Project Management
Creating Maximum Value

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Abstract:

This paper presents how basic project management practices can unlock huge additional value across any enterprise prepared to embrace fundamental principles, pick the right people and support them to the hilt. The paper deals with issues of leadership, stakeholder management, teamwork, processes, systems and techniques. The paper, based on many case studies, has application for companies and institutions who wish to generate the maximum benefit from their capital value, and for individual project managers who want to help them do it and prosper in consequence.

Keywords: Project Management, Process, Organisation, Value, Risk.

1 Introduction

The project management profession has certainly developed over the last forty years I have been in the business. When I started, the term Project Manager was essentially confined to the management of engineering and construction projects. Nowadays "Project Managers" are responsible for a wide range of projects, from the delivery of complex programmes of business change with underpinning ITC systems, to the election of political parties! (Refer to Audience)

The role has also expanded significantly. The traditional definition of the Project Management role was, and still is in many cases, "delivering to specification, budget and schedule". This significantly undervalues the contribution which Project Management can make to an initiative, an enterprise or an institution in helping achieve strategic objectives and "create the maximum value" from development expenditure.

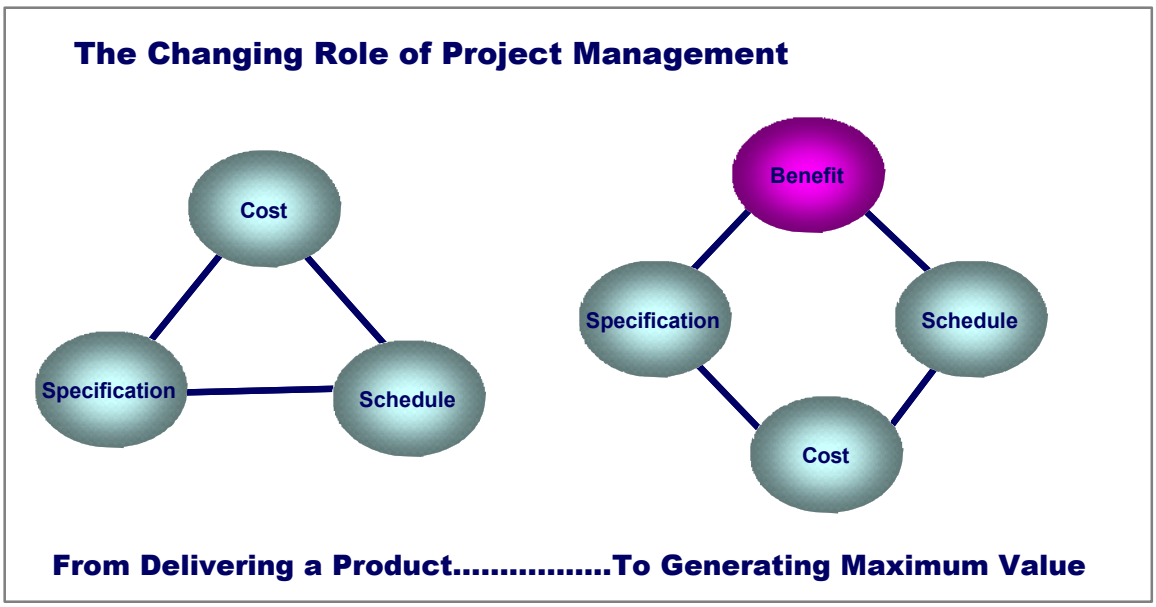

Figure: 1 "The Changing Role of Project Management"

The objective of this paper is to provide Project Managers, of all kinds, with a framework to deliver maximum value within their own environment. I would hope that most of you will recognise most of value levers which I describe, but you may find the overview of interest.

Overview

INDECO has undertaken many hundred project reviews and we have been involved in the development and management of projects in many different sectors and countries from the hands on management of major energy projects to the facilitation of complex organisational change. In the collective view of our team there are seven areas which directly influence the value which companies obtain from their capital expenditure. These are shown in the Figure below.

1. Create Unity of Vision across, and ensure competence within, the extended project team -the right people in the right place.
2. Define the capital value process and make it stick - clearly separate Appraisal and Development
3. Manage stakeholders and politics proactively within the cultural environment.
4. Focus on Value Improvement Practices (VIPs)
5. Define Responsibilities and Interfaces across the extended team and make sure every one understands them.
6. Manage development and execution with rigour to protect value.
7. Measure Value and Risk to provide focus effort and enhance commu nication

Figure 2 The Seven Levers of Value

Lever 1-Unity of vision and competence of the Extended Project Team

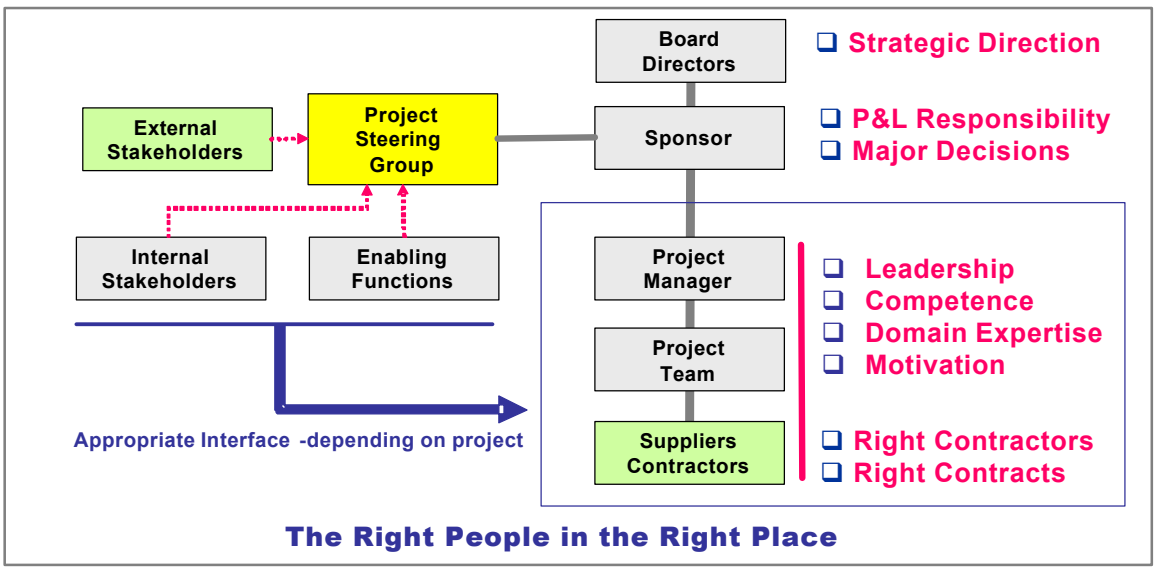

Figure 2 The Extended Project Team

Most people recognise that the leadership ability of the project manager, the domain expertise within the project team, the level of motivation of that team are critical success factors of most projects. However it is also absolutely essential to ensure clarity of role for every organisational entity, supplier, contractor and individual engaged on the project and build unity of vision across the extended project team. In our experience the role of the Project Sponsor and the way he manages the project through a "Project Steering Group" is particularly critical in projects of any complexity involving concerted actions across an organisation.

Lever-2 Clarity of the Capital Value Process

Most of our clients are the major blue chips who spend billions of euros a year on a wide range of capital projects. They all consider their "Capital Value Process" as absolutely mission critical and they spend a huge amount of effort in developing and implementing it rigorously within their organisation. Virtually all these processes are based on a similar series of "Stage Gates" designed to filter out the projects which don't make sense, and progressively optimise and create more value from those which are ultimately implemented. At corporate level a portfolio management process is used to drive development to meet strategic business objectives, rank opportunities and balance risk. This is rather outside the scope of this paper.

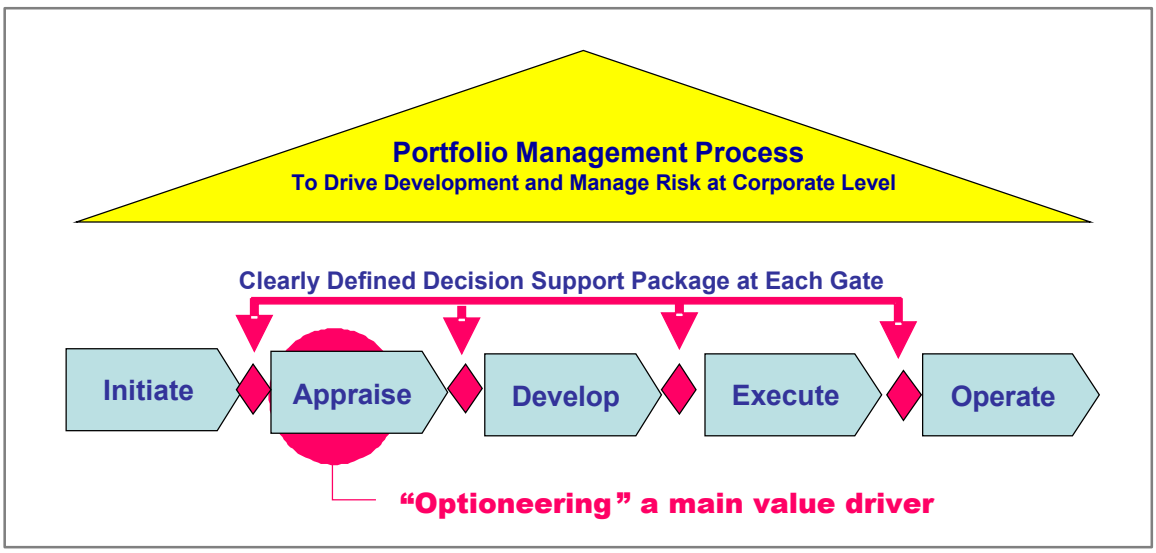

Figure-3 Typical Stage Gate Process

Maximum Value Generated in the Appraise Stage

In many ways the most critical Stage is "Appraise". This is where the project is evaluated for Strategic Fit and all possible options of achieving the business objective should be identified. This is the Stage when maximum value is usually added and the key challenge to get people particular to think "out the box". To a man with a hammer everything looks like a nail.

Case Study:

A major petrochemical producer wanted to increase his supply of nitrogen to a major complex. A nitrogen plant was developed and constructed at many millions of euros. Just as the plant was completed it transpired that it would have been possible to do a deal with an offsite supplier for a fraction of the cost.

Lever-3 Effective Management of Stakeholders and Politics

In his book the "Anatomy of Major Projects"[1] Professor Peter Morris, an INDECO Director, studied the history of a number of major projects. He concluded that most of the major problems encountered were actually outside the control of the Project Manager and were generally related to the management of stakeholders, and to corporate and governmental politics. In many cases these issues can only be handled by the upper reaches of the extended project team illustrated in Figure-2.

At the project level however it is vital to understand who the various stakeholders involved in the project are, their perceptions, motivations and expectations. In a major real estate development project ion London we identified 102 different stakeholder groups ranging from the very supportive to "Terrorists" who had to be contained, if not eliminated!!. The kind of Stakeholder Mapping shown below is one way of building an appreciation of the issues involved.

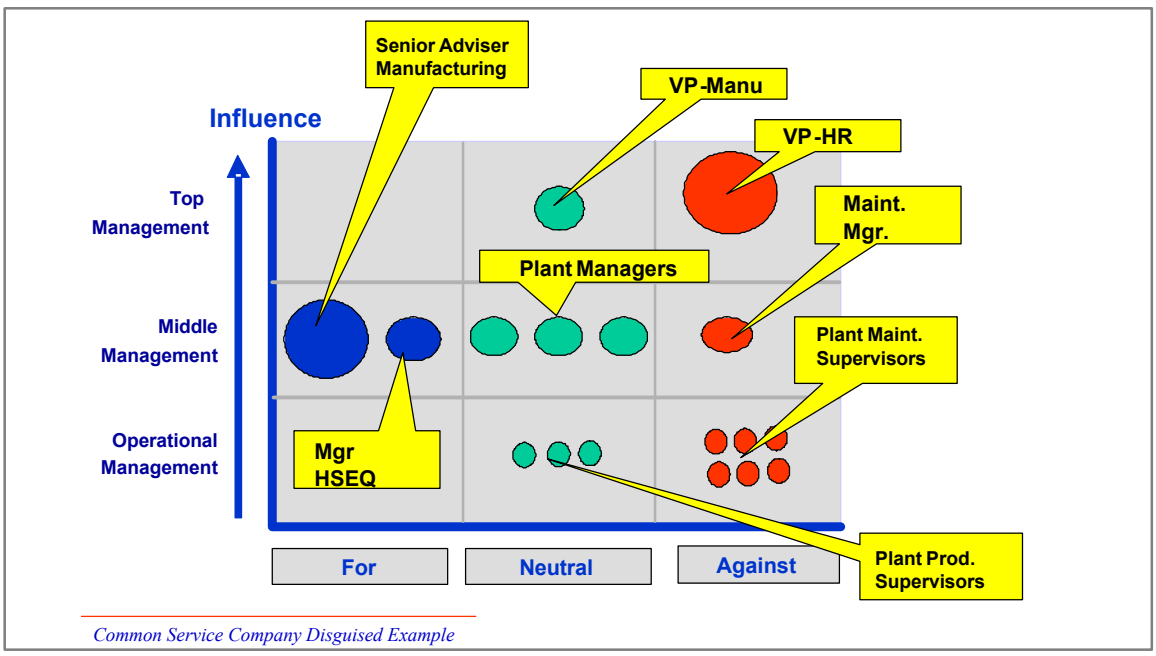

Figure-4 Stakeholder Mapping

Case Study

INDECO was retained to undertake a consolidation exercise of common services across a major industrial site. Despite the obvious savings to be gained, the Director HR did not want to face the industrial relations issues involved and effectively sabotaged the project.

[1] "Anatomy of Major Projects", Dr Peter Morris, Wiley

Lever-4 Implement Established Value Improvement Practices

IPA, the independent benchmarking company, consider that first quartile project organisations who implement Value Improvement Practices (VIPs) on a typical process plant project will on average obtain a 20% improvement in value. The Chart below shows typical value improvement practices. Most of these VIPs such as "Risk & Opportunity Workshops", "Value Engineering", and "Constructability" are well understood. In many organisations these take the form of formal workshops, often externally facilitated, which are a mandatory aspect of the Capital Value Process and must take place at pre-determined points during the capital development process for the project to obtain stage gate approval.

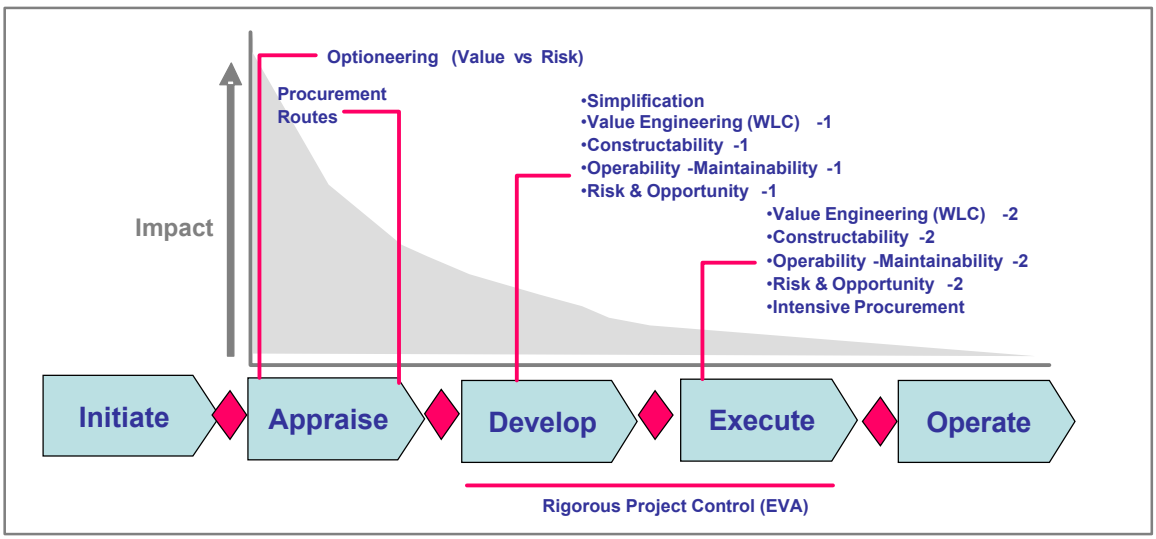

Figure-5 Value Improvement Practices

Case Study

INDECO was retained by a major oil company to improve the value from their capital expenditure on gas stations across ten European operating companies. On the cost reduction side of the assignment we reduced cost by around 10% through benchmarking followed by value engineering of specifications. Around 12 % was saved through the intensive procurement of equipment and construction services. In a wide variety of projects we have seldom failed to produce this level of saving through these two value drivers alone.

Lever-5 Total Clarity of Roles, Responsibilities and Interfaces

In major companies, with an extensive development programme, the Stage Gate process is normally developed to the next level of detail as shown in the Figure below. Each activity is developed to the next level of detail and the precise roles and responsibilities defined across the extended project organisation in a series of workshops. The resultant RACI chart signed off by all participants. This is normally documented in the form of an on line portal and linked to Templates and examples of "Best Practice". If this is done effectively the portal provides an effective medium for learning from experience and building collective corporate knowledge.

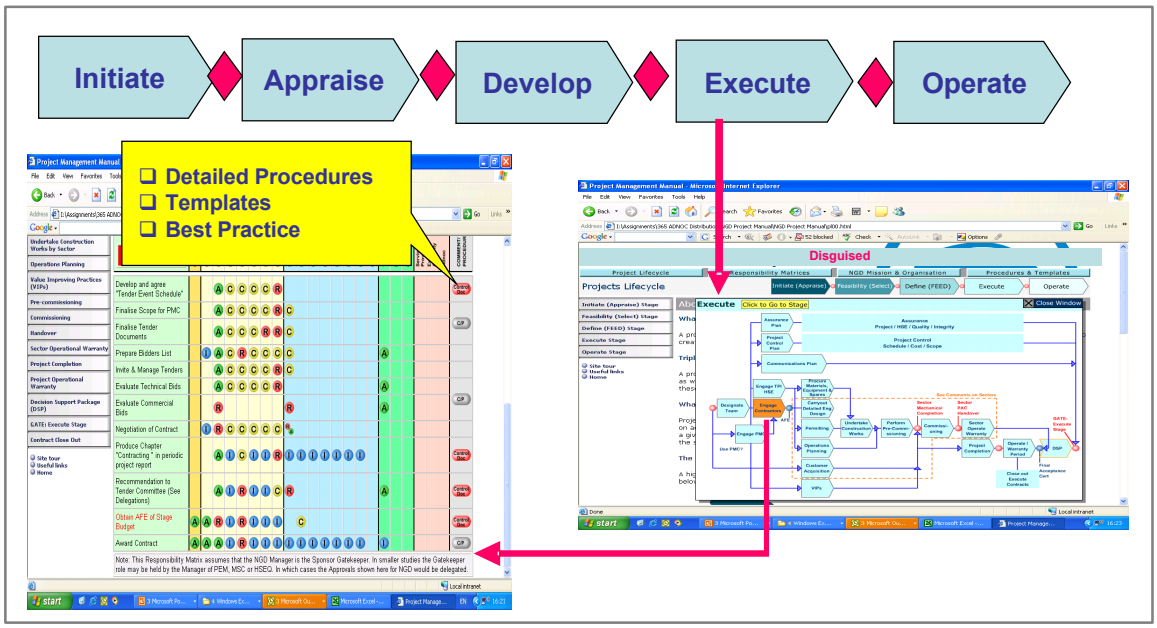

Figure-6 Defining Process, Roles & Responsibilities

Lever-6 Manage Project Activity with Rigour

Value is essentially created in the early stages of project development. Once the project moves into execution management rigour is required to protect the value in the project, and ensure it is delivered to schedule within the implementation budget. The way this is best done is a well trodden path. Despite this it is surprising how few companies do it really well. The Figure below illustrates the INDECO methodology in this regard. We have adapted to a wide range of projects in many different sectors.

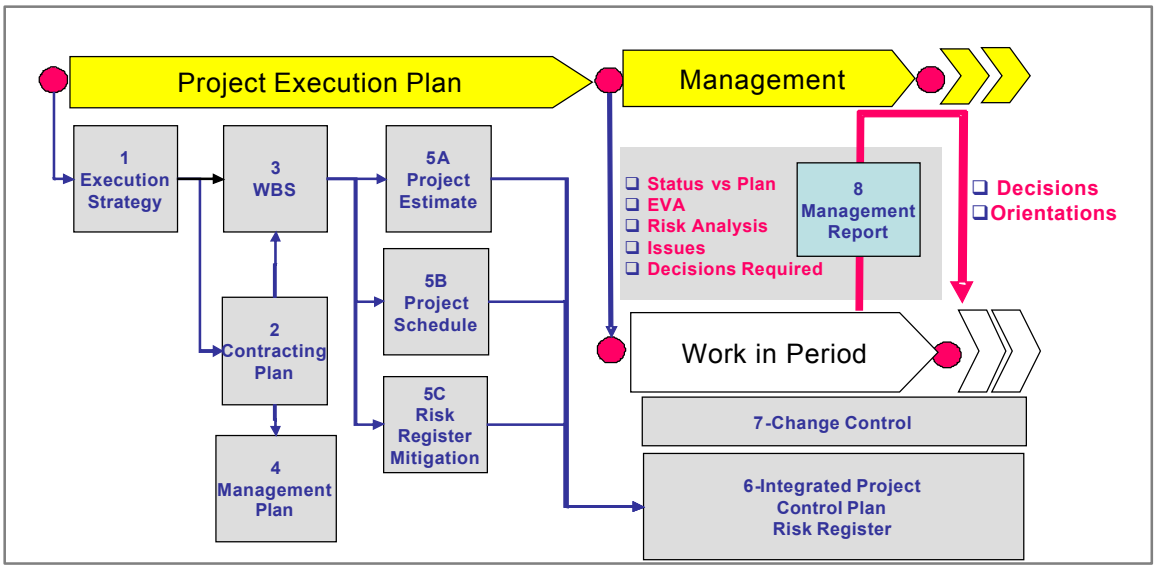

Figure-7 Project Control Framework

Case Study

INDECO was retained as Project Management Consultant for the construction phase of a billion dollar+ power project. The construction period was 26 months and schedule penalties were $400K per day. INDECO was responsible for setting up the project organisation, project control process and systems. Early Earned Value analysis showed a major problem emerging in the production rates of pipe-work required to meet the project schedule. We developed and implemented a detailed control system based on job cards and Timesheets. The system was used to calculated progress and productivity by area, by system and by supervisor across a 3000 man workforce every Friday night. On Saturday morning there was a meeting of the 20 or so construction supervisors. Problems, signalled by low progress and productivity, were identified and remedial actions taken. Resources were reallocated as required. The project was completed to budget on the last day of the contract schedule. The INDECO Project Control system was widely regarded as one of the critical success factors on the project.

Lever-7 Measure Value Analytically

In setting out to create maximum value we must define how to measure it. Measurement serves to focus attention, enhance communication, and concentrate development effort on the most critical project issues.

Benefits can generally be expressed as revenue generated, or savings made. Much has been made of the "Balanced Scorecard" approach to reflect benefits which are hard to quantify, such as "Customer Satisfaction" "Employee Morale" and many companies use this approach. The harder nosed will say "if you cannot put a number on it, it's not a benefit". This means that perceptions of, for example, improved "Customer Satisfaction" must be translated into higher retention rates and increases in sales which in turn become management targets. Lifecycle costs are easy enough to understand although not always easy to estimate. Once revenue and costs have been established for the project lifecycle, classic techniques of cash flow analysis such as, Net Present Value (NPV) and Internal Rate of Return (IRR) can be used to compare the relative value of different options. Some options may offer potentially better rates of return but are much riskier. The Exhibit below shows the way in which Revenue Costs and Risk were analysed on a multi billion euro real estate project using the INDECO Risk & Opportunity Model we developed for the project. Tools and techniques are readily available and relatively easy to use.

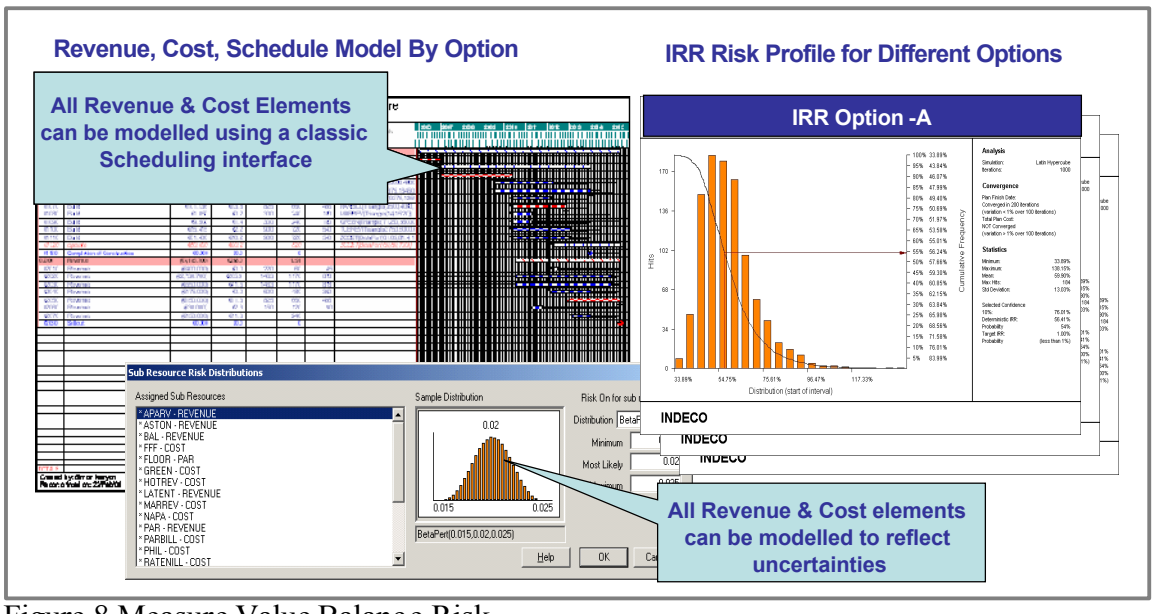

Figure 8 Measure Value Balance Risk

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In thirty minutes or so it is not possible to do justice to the subject of Generating Maximum Project Value. I hope however you found this overview of interest and that perhaps there are one or two areas you might like to pursue further.

Most major corporations recognise that really effective project managers are a rare commodity. If you succeed in applying even some of the techniques discussed in this paper to generate more value from your own projects, you are personally unlikely to go un-rewarded.

Author

George Steel is the founder and Managing Director of INDECO a leading international project management consultancy. George has personally led many major projects and value improvement initiatives in many different sectors and parts of the world, including Central Europe. Prior to founding INDECO George was a partner with Booz Allen & Hamilton, New York, where he was responsible for the organisational development of a number of national oil companies and for the planning of many multi billion dollar development programmes. Earlier in his career George was a project manager with an international engineering and construction company designing and constructing oil refineries and LNG projects around the world. George has an honours degree in Engineering from the University of Edinburgh and is a fellow of the Association of Project Management.