



Value Management – Achieving Excellence

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Julie A Warriner – Chair, Institute of Value Management

chair@ivm.org.uk

Julie@value-decisions.uk

Outline

- ▶ The Institute of Value Management, its aims, core principles, training and certification and Value for Europe
- ▶ Value Management Delivery in the Rail Industry
- ▶ How Risk and Value Management are aligned to add maximum benefit to project delivery?

The Institute of Value Management, its aims, core principles, training and certification



The Institute of Value Management, its aims, core principles and training and certification

IVM Key Aims:

- ▶ To enhance performance and delivery of value by strengthening Value Management practice across all sectors of the UK economy
- ▶ To demonstrate the value of Value Management across all sectors of the UK economy
- ▶ Promote the Value Management qualifications especially Professional in Value Management (PVM) to organisations, individuals, HM Government and educational institutions and professional bodies
- ▶ Increase the membership of the IVM by at least our growth forecasts
- ▶ Have active participation in each of our Regions
- ▶ Have more effective communication with members, potential members, organisations including educational institutions and professional bodies
- ▶ Be a leading member of Value for Europe.

IVM Core Principles:

- Developing competence to deliver sustainable Value
- Promoting Value Management, Standards and Training and Certification
- Raising awareness of Value Management as a key element of a Management System
- Raising Standards through active involvement in British Standards Institute and other European and Worldwide Standards Bodies.
- Collaboration with other Professional Bodies in the UK, European Countries who are members of Value for Europe and Value organisations worldwide



Value Management Core Principles

- ▶ Value Management is founded on the concept of value and on function-orientated thinking
- ▶ There are 4 key principles:

1. Strengthen Value Orientation

Value orientation is the way an organisation aligns value culture to its goals by developing and sharing a common vision, mission and values. An effective value orientation requires that everyone in the organisation understands what drives value for that organisation.

2. Apply Function Thinking

An effective focus on function is achieved through the structured process of function analysis which identifies, clarifies, agrees and prioritises what needs to be achieved in performance terms in connection with a product, (for example portfolio, programme, project, process, goods, or services).

► Value Management Core Principles cont'd

3. Apply a Structured Holistic Approach

The organisation should apply a structured holistic approach. An effective structured holistic approach is achieved when the organisation's value management approach is developed to suit the level and nature of the subject under consideration.

4. Manage Complexity, Risk and Uncertainty

The organisation should manage complexity and uncertainty. Effective management of complexity and uncertainty requires that the organisation considers the effects of these influences on both performance and resources used.

Risk assessment should take into account residual risk which can be tolerated, the character of such risk, and how such risk is distributed, shared and understood among those exposed, among those caring for those exposed, and among customers, users and stakeholders over the life cycle of the situation under consideration.

The Institute of Value Management, its aims, core principles and training and certification

Value for Europe Training and Certification System

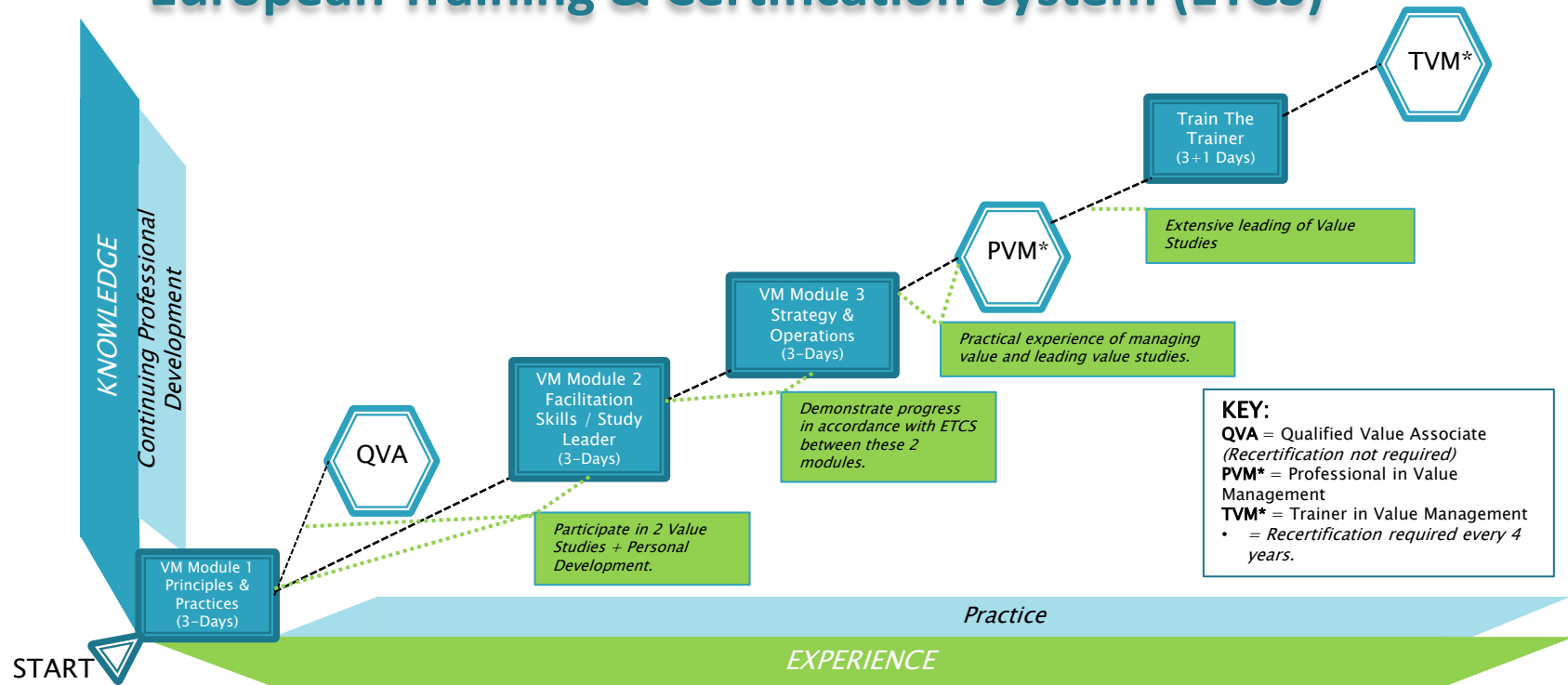
- There are 3 levels of qualification:
 - **QVA** is someone who has a good understanding of the principles and the basic tools of Value Management and is able to apply them within day-to-day work and contribute effectively as a member of a value study team. The qualification does not imply any competence to design or lead a value study.
 - **PVM** is someone who can design and lead a value study of at least moderate complexity in a familiar business environment, and who has the basic understanding to be able to apply this capability in more diverse situations. Highly experienced PVMs may address issues with high levels of complexity across different business sectors, but that is not the standard which a newly appointed PVM is expected to achieve.
 - **TVM** is someone who has considerable experience in the application of VM, and in addition is competent to design and deliver training and mentoring both in terms of theory and practice.

All the qualifications are recognised in the UK, Europe and Worldwide



Value for Europe : Value Management

European Training & Certification System (ETCS)



For further guidance see the Training Tab on www.ivm.org.uk

Value Management Delivery in the Rail Industry



Value Management delivery

What is Value?

- ▶ Did you know?
 - 60+ different types of baked beans
 - Some are low sugar / salt, organic, flavoured
 - Small, catering, resealable #
- ▶ **What basic Needs are they fulfilling?**
 - Optimise Nutrition / Satisfy taste buds / Fulfil hunger / Provide quick meal / Sustain life?
- ▶ **Value achievement / Benefits realised**
 - Often depends on stakeholders needs & wants
 - May depend on budget
 - May hold a 'prestige' factor i.e. satisfy image
 - Provides nutrition / satisfies hunger.



Value Management delivery

What is Value Management?

- ▶ Satisfaction of Need
Consumption Resources
- ▶ Optimum Functionality
for Minimum Cost



Getting what you need
£ you will pay

VALUE Definition:

- ▶ Measure of how well a project, product, and organisation satisfies Stakeholders vs resources consumed
- ▶ Value Management - a structured, team based approach to identify functional requirements.
Aims to achieve optimum functional outputs whilst aligning cost, quality and safety
- ▶ The Human mind is solution orientated - the solution is often determined before the problem is defined

Value Management Delivery in the Rail Industry

GNGE (Great Northern Great Eastern) Joint Line Improvement Programme

- Capacity and Journey time driven project
- Free up ECML for Passenger trains
- Move Freight services to GNGE route.

GNGE Major Assets

- **Approx 86 miles : Werrington to Doncaster**
- **Structures**
 - 112 Underbridges (70 No. with issues)
 - 84 Overbridges (30 No. with issues)
 - 225 Culverts
- **Crossings**
 - 147 No. physical crossings
- **Permanent Way**
 - Large volume of re-railing, re-sleepering, re-canting, point ends, crossover works, double junction



Value Management Delivery in the Rail Industry

- Multi-stakeholders
- Budget and programme constraints
- Geographical constraints – 86 route miles
- Range of neighbours / parties to consult

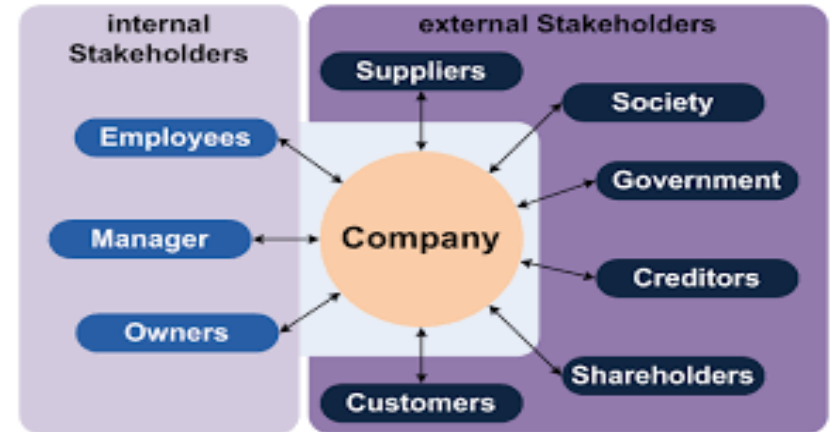
- Range of Value (and Risk) interventions:
 - Output Definition - Critical Success Factors, Stakeholder Needs, Function Analysis, early Risk identification
 - Optioneering / Selection – filtering and selection
 - Value Engineering – driving out efficiencies or over-engineering
 - Lessons Learned – successes and issues
 - Quantified Schedule Risk (QSRA) - Time
 - Quantified Cost Risk (QCRA) - Cost



Value Management Delivery in the Rail Industry

Stakeholder importance imperative:

- Key stakeholders critical to success
- Early engagement = buy in
- Multi-disciplinary / range of knowledge
- Internal and external

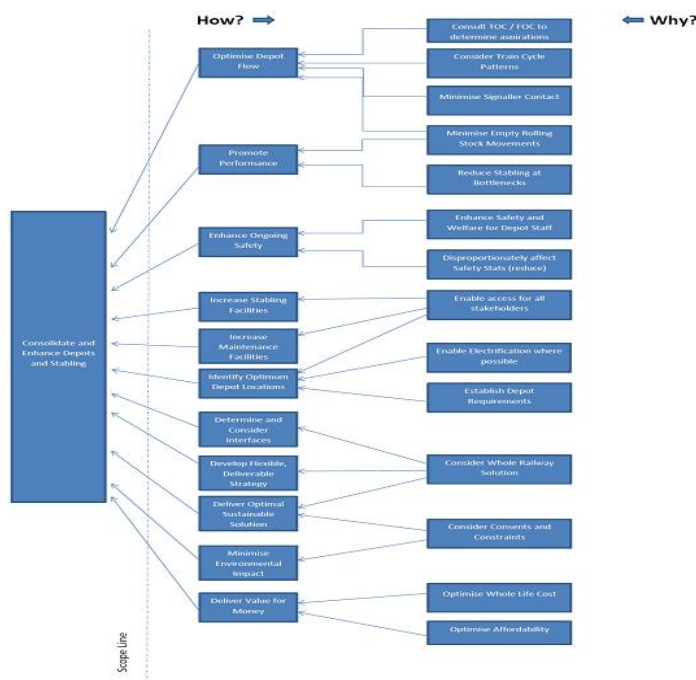


- ▶ Department for Transport
 - ▶ Train / Freight Operating Companies
 - ▶ Councils / Highways Agency / Landowners / Neighbours
 - ▶ Contractors / Suppliers
 - ▶ Engineers / Commercial / Project Management / Planners / Construction
-
- Alignment of functional Needs
 - Continued consultation / information / buy-in
 - Forging closer working relationships – Alliance contract

Value Management Delivery in the Rail Industry

Stakeholder Needs & Wants

- Stakeholder engagement / support
- Exploring end Success (Benefits)
- Analysis of Needs / Wants
- Functional outputs



Estimated VE Saving (Best Case) £	Estimated VE Saving (Worst Case) £	Element of Work/ Scope	Notes/ Action to Achieve Proposed Savings	Section of Route
£250,000	£250,000	Level Crossing	Opportunity to gain approximately 8 minutes journey time at Tinsley Level Crossing and Beevors Level Crossing (£250k saving)	Werrington Junction to Spalding
£12,000,000	£5,000,000	Track Renewals (range of saving £5-12m)	Kay Kendall confirmed Track Renewals are currently reviewing CP4 rates. Packaging of works will provide cost saving opportunities	Werrington Junction to Spalding
£1,100,000	£1,100,000	Track S&C	Deeping St James (outside St James SB) requires renewal. 12a, 12b point ends (Werrington to Spalding) to be renewed (over and above £1.1m). Power upgrade required (E&P costs not included in current estimate). Note- re-control requirement approximately £200/300k additional cost.	Werrington Junction to Spalding
£1,700,000	£1,700,000	Civils	Saving with regards to double counting elements of work	Werrington Junction to Spalding
£400,000	£300,000	Structures (range of £300-400k saving)	High volume of overbridges may be an opportunity for packaging up of work £300/400k savings.	Spalding to Sleaford
£2,400,000	£2,400,000	Level Crossing (£2.4m plus)	Mill Green LC will be undertaken as part of the 2010 renewals workbank. Definitive list of LC closures required (in particular Spalding, Flax, Mill LC).	Spalding to Sleaford
£10,000,000	£7,000,000	Track Renewals (range of saving £7-10m)	Kay Kendall confirmed Track Renewals are currently reviewing CP4 rates. Packaging of works will provide cost saving opportunities	Spalding to Sleaford
£1,500,000	£1,000,000	Recant of curves (range £1m/£1.5m saving)	Kay Kendall to provide current track rates based upon a desk-top exercise (based on mileage and yardage).	Spalding to Sleaford
£1,200,000	£1,200,000	Civils (double counting element of works; approx £1.2m saving)	Review to be undertaken as to where double counting has taken place	Spalding to Sleaford
£20,000,000	£18,000,000	Track Renewals (range of £18-20m saving)	Kay Kendall to provide current track rates based upon a desk-top exercise (based on mileage and yardage).	Sleaford to Lincoln Pyewicke Junction
£2,900,000	£2,500,000	Civils (range of £2.5-2.9m saving)	Review to be undertaken as to where double counting has taken place	Sleaford to Lincoln Pyewicke Junction

Value Management Delivery in the Rail Industry

Key Successes:

- ▶ Successful multi-party alliance set up and maintained
- ▶ Operating Expenditure savings achieved through delivery i.e. signaller savings
- ▶ The project achieved BS11000
- ▶ The alliance delivered sustainably - CEEQUAL achieved
- ▶ Alliance successfully drawn together (previous alternative contracting routes)
- ▶ Successful delivery of tonnage, gauge, capacity and JTI's
- ▶ Hand back of final commissioning was achieved to the ORR / DfT milestone
- ▶ Significant volume of multi-disciplinary works across 86 route miles (Civils, Level Crossing, Track and Signalling works)
- ▶ New technology introduced.

Benefits:

- ▶ Successful delivery of tonnage, gauge, capacity and journey time improvements
 - ECML capacity enhanced
 - Freight train capacity maintained (equivalent journey time)
 - In turn, benefits to travelling public!
- ▶ OpEx Savings realised
 - Delivered to high standard – BS11000
 - Hand back to ORR / DfT milestone
 - Longer term opportunities to maximise capacity.

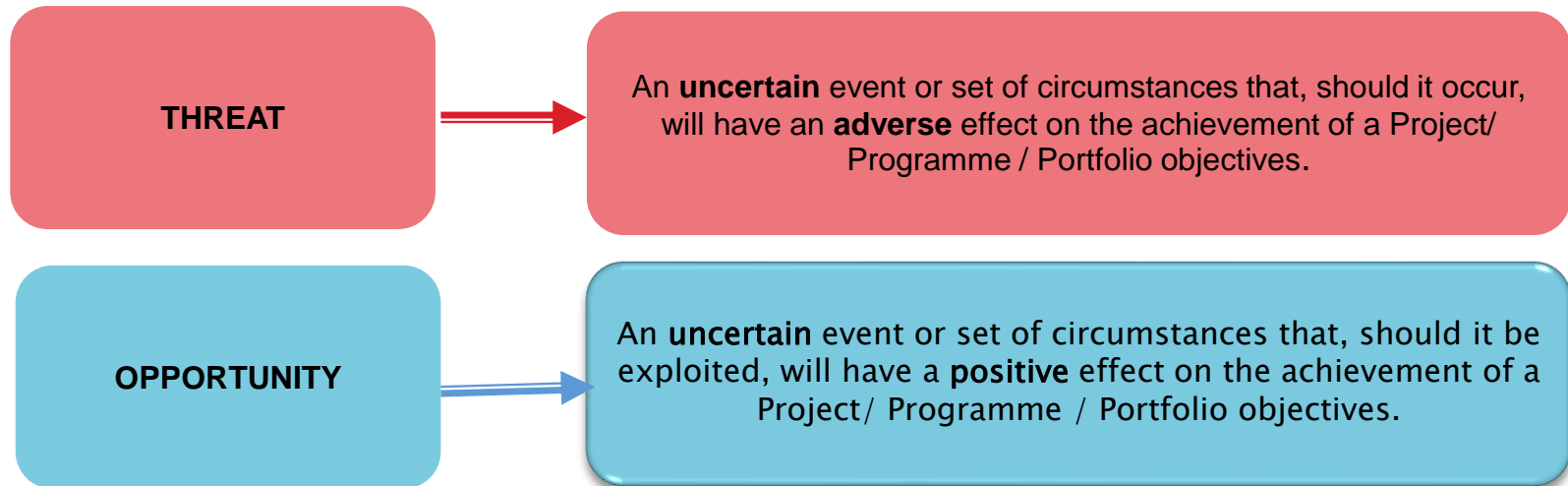


**How Risk and Value Management are aligned
to add maximum benefit to project delivery?**



Risk and Value Management Alignment

What is Risk Management?



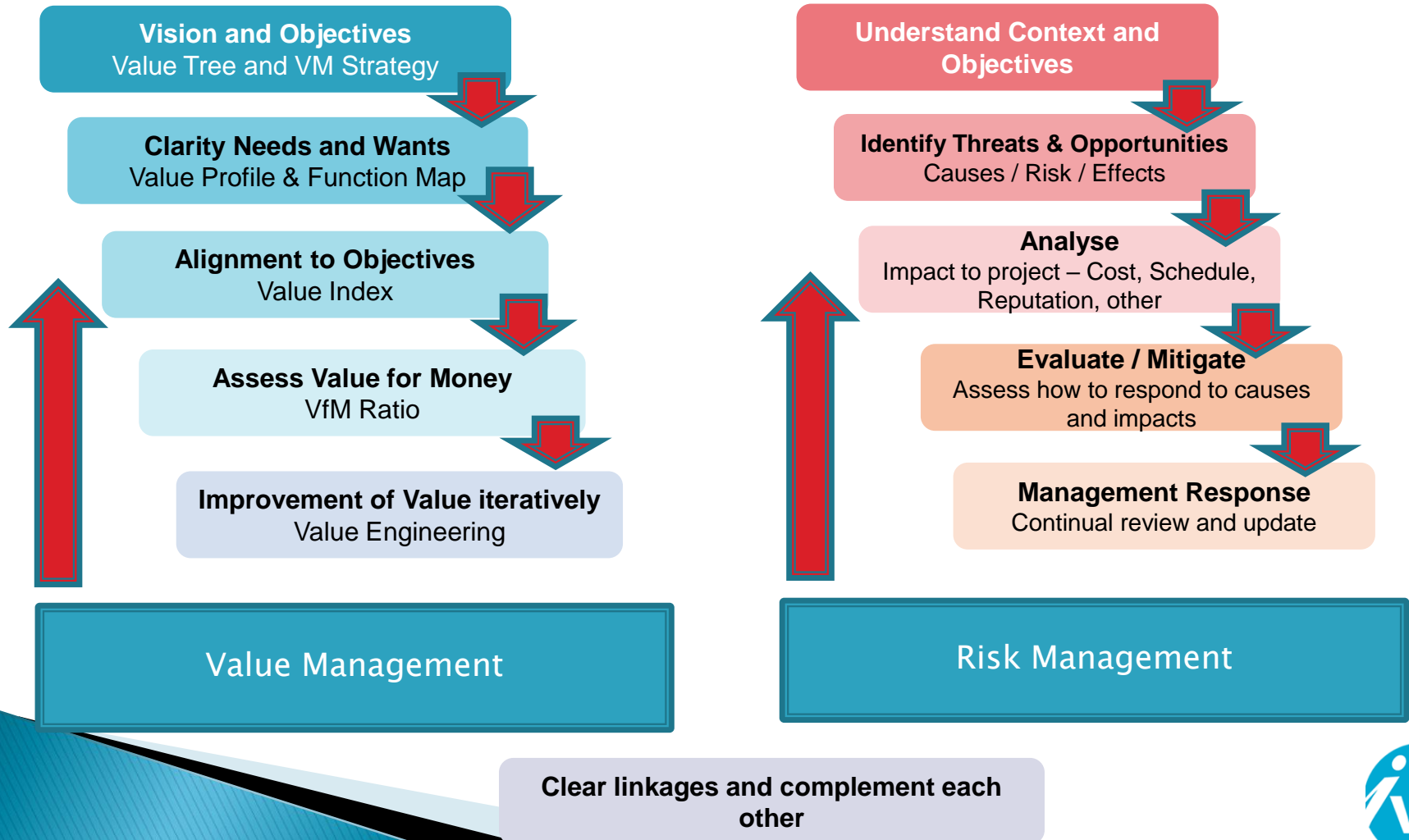
- Key link between Risk Management and Value Management

Value for Money (VfM) /

Threat & Opportunities

Risk and Value Management Alignment

How are Risk & Value Management aligned / compliment to enhance Value in delivery?



QUESTIONS?

chair@ivm.org.uk

Julie@value-decisions.uk

Tel: 07919 470566