

## Productivity – a Case for Value Management

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In its simplest form, references define Productivity as “Output/Input”. A seemingly simple equation suggesting functional output can be measured per unit of input resources. However, it would seem that within some of our largest and most influential institutions, output functions perceived as necessary, are poorly tested in terms of cost and worth. Why don’t large institutions undertake the basic cost benefit analyses like most individuals do when making important purchases? Is it because they do not think there will be a worthwhile payoff, or is it just too easy to simply raise additional funds from shareholders and/or taxpayers in order to write off waste, loss of efficiency and loss of purpose?

We are told with increasing frequency that Australia must increase its productivity in order to be competitive. We are also told how all of our governments are struggling to find the money to pay for essential services, the necessary infrastructure for economic growth and to pay down national debt. Most of us are aware that in the case of government there are limited options for raising additional revenue that will not add to national debt, constrain business investment or cause a contraction in consumer spending and/or confidence.

Public companies have fewer constraints in raising capital but for them an increasing number of signals are being sent by shareholders to demonstrate they are not happy with diminishing returns and dilution of share value.

If all this is true then the Western Australian Auditor General’s comments in regard to State capital expenditure should be of interest and concern to us all.

A quote lifted from the 2013 report from Auditor General Mr Colin Murphy: “*The expected cost of the 20 projects we reviewed is \$6.157 billion which is \$3.275 billion (114 per cent) more than the total original approved budget estimates: 15 of the 20 projects are expected to exceed their original approved budgets, of which four are expected to exceed it by more than 200 per cent, six of those 15 projects expect to exceed their original approved budget by more than \$100 million*”.

According to this report, overruns in time and cost appear horrendous; yet there seems to be little interest from the press, the industries involved, the State Opposition, the Federal Government and the community.

The Auditor General continued: *“Approximately 90 per cent (\$2.953 billion) of the cost variance for projects occurred during the evaluation phase of the project when the project business case was developed and the project scope and costs were more accurately defined”.*

Does this not suggest that from the birth of these projects until they reached the definition and delivery stages that the questions: “What are we paying for, what does it do and is it value for money” had not been asked in a meaningful way? In a political sense and in regard to monies already expended, it is often perceived by project champions, agency heads and consultant designers that, by the time a project has reached the definition stage, it is too late to go back and redefine it so as to achieve better value outcomes.

This is despite the possibility that the initial justification for a project may have been based purely on a political whim or on the wish list of a senior manager. Could it be that if the true scope and hence the likely true cost of a project were to be revealed up front it is less likely to get funding approval; even if the project truly does represent value for money? According to the WA Auditor General’s findings it would seem that effective due diligence for investing in capital assets is neglected right from the start; a view supported by the Hon. Malcolm Turnbull in his web page comments regarding one of Australia’s largest capital works, the National Broadband Network (NBN): *“The NBN has been shrouded in a web of spin, obfuscation and exaggeration”.*

What can be done when huge cost and time blowouts start to become apparent? Not much it seems, especially if a significant amount of money has already been expended on planning, design and perhaps the purchase of sites. The required extra money may be grudgingly found but always at great cost and disappointment to shareholders and/or taxpayers.

The community in general cannot be aware of what these blowouts are costing them or the means by which additional money is raised; otherwise there would be an outcry. In the case of governments, finding extra cash for a blown project could involve selling off an existing asset, deferring spending on maintenance, delaying some other needed facility or service, borrowing and raising taxes and charges. Public companies, at least in the past, have found it easy to raise or retain capital through the issue of additional shares, increasing the price of products and services or by reducing dividends. Consequently shareholders suffer, just as the taxpayer and the Nation suffers in the case of government.

Value management (VM) provides a tried and tested means for reducing the need for all this pain because it provides a focus on the cost of functions and their worth. The *purpose* of capital expenditure is expressed in references, government and private industry papers and financial principles in various ways. Some call it “Services”, some “Outcomes”, some “Deliverables” and others simply “Purpose”. They all refer to the same thing – “Functions” and “Functionality”.

Properly delivered, a Value Management Study (VM) utilises Function Analysis and other tools to facilitate a means for delivering functions and services in a better value way. It *does* ask the questions: “*What is it?*”, “*What does it do?*”, “*What does it cost?*”, “*What must it do?*”, “*What alternative means can be used to achieve the required outcomes?*” and “*What will the alternatives cost?*”

If Value Management and Function Analysis are employed right from the start, when a project is just a “glint” in someone’s eye, the unforeseen cost blowouts that torment Auditors General may be avoided.

In the context of Value Management the word “function” is all about “purpose” and “work”. “Analysis” is the separation of a concept or thing into its component parts. Function Analysis can therefore be considered as the breaking down of a “working” entity into its component parts or functions. At this level it is much easier to “identify” what we are actually paying for and much easier to find innovative ways of achieving the same outcome in a better value way.

VM workshops are often first held at the end of design development (perhaps because a constraint to project viability has emerged) but by this time considerable funds have already been expended. When such a workshop gets underway project champions proclaim, “We know exactly what this project must do!” However, as it progresses through stages where assumptions and functional requirements are tested, comments like: “We should have done this months ago” are often heard and it becomes clear to some participants that a lot of what they are discussing should have been dealt with at the Planning or Evaluation phase. Such observations would seem to tie in with the WA Auditor General’s findings.

Back in the early 1990’s prompted by the findings of studies from the likes of the Construction Industry Development Authority (CIDA) and others; there was a dedicated attempt to improve capital allocation procedures and the value of project outcomes. Most State Governments, the Federal Government and some larger private entities developed a procedure that if properly followed would ensure that rational strategic functional cost and worth analysis would be applied to the allocation of capital. Names like “Total Asset Management” or Strategic Asset Management” (TAM, SAM) were given to it.

A separate but closely linked procedure was developed to chart a logical course of project initiation and delivery for projects that were deemed necessary in terms of function, timely in terms of need and representing “Value for Money”. This procedure was intended to ensure capital projects would have rational beginnings, efficient design, expedite construction and provide a learning environment that would promote

continuous improvement. It was generally given a name like “Project Initiation Process” (PIP).

Both the Strategic Asset Management and the Project Initiation processes included Value Management at several key points to ensure those important questions of “*What are we paying for, what does it do and are we getting value for money?*” were asked throughout the birth and delivery of a project and beyond.

Since the 1990’s many champions of VM who understood and appreciated the benefits it could bring to the planning, delivery and operation of capital projects have moved on. Consequently many agencies seem to have forgotten how the 5 phase VM job plan should be utilised in a facilitated Value Management Study to ensure capital projects intended to either accommodate or provide services are methodically and effectively tested for purpose, cost and worth.

Value Management has a long history of success in adding value for money, beginning in 1942 with the work of Laurence Miles’ at the General Electric Company in the US. It can deliver improved value for money in several ways including: “Achieving all necessary functions for less cost”, “Providing an increase in value for no additional cost” and “Providing a disproportionately greater increase in functionality for some additional cost”. Would not achieving more output, for the same or less input resources guarantee improved productivity and competitiveness?

Australia is not alone in its need to achieve better value for money. Many other developed (and developing) countries including United Kingdom, Canada, China, Japan, Korea and Saudi Arabia have organisations similar to the United Kingdom Institute of Value Management and the Hong Kong Institute of Value Management. These organisations maintain a register of VM service providers and provide standards and training in the method. In Australia the Institute of Value Management Australia (IVMA) promotes the use and worth of VM and fosters and supports a qualified group of Registered Value Management Study Facilitators.

The IVMA is going through a period of change designed to raise its profile and increase both registered and non-registered membership. A new look IVMA is being launched by current members in the first half of 2014 with a message for all who would seek to improve the value for money of their products, processes and capital projects.

IVMA members are the best qualified professionals in Australia to assist agencies to ask the questions: “What are we paying for?”, “What does it do?” and “Is it value for money?” Governments, commerce and industry could do well to join and support the IVMA and its members in seeking the better value outcomes and the increase in productivity that Australia needs. Moreover, both government and private sector

agencies have a moral responsibility to seek and achieve the best possible value for the money their taxpayers/shareholders trust them with.

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