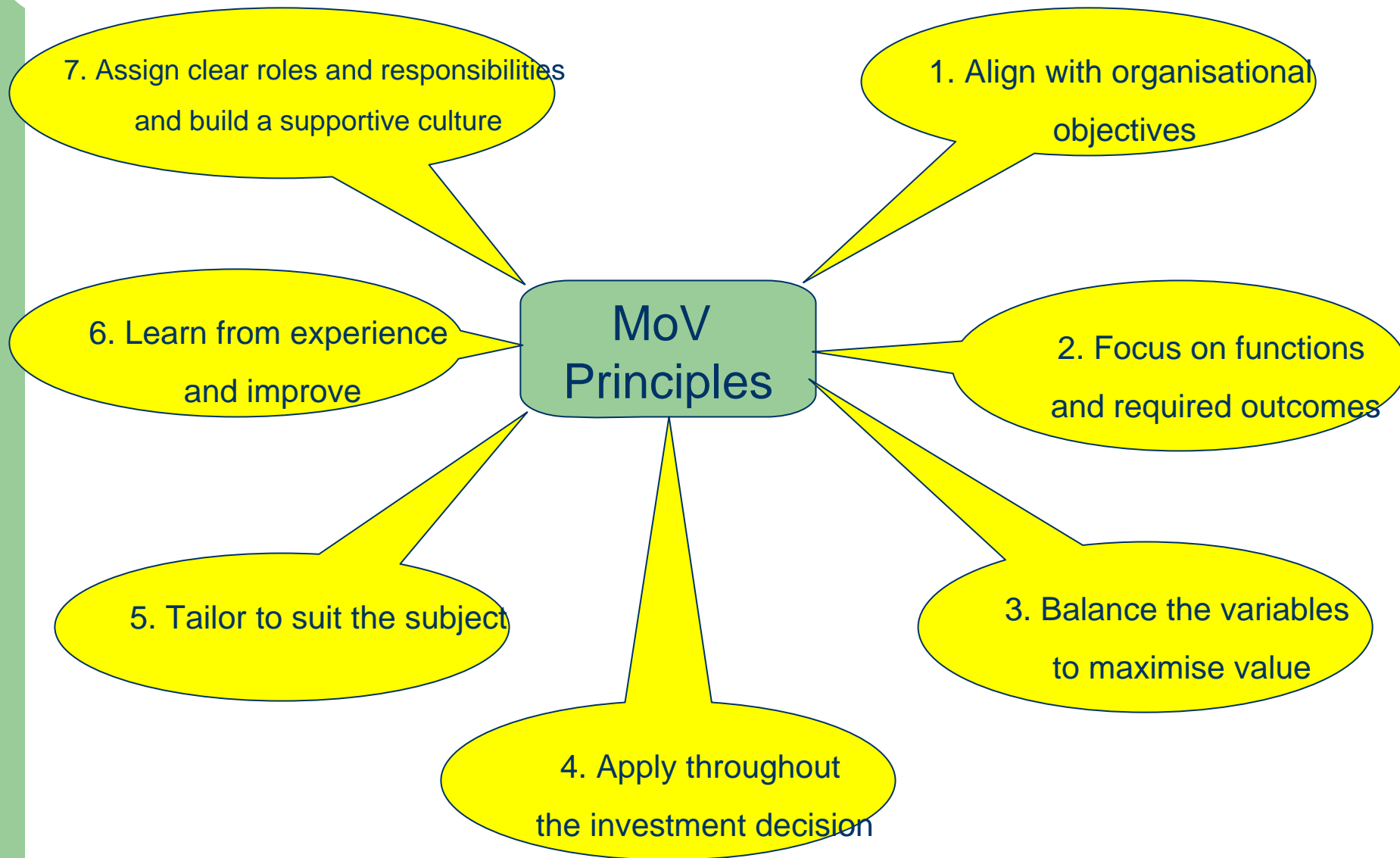
# How is MoV different?

- There are many publications of Value Management



- Relevant to all sectors, public and private
- Applicable at Portfolio, Programme, Project and Operational levels
- Broadly consistent with International Standards in Value Management
- Integrated with suite of Best Management Practice methods

# Seven sound Principles



# Align with organisational objectives

## - Great Ormond Street Hospital Ophthalmology Department



- **The challenge:**
  - Moving department to new wing
  - **Need to build case to justify space allocation**
  - Implementing organisational change in response to Tomlinson Report
- **The process:**
  - Consultations with staff followed by two day workshop
- **The outcome:**
  - Organisational changes agreed
  - Demonstrated advantages of moving to single new dedicated space
  - Establishment of cost base
  - **Contribution to business case for required space**

With acknowledgements to

# Align with organisational objectives

## Government of Alberta - Accommodation Review

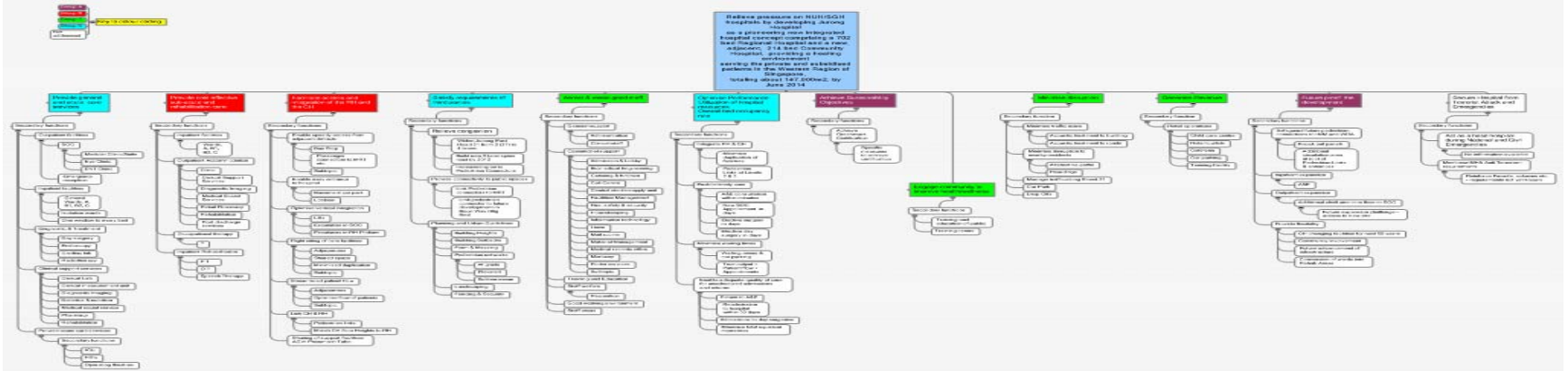
- **The challenge:**
  - Concern over unnecessarily high accommodation space allocation and related costs for more than 2 million square meters of usable space (1,500 owned and 300 leased buildings)
  - **Objective to improve use of functional space, increased collaboration, reduced capital and operating costs and energy use/carbon footprint**
  
- **The process:**
  - Stakeholder consultation, current state assessment, goal setting and strategic value management sessions. Representatives of accommodations users and providers were involved throughout the review process.
  - All significant functional areas reviewed
  
- **Scope:**
  - All Government of Alberta accommodation and the processes related to its delivery.
  
- **The outcome:**
  - **4 strategic action areas and 14 specific recommendations Contribution to business case for required space**
  
- **What the Client said:**
  - “a very successful start to a broad corporate asset management program.”



With acknowledgements to Martyn Phillips, Team Focus

# Focus on function and required outcomes

## Jurong Hospital Singapore – Funding gateway approval study



- **The challenge:**
  - New community and general hospital
  - New concept to increase general hospital capacity by transferring patients to community hospital for recovery and rehabilitation
  - Buildings separated by new six lane highway!
  - **Need to demonstrate Value for Money as well as robust controls over cost, change, programme and risk**
- **The process:**
  - Detailed preparation and meetings, followed by two day workshop involving all key stakeholders
- **The outcome:**
  - Detailed Value Profile developed as basis for decisions
  - **Additional expansion capacity added to minimise future disruption**
  - **Issues around access and improving (air conditioned) connectivity resolved**
  - **Change control and Cost management processes demonstrated and agreed**
  - **Master programme and milestone dates agreed**
  - **Key risks and mitigation actions identified and agreed**
- **What the client said:**
  - This will give us a better hospital and provides the case to pass the upcoming gateway review



# Balancing the variables to maximise value

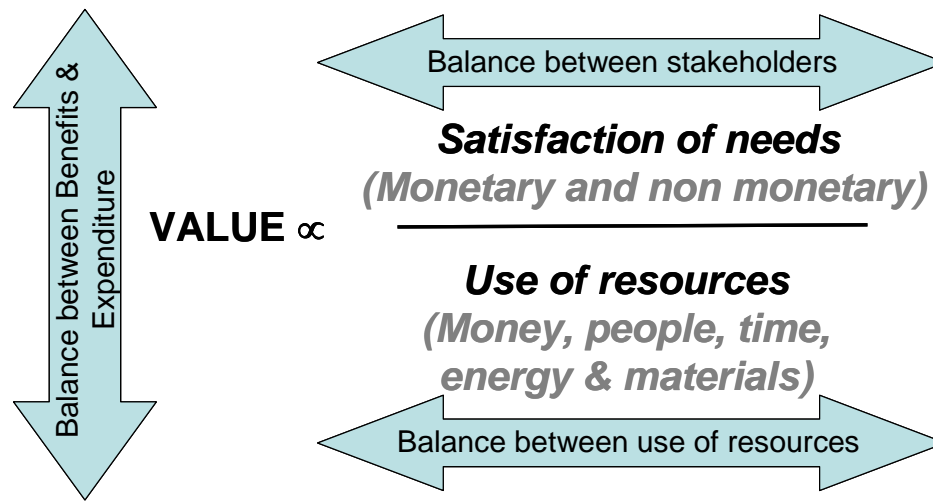
- Value is not absolute, it's a question of balance

Value defined as ratio between satisfaction of needs (benefits) and use of resources (expenditure)

Reconciling the needs and views of different stakeholders

Balancing the use of resources to suit priorities

Balancing the overall benefits realised with the use of resources by optimising the value for money ratio



# Balancing stakeholder requirements

## Integrated Clinical Education Centre. UHNST & Keele University



- **The challenge:**
  - Differences in expectations between stakeholders of UHNST and Keele University
  - £4.3m affordability gap (35%)
- **The process:**
  - Consultations with all groups of stakeholders
  - Identification and ranking of common ground and points of difference
  - Breakout groups to resolve differences
  - Plenary workshop to agree outputs
- **The outcome:**
  - Consensus achieved informing project brief
  - Required savings achieved
- **What the client said:**
  - VM provided an excellent forum for reconciling different stakeholder priorities. The resulting common brief allowed for the effective sharing of space

With acknowledgements to

# Prioritising Resources

## - Transforming Public Service



With acknowledgements to Mike Graham,  
UK Value Management

- **The challenge:**
  - Public service department struggled to cope.
  - **Department aligned to react to one large uncertain workflow through two stage process: quick initial response followed by agreed service when resources were available**
  - People were highly efficient crisis managers!
- **The process:**
  - Top management workshop set value policy and mandated value programme for change
  - Staff workshops across several departments mapped value chains, identified opportunities, proposed improvements & implemented these
- **The outcome:**
  - **Function Analysis identified three distinct workstreams: ongoing business, cyclical business, and unexpected business.**
  - Reactive strategy incorporated substantial non value adding activity. Once recognised this headroom transformed staff attitude from being overburdened to being available.
- **What the client said:**
  - A stressful reactive service transformed to a forward looking enjoyable productive service.

# Apply throughout the investment decision

## King Hamad Hospital, Bahrain



RELEVANT IMPORTANCE OF PRIMARY PURPOSE	30	20	10	5
• MEET SPECIFIC REQUIREMENTS OF M.H	30	20	10	5
• REFLECTIVE POSITION OF THE HOSPITAL NAME	5	8	10	7
• PROVIDE TEACHING FACILITIES	5	15	10	10
• MAKE THE BEST USE OF THE FACILITIES (SPACE SAVERING)	25	20	10	18
• PROVIDE GOOD PLANNING PROVISION	10	10	10	10
• MAXIMIZE OVER 20 YEAR LIFE CYCLES	15	15	10	15
• MINIMIZE MAINTENANCE AND BUDGET	5	7	10	7
• BE FISCALY THOUGHTFUL PARTIES LEGAL + STAKEHOLDERS	5	5	10	14

- **The challenge:**
  - Development of a secondary care general hospital serving the whole of Bahrain
  - Deliver value for money
- **The process:**
  - **VM studies convened at key project decision gateways:**
    - Preliminary Design
    - Detailed Design
    - Tender
  - Attended by key stakeholders from MoW, MoH, Hospital staff and Design Team
- **The outcome:**
  - **The first study built a common understanding of the brief**, clarified and resolved design issues to identify proposals to improve value and reduce costs
  - **The second study built upon the above to generate acceptable proposals** to reduce costs by 2.107m BD.
  - **The third study focused on procurement issues** and resolved the budget uncertainties to enable Ministerial approval to budget at tender stage

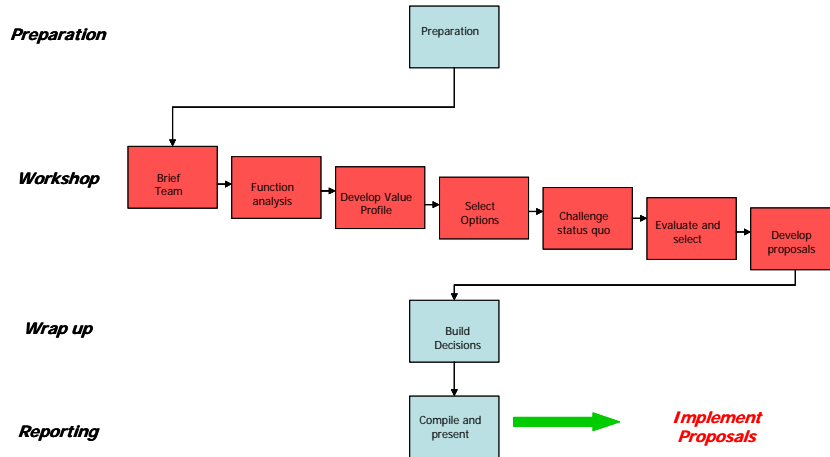
With acknowledgements to

# Apply throughout the investment decision

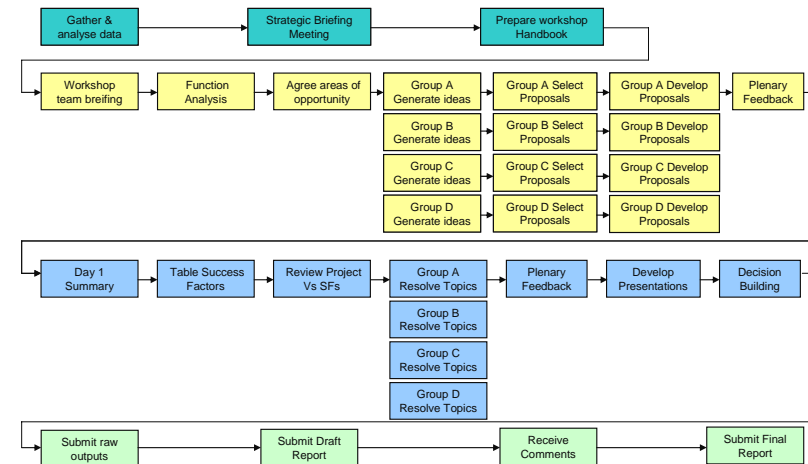
## - MoV at key project stages

PRINCE2 stages	Gateways	Traditional project stages	Focus of MoV study	Main study output
Start up	Gateway 0: strategic assessment	Inception	Validate need for project	Information to improve the business case
Authority to initiate	Gateway 1: business justification			
Initiate project	Gateway 2: delivery strategy	Concept	Project definition	Functional definition of project
Authority to deliver	Gateway 3: investment decision	Feasibility (note: PRINCE2 can treat this as a separate project)	Assess options	Information to clarify a viable brief
Delivery stages	Gateway 5: operational reviews and benefits realization	Design Implementation	Balance benefits and resources Delivery processes	Maximized value Optimized delivery
Authority to close	Gateway readiness for service	Completion	Review outcomes	Lessons learned for continuous improvement
Post-project review	Gateway 5: operational reviews and benefits realization	Use	Review outcomes	Improved operational efficiency
			Improve operations	

# Tailor to suit the project



## Simple project



## Complex project

# Continually learn from experience and improve performance

Develop  
procedures

Define

Measure

Capture Data

Analyze

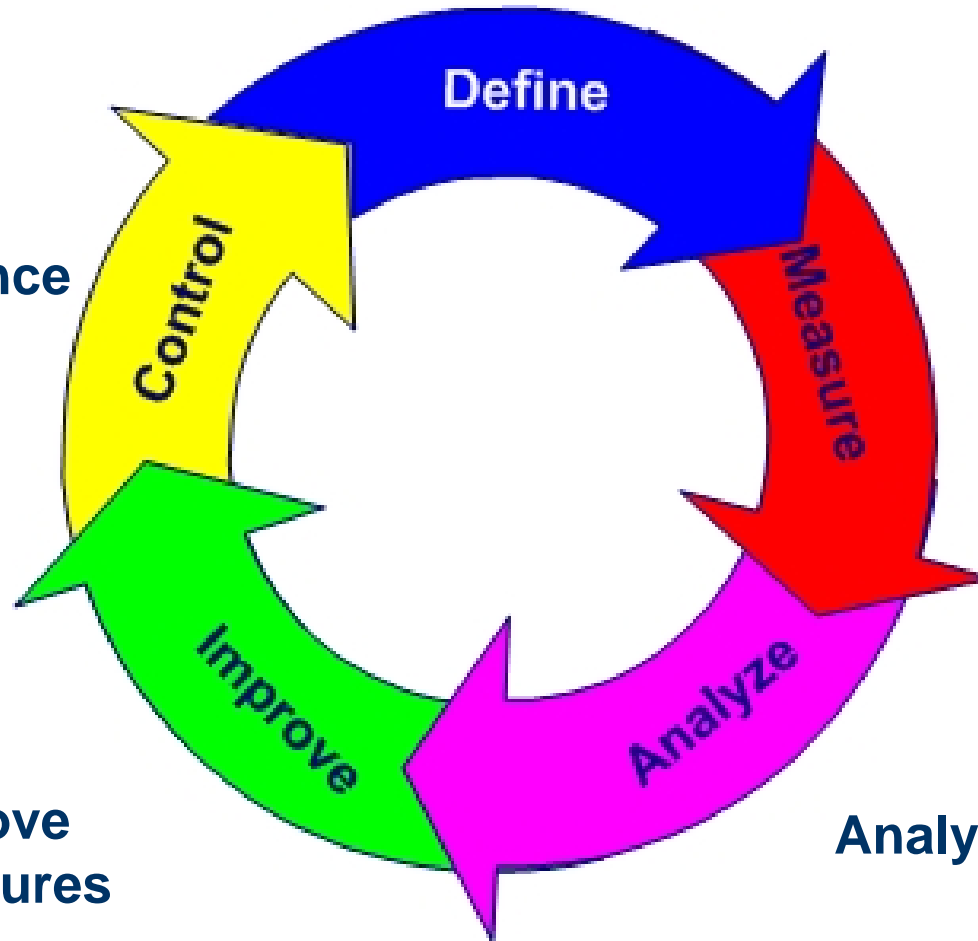
Analyse trends

Improve

Improve  
procedures

Control

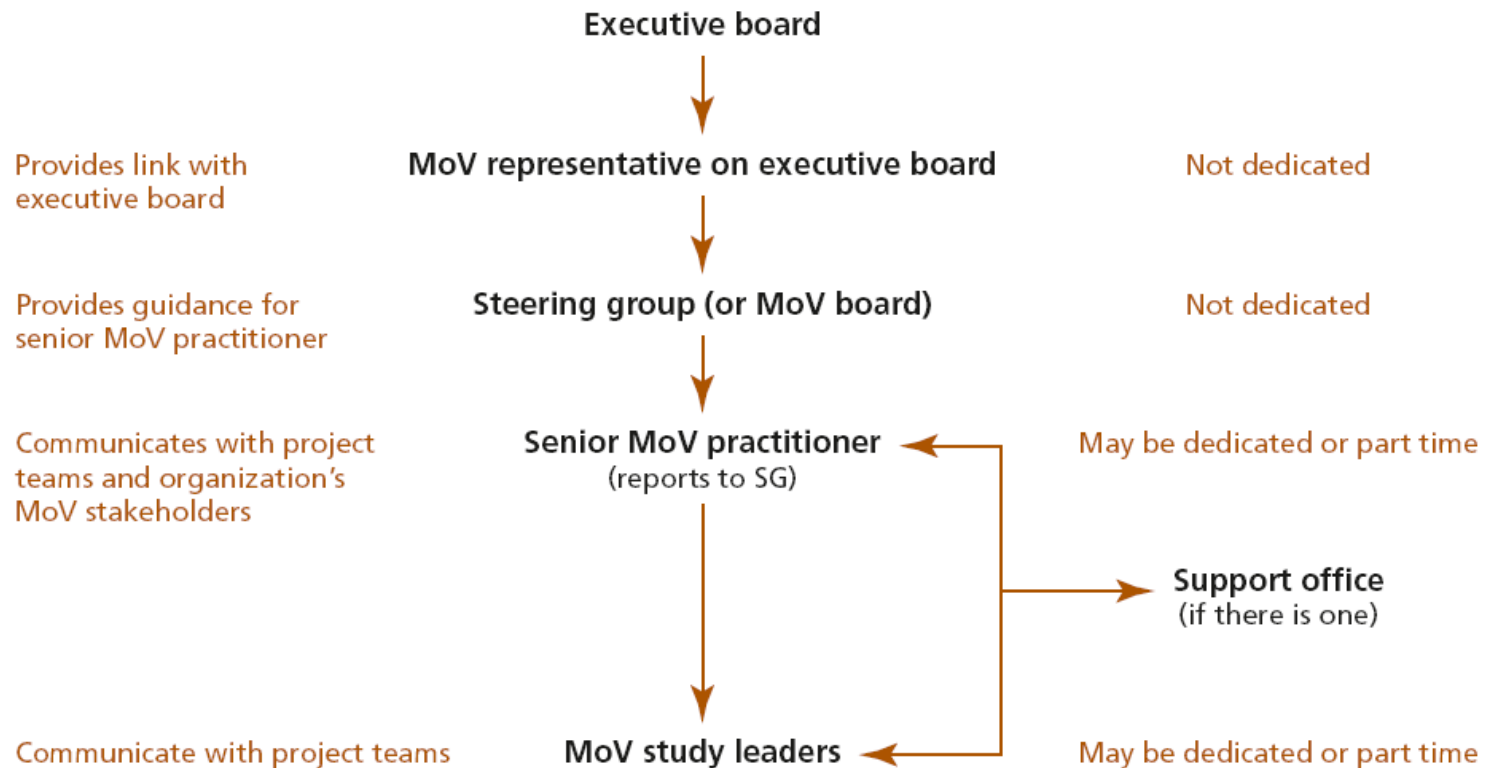
Revise guidance



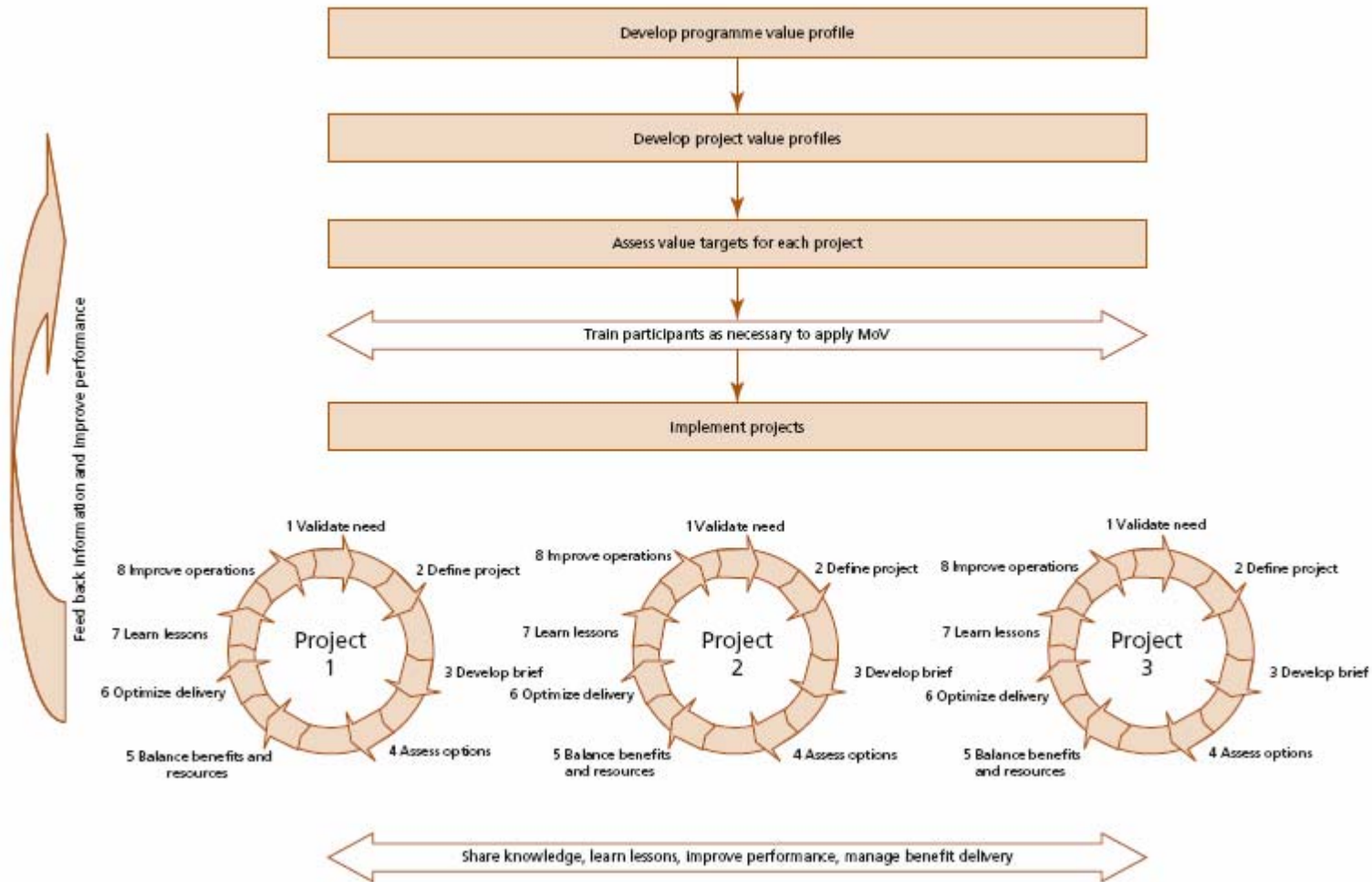
# Assign clear roles and responsibilities

Possible Organizational management structure

Must be proportionate to the need



# MoV used at portfolio, programme and project levels



See examples in later presentation

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# At operational level

## Southampton University Hospital Trust

– Rationalisation of pharmacy operations



### The Challenge:

- To reduce operating costs of Pharmacy by 10%

### The process:

- Consultations with wide selection of stakeholders. and VM study

### The outcome:

- Detailed function analysis helped management to recognize that its pharmacy's function was not so much 'dispensing drugs' as 'managing medication'.
- Whereas the pharmacy cost around £2 m per year to run, it influenced broader hospital costs of around £19 m, **enabling far greater savings (more that the total operating costs of the pharmacy alone)**

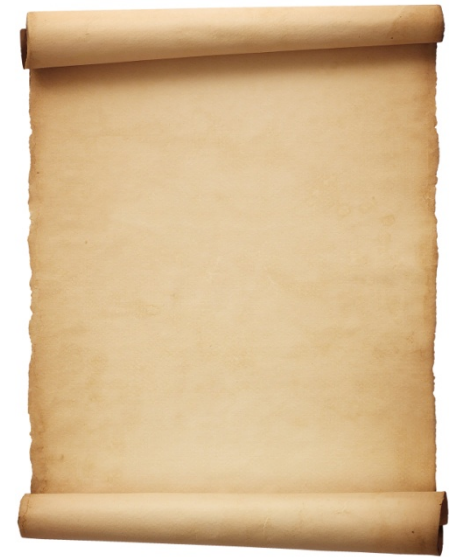
- **What the Client said:**
- Value Management acted as a catalyst to converge opinion on the totality of pharmacy's role in the trust

With acknowledgements to Clive Bone,  
Bone & Robertson

# Getting it right from the start

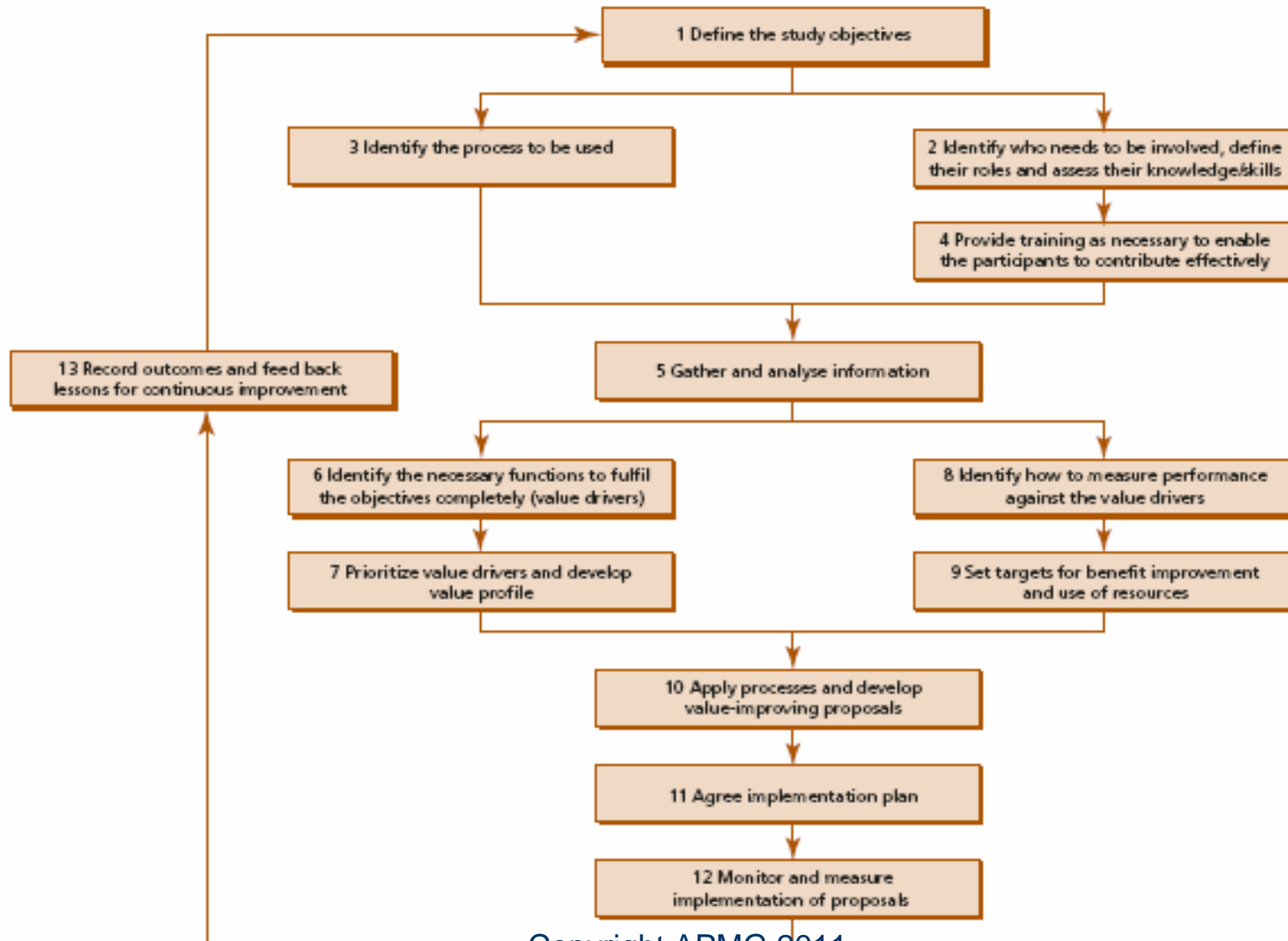
## - The Plan

- In the beginning was THE PLAN.  
And then came The Assumptions.  
And The Plan was without substance.  
And The Assumptions were without form.  
And darkness was upon the face of the Workers.
- And they spoke among themselves, saying,  
'It is a crock of s--t, it stinks.'  
And the workers went unto their Supervisors, and said,  
'It is a pail of dung, and none may abide the odour thereof.'
- And the Supervisors went unto their Managers, saying  
'It is a container of excrement, and it is very strong,  
such that none may abide it.'
- And the Managers went unto their Directors, saying,  
'It is a vessel of fertiliser, and none may abide its strength.'
- And the Directors spoke among themselves saying one to another,  
'It contains that which aids plant growth, and it is very strong.'
- And the Directors went to the Vice-Presidents, saying unto them,  
'It promotes growth, and it is very powerful.'
- And the Vice-Presidents went to the President, saying unto him,  
'This new plan will actively promote the growth and vigour of the company, with powerful effects.'
- And the President looked upon The Plan, and saw that it was good.  
And The Plan became policy.
- And that is how S--t happens.



# Getting it right from the start

## Programme and project plans - MoV Study Plan



# The value cascade

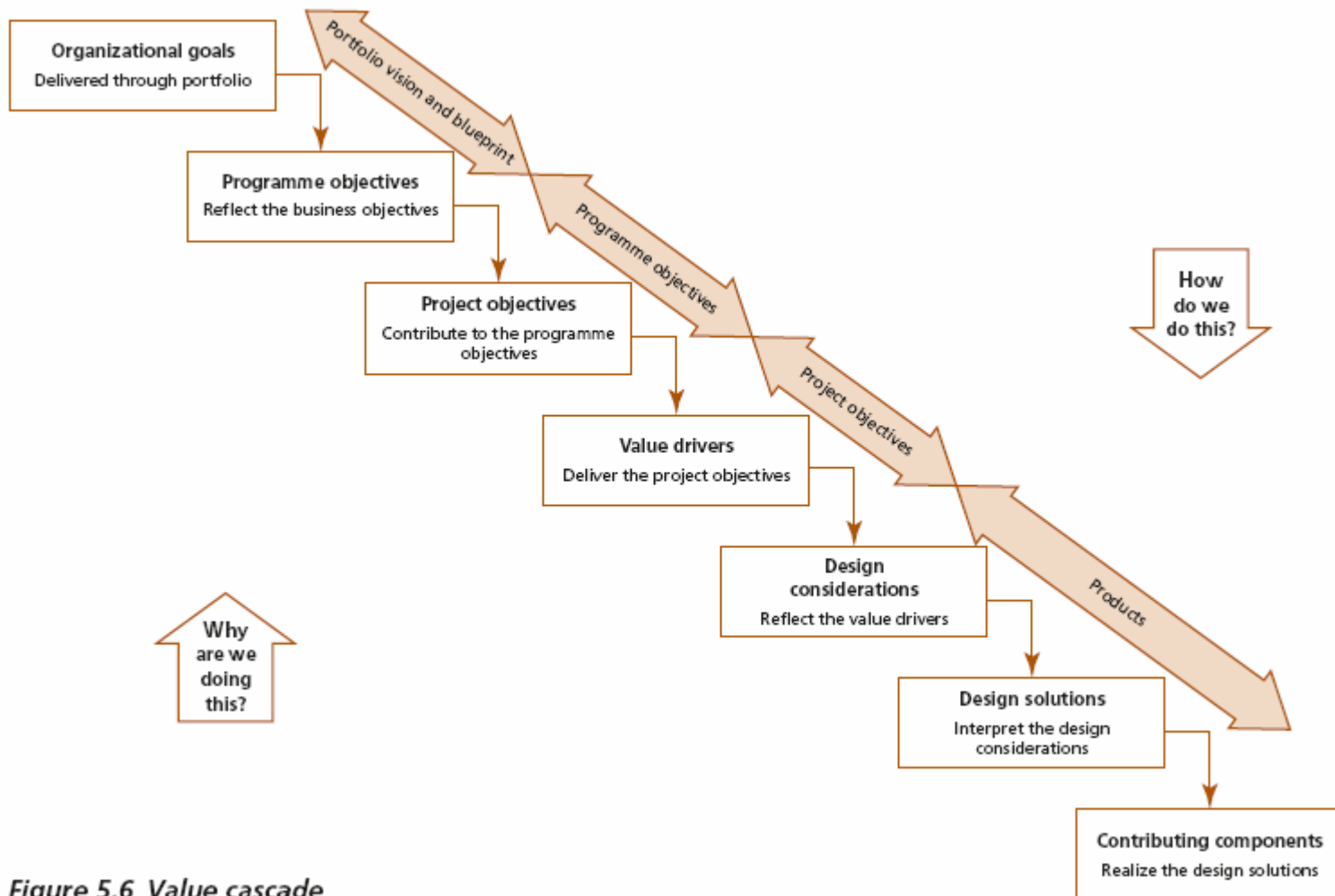


Figure 5.6 Value cascade

Relates products and objectives to organisational goals

# Harmonising Scottish housing policy

Providing consistent and improved stock, better procurement and staff development



## The challenge

- National legislation introduced a new duty on local government to develop housing policy together with strategy to implement that policy

## The process

- VM principles, processes, techniques and approach to implementation applied to
- deliver policy option appraisals
- stimulate public engagement and debate
- develop local housing strategies for every local authority in the country

## The outcome

- **Specific local programmes and projects delivered in line with strategy to give**
- improved social housing services
- Consistent standard of public and private housing stock
- Consistent staff development, organizational change, and contract procurement

With acknowledgements to Mike Graham,  
UK Value Management

# Interacting with the environment

## External factors

Political influences

Economic considerations

Social influences

Environmental considerations

Legal considerations

Technological considerations



Interaction with others' projects

# Interacting with the Environment

## Public debate to improve Health Services



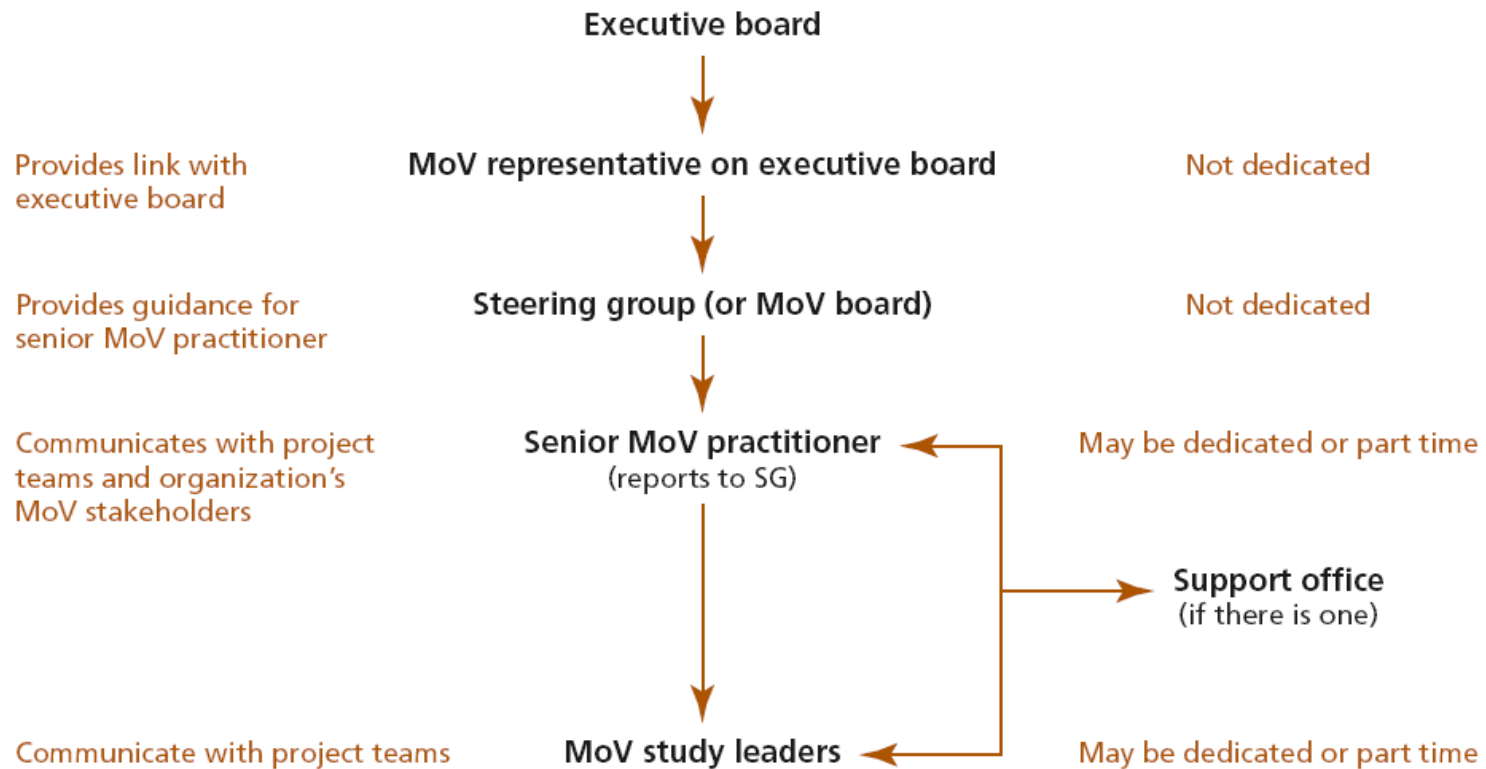
- **The challenge:**
  - Two regional hospitals, located in town centres about 20 miles apart, were working at capacity
  - Population was growing but neither hospital was suitable for expansion
  - **A huge protest movement ‘Save our Hospital’ fought proposal for large central (rural) hospital**
  
- **The process:**
  - Value Management was adopted as a framework for public debate
  - Politicians, executives, and protestors were each invited to present ‘information’ and work together as stakeholders to propose ‘functional requirements’ for regional services
  
- **The outcome:**
  - **Everyone better understood the need!**
  - **The project changed from ‘build replacement hospital’ to ‘improve 24hour healthcare!’**
  - Positive proposals for an integrated service emerged and many of the ‘protest group’ formed the ‘public communications group’
  
- **What the client said:**
  - VM enabled effective public engagement improved interaction between Health and many services outside the Health budget.

With acknowledgements to Mike Graham,  
UK Value Management

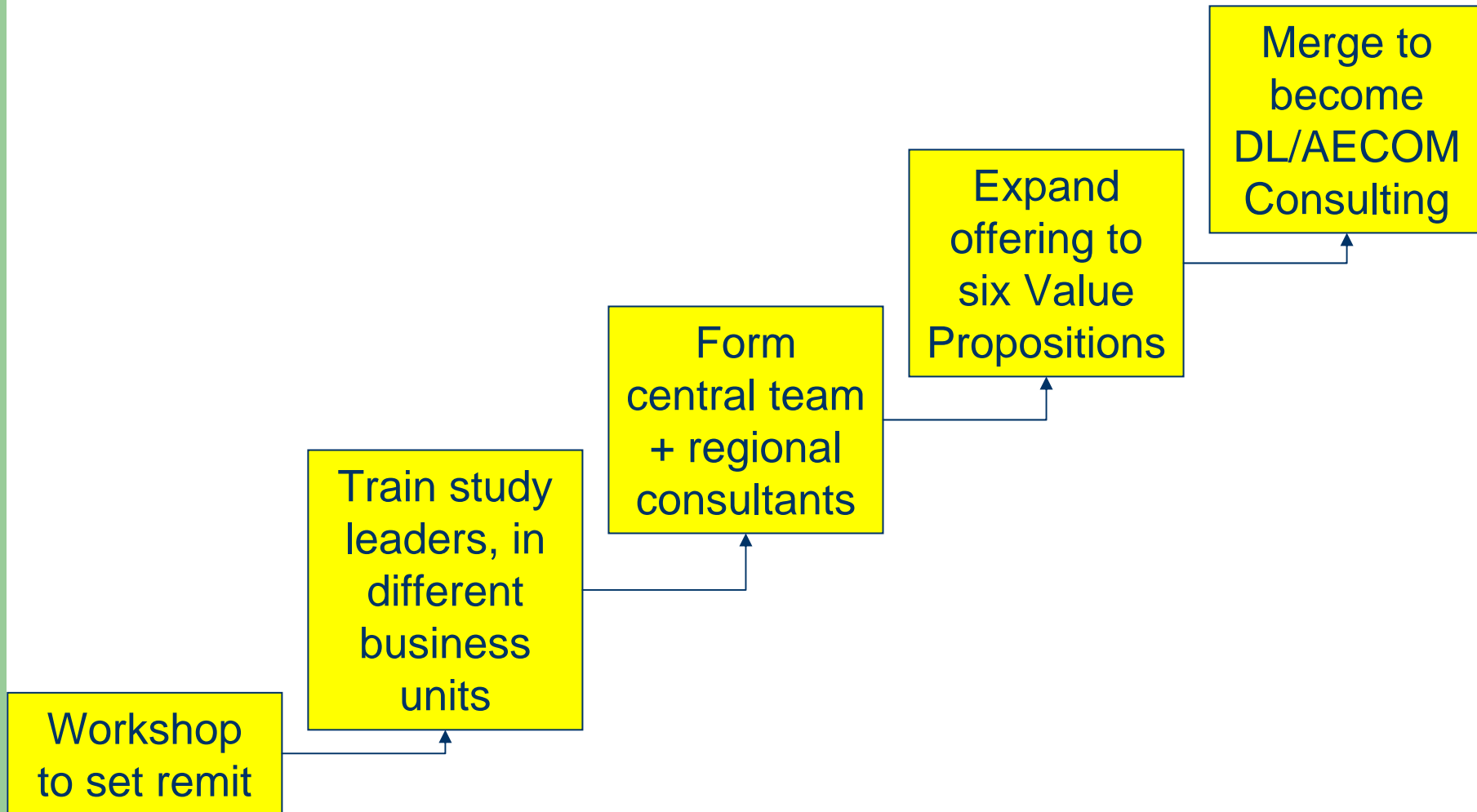
# Embedding into an organization

Possible organizational management structure

Must be proportionate to the need



# Embedding VM into Davis Langdon



# Upholding the quality of delivery-

## Qualifications in Value Management

- Best Management Practice, MoV, APMG
  - Foundation and Practitioner
- European, Value for Europe, EGB
  - Adopted by UK Institute of Value Management (IVM)
  - Foundation, Intermediate (QVA) and Practitioner (PVM) (knowledge and delivery skills)
- Society of American Value Engineers (SAVE)
  - Foundation (AVS), Intermediate (VMP) and Practitioner (CVS)
- Institute of Value Management, Australia, IVMA
  - Practitioner (Member of IVMA)



# Summary

- VM has evolved
- Varying success on hospital programmes
- UK initiatives to improve performance
- Cabinet Office and Major Projects Authority
- Best Management Practice portfolio, MoV
- Examples of use relating to Principles
- Getting it right from the start
- Value Cascade, environment & embedding
- Internationally qualifications to maintain quality

# Questions and discussion and thank you



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