Reproduced from the Institute of Value Management VALUE Magazine, February 2014

**Driving best value portfolios,** programs and major projects through value assurance

The effectiveness of value management and value engineering can be limited under certain circumstances. This extract from a paper submitted by **Martyn Phillips and Shamsi Shishevan** from Alberta in Canada states the case for value assurance in driving best overall value.

Value engineering (VE), also known as value management (VM), is an excellent tool for identifying improvement opportunities to various projects, products and systems. However, the effectiveness of VE/VM can be significantly constrained by the circumstances within which it is applied (eg, structure, policies and culture of the organisation(s) involved and contractual arrangements). Further, VE/VM is most often applied as a relatively short duration intervention and quite often with limited follow-through, ultimately resulting in some loss of the anticipated value improvement.

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Value Assurance (VA) drives best overall value for the enterprise. It is an overarching, performanceenhancing process and is applied for the entire duration of a program of projects (products or services), from inception, through development and installation, to operations and final disposition. VA ensures balanced solutions and is applicable to both "hard" and "soft" types of endeavours. While project management (PM) assists in execution of programs and projects most efficiently, VA pertains to deriving, confirming and maintaining best overall value for portfolios, programs and major projects. VA guides

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the setting of standards, provides benchmarks and focuses on aspects that are most worthwhile, especially in terms of time and return on investment.

### Context

Successful portfolios and programs require alignment of expectations, robust project, risk and value management, plus assurance and optimisation and reconfirmation of results. In line with the need to ensure overall affordability, shareholder returns and stakeholder satisfaction, there are various levels of focus, shown in the table opposite.

Value is often inadequately articulated and hence may appear somewhat elusive. For any portfolio, it is important that the following aspects are addressed in deciding which programs and projects should be allocated resources:

- Alignment of programs and projects to business priorities and goals
- Focus on strategically important outcomes
- Robust management of program and projects for delivery of the expected value
- Adequate staffing, both in number and through training; appropriate team leadership

Enterprise	Focus: MAXIMIZING SHAREHOLDER VALUE/STAKEHOLDER SATISFACTION • Corporate governance & policies • Strategic direction • Risks and opportunities
Portfolio	<ul> <li>Focus:</li> <li>BENEFITS eg, environmental improvement &amp; lower unit production costs</li> <li>Business leadership</li> <li>Programs selection</li> <li>Value optimisation</li> </ul>
Program	<ul> <li>Focus:</li> <li>OUTCOMES, eg, change of process for power generation</li> <li>Needs definition</li> <li>Projects sponsorship</li> <li>Benefits realisation</li> </ul>
Project	Focus: OUTPUT, eg, provision of a new power station • Delivery of capabilities to provide service(s)
Service Delivery	Focus: Providing SERVICE and ensuring timely RETURN ON INVESTMENT • Operations and maintenance • Optimisations of systems and services

Levels of focus

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## **Creating the conditions for success**

Program and project quality, value for money, risk, cost-efficiencies and in-service performance are closely related and require strategic alignment, cross-linking, and continuing review.

Clarity of focus and definition of the "vital few" influencing factors is essential. Value (eg, for the taxpayer, shareholder, etc.) may be derived from highly performing organisations, portfolios, programs and projects. It can happen that a well-executed project becomes somewhat forlorn within the bigger picture of a poorly performing organisation.

It follows, therefore, that for a program and its projects to be truly effective, the parent portfolios and organisation must perform well. Hence the need for an all-encompassing process to drive and assure best value for the organisation.

Innovation is said to be at the heart of corporate strategy and competitive advantage for many of the world's leading organisations. Unilateral decision-making is now relatively uncommon in progressive corporations. Today, decision by consensus is more the norm. This requires a suitable guiding process that will also encourage innovation and sustaining results. The keys to program success are to:

- Set the appropriate tone from top management, ensuring clear accountabilities, alignment, awareness and training, as well as supporting a visible presence for assurance teams within the business unit(s)
- Clarify the framework for the management of programs and projects and communicate procedures to all stakeholders
- Allocate adequate time upfront to establish effective project planning, review and control systems, and develop a comprehensive program or project plan
- Confirm a proper understanding of needs, clarity of purpose, lean team structure(s), clear roles, responsibilities and contractual arrangements for implementation
- Embed a strong value and risk management culture, with a partnering (alliancing) style
- Ensure readiness to proceed to each next stage

## Assurance of results

As business dynamics shift, an organisation's needs may change before project completion. Particularly in complex business environments, it is important that managers and other stakeholders are able to have a reference framework for ensuring confidence in program and project delivery to suit changes in circumstances or events.

Organisations go through cycles of change of staff, culture and program focus. In so doing, the organisations can lose their collective memory and expertise, thus sometimes having to learn again some fairly basic, corporate project management skills.

Assurance is required such that portfolios and their programs and projects remain viable in terms of:

- Business aims (benefits, scope and costs)
- User requirements (availability, serviceability, operability, reliability and compliance capabilities)
- Technical merit (feasibility and fitness-forpurpose)
- Supply chain capabilities and compatibilities
- Likelihood of meeting forecast targets
- In-service continuing effectiveness and financial efficiency; preserved value

Executives need reliable processes to ensure that their organisation's current efforts and proposed changes are truly cost-effective and meet corporate objectives. They also need to ensure that the most appropriate aspects have

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been addressed adequately and that best value for money is obtained within controlled risk parameters. The following are integral considerations of the value assurance approach.

## **Program and project oversight**

Despite various management systems, projects still go awry and value is lost to the organisation and various stakeholders. A key aspect of governance is the assurance to stakeholders of attainment by the performing organisation of good results in the most critical areas. So often, project development and/or implementation teams are unaware of the overall value expected from their undertakings. For example:

- Business goal-setting persons and their performance criteria are often absent during project development
- Return on investment (ROI) criteria are not clearly disseminated and therefore not necessarily attained
- Key knowledgeable people are lost to the next critical program or project; information may not be passed on and assumptions are then made by the next wave of staff
- Program productivity/yield no longer matches stakeholder expectations
- A well-communicated, strategic framework is

necessary for deriving balanced solutions to complex and divisive issues, also taking into account financial, legal, political, regulatory, schedule, resource and technical implications. A comprehensive, but easy to interpret, system of "cradle to grave" checks and balances is needed to maximize corporate performance and key supporting initiatives.

Accountability and processes must be clearly defined. This is accomplished through refocusing business programs and resources - by proper identification and understanding of the issues, stakeholder values and strategic intent at an early stage, together with involvement and clear focusing of the appropriate team members at the right times.

VA encourages collaborative, performancedriven working and is applied over the whole program/project life. The approach ensures that the expectations or results gap between management levels is closed, and that commitments are followed through. Independent, formal certification of proposals as good value for money is an additional benefit, especially to effectively engage additional resources and partners.

Risk management is applied at the levels of: enterprise, portfolio, program, and individual projects including critical systems & components. Risks may be present due to limited experience, lack of information and general uncertainty regarding future conditions and viewpoints.

### Selection of programs and projects

While program and project selection is often made based on largely economic or financial terms, it has become extended to include aspects such as environmental friendliness and certainty of performance. In this regard 'value drivers' (project characteristics that are most important to stakeholders) are critical to identify and apply - value drivers bring issues into sharp focus. Strategies focused through value drivers bridge, or eliminate, the "performance gap" and guide the implementation of effective change programs. A value–focused, turnaround strategy addresses where value and performance are being inhibited or slipping away from the organisation.

Management of a portfolio should drive a path toward achieving stated strategic objectives and, ideally, the route of continuous improvement gains across the whole enterprise. Programs and projects should clearly support attainment of the corporate vision statement, principles and forecast outcomes. Most performance/value enhancement gains are made through strategic decisions and in conjunction with stakeholder

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input. The key to aligning performance is through recognition and appropriate attention of stakeholder perspectives and values.

Tools for the selection and sorting of programs and projects include use of:

- Financial projections -net present value analysis, payback analysis, return on investment
- Multi-criteria profiling and performance/value index
- Needs prioritisation

It is crucial to understand the context and ramifications of a far-reaching decision before implementing the change(s). VM workshops are excellent for consensus building, but typically much longer periods of time are required to build lasting consensus among influential stakeholder groups with disparate interests.

## Value assurance application

Value assurance is a business and functional performance improvement process that is used to establish strategic direction and optimum use of corporate resources. VA pertains to deriving, confirming and maintaining best overall value along with managed risk, for the whole life of portfolios, programs and individual projects. An example of the scope of application of value assurance is illustrated in Figure 1 below.

The VA process starts as early as needs analysis, development of the service delivery model and formation of alliances. Tasks extend across a broad range of activities and timescales, from alignment of stakeholder expectations and business plans, through confirming the best overall fit of developing project proposals, to optimizing an in-service system or facility. A formal value file is established at the outset of each program and project, and is maintained on a consistent basis throughout the life of the program.

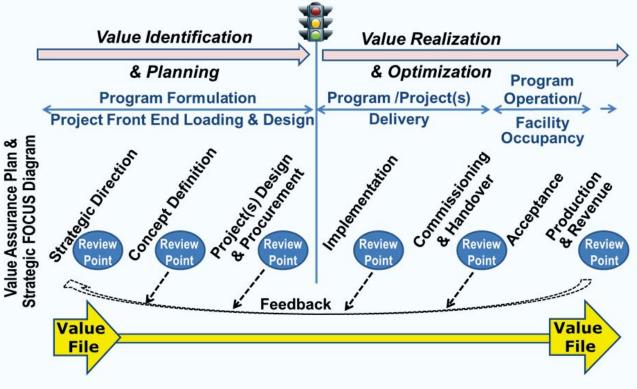


Figure 1. Scope of application of value assurance

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Key components of VA are strategic alignment, concept engineering, risk management, decision analysis, stage readiness assessments, value profiling & indexing, value improvement, program/project assurance, change management and systems optimisation, along with other management tools as appropriate. Use of VA streamlines the processes for multi-level reporting and key decision-making, thus allowing project staff to focus on their day-to-day duties. Regular VA reports provide the means to communicate well to executive management and stakeholders that portfolios, programs and projects will realistically:

- Yield best value and return-on-investment
- Be delivered within the specified timeframe and allocated budget

The VA process is results oriented and is scalable for applications of various sizes and complexity. In essence, the process provides a:

- Strategic navigational aid for portfolios and programs
- Stakeholder consensus building aid for complex situations
- Set of program/project analytical and remedial tools and techniques
- Continuing 'health check' for reviewing

program and critical project capabilities for meeting stakeholder expectations throughout the entire life-cycle

A 'value assurance and strategic advisory' stream works in parallel to the day-to-day program/project development and implementation stream. A suitably experienced and well-rounded VA co-ordinator reports directly to executive management on a regular basis. Within the holistic value assurance process, value and risk management workshops are utilised as appropriate.

### **Program/project assurance**

Value tends to be eroded over time, especially for projects with long development periods. Having established that the approved concept represents the best overall value, it is necessary to ensure that program or project implementation will deliver the promised value.

As a sub-set of VA, program/project assurance (PA) comprises objective, independent review and monitoring functions to confirm compliance with overarching, approved plans. PA is applied at the levels of program and individual project. It provides funders and other key stakeholders with confidence that, for a defined scope, deliverables will be on time, within approved budget and of acceptable quality. This is accomplished through a framework that provides independent oversight and coordinates monitoring reviews and objective assessment reporting. Programs and their projects are reviewed through a gateway or milestone review process conducted by appropriately skilled and experienced personnel.

PA complements traditional program and project management systems through comprehensive, high level monitoring and reporting of plans, progress and changing impacts of interaction. By being free of the daily issues and activities of the project management team, this assurance process also provides insight into areas that may not have been fully considered. Particularly for sensitive and complex undertakings, this reinforces the team's efforts and ensures that progress is being made along the right track, thus contributing significantly to the stakeholder confidence. PA bridges the sometimes uncomfortable communication gap between middle and senior management. PA works in parallel with the leading, generic, project management standards and focuses on compliance with the overarching intent and approved plans. Joint application of VA and PA increases organisational efficiency and effectiveness by reducing managerial bottlenecks and optimising resource use from the outset.

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"By seeing the whole picture, value assurance has the ability to create powerful insights and steer undertakings toward better solutions in less time, with the optimal use of resources."

### Summing up

By seeing the whole picture, value assurance has the ability to create powerful insights and steer undertakings toward better solutions in less time, with the optimal use of resources. The VA process is ideal for uncovering nonfunctional elements, driving out waste and responding to changing circumstances. It guides and ensures that developing solutions are appropriate and up-to-date for the portfolio, program, project, product, service or system needs. Within the VA framework, program/ project assurance supports this and reports directly at high level on the status of approved plans, revisions and if other changes will be implemented on time, within budget, to the prescribed quality standards – to ensure stakeholder satisfaction and obtain forecast value. VA is an overarching, business and function-based management process. It stimulates a pro-active, holistic and systematic way of group thinking and drives best value through an end-to-end, firmly anchored, planning, monitoring and control mechanism for programs and projects. This paper describes an opportunity-based approach derived by integrating various management methods, based around the function orientated, philosophy of the value methodology.

The essence of the VA approach is a continuum of participatory strategic planning, group problem solving, the explicit management of risk and value, along with stage readiness assessments, effective change management and a system of linked, multi-level performance reporting and course correction. VA is particularly useful for guiding business change initiatives, such as new systems to increase performance, as well as complex capital endeavours that will bring about significant or rapid change. Value assurance is accomplished through holistic, longer-term thinking and application of a suite of universal and interconnected "best practices".

#### Acknowledgements

This is an extract from the paper presented to SAVE International at the Value Summit, Washington DC, June 2013. The original paper is available in full @ www.ivm.org.uk

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