

Risk and value management

Business, Risk Management



Risk and value management are processes that are fundamental to the successful delivery of a project. They should be used in every stage of the project lifecycle from concept through to closure. In practice, value management exercises are carried out first, to determine exactly what constitutes value to the business from delivery of the project. A preferred option is identified, together with the risks that are likely to occur if that option was implemented. The project team should repeat the exercises of defining value and associated risks until they arrive at the optimum balance of value and risk. 1

The aim of this document is to discuss Risk and Value Management, the linkages between them and then apply the theory to the scenario in order to supply a report detailing the best approach to the project and an initial view of risks. This document will provide both a value and risk management study in order to identify the best approach to the project and an initial view of risks. Value Management Literature Review Value Management was created by Larry Miles and other members of the purchasing team at General Electric (GEC) in 1947 when it was referred to as Value Analysis.

The concept was developed in response to the question, "How had companies managed to innovate during World War II?" This question was asked because during the war key materials had been rationed and yet many companies had improved their products and services. However, when the war ended few companies continued to use the innovative processes that helped overcome war time shortages. Miles brief was to understand how they had been so successful. However, he went beyond the brief and presented a model based on the idea that "All cost is for function" and

argued that customers in fact buy functions which are experienced through products and services. 2

In less than 10 years after Larry Miles created Value Analysis at General Electricity the concept had become more widespread, with the US Navy Bureau of Ships setting up a formal value analysis programme in 1954. However, the US department of Defence didn't advertise vacancies for value analysts, but for value engineers and therefore the term Value Engineering (VE) was born and in 1958 the Society of American Value Engineers (SAVE) was established. Although the use of value analysis was becoming very popular in the United States it was not to be seen in the UK for another 30 years when the American company Xerox started using the technique in their UK headquarters in 1983. 3

A function is something that a product or service "does" for someone who uses it, and is something they need. When looking at products or projects in terms of functions it helps provide the project team with more creative focus. This is because the team no longer focuses primarily on the mechanical explanation of the product, but instead focuses on what the product does for the customer. 4 Perhaps one of the most important phases of value management is "Function Analysis". Function Analysis helps to overcome communication problems by providing a good platform to build creative thinking on.

Function Analysis is done by asking questions such as: In 1968 Charles Blythway developed an approach to function analysis called "Function Analysis System Technique" (FAST). This approach helped to identify and link

all the functions of a more complex system or product. This technique involves creating a diagram that moves from right to left asking the question " Why?" and moves from left to right answering the question " How?", which helps test the logic of the links.

The term value management (VM) is very vague and according to Smith (2008)⁶ covers all value techniques such as value planning (VP), value engineering (VE) and value analysis (VA). There are no strict universally accepted definitions for value management and its related sub groups as value management is a very diverse topic which changes in response to the situation and context of which it is being used. However, it is possible to get a good idea on what value management is by looking at some of the many definitions on offer.

The Institute of Value Management (IVM) defines Value Management on its website as " a structured and disciplined approach that ensures the correct balance of performance, cost, and delivery is in place to meet the market requirements and business need" (IVM, 2000). Although this is an accepted definition it contains no real distinguishing features that separate VM from other management tools and techniques.

Kaufman (1998, p. 1) describes value management as: " more than a tool or technique for reducing product cost. Over the last fifty plus years VM has matured into a methodology that employs a set of disciplines proven to solve a broad range of management issues successfully and dramatically to create competitive advantage for the company". This definition supports the fact that there is a difference between cost and value. Cost is only one factor to

take into consideration when making decisions however it usually isn't the only one.

Value management is the title given to the full range of value techniques; which include: Value Engineering (VE)- This is the title given to the value techniques concerned with the achievement of necessary functions using minimum resource without detriment to quality, reliability, performance or delivery (Smith, 2008). Value Analysis (VA) - This is the title given to the value techniques applied retrospectively to completed projects to analyse the projects performance against predetermined expectations.

The terms VE and VA are very similar and in a lot of Value studies the terms are used interchangeably, therefore to avoid confusion some practitioners just use the term Value Management to cover all applications. A simple illustration of the application of VM, VE and VA to a project might be:

- Value Management - The decision to invest; do we need a project? The project concept and scope, what form of project do we need? The outline design and what should be the major elements?
- Value Engineering - Project design and design of project elements
- Value Analysis - Improvement of a construction, manufacturing or management process and post project review.