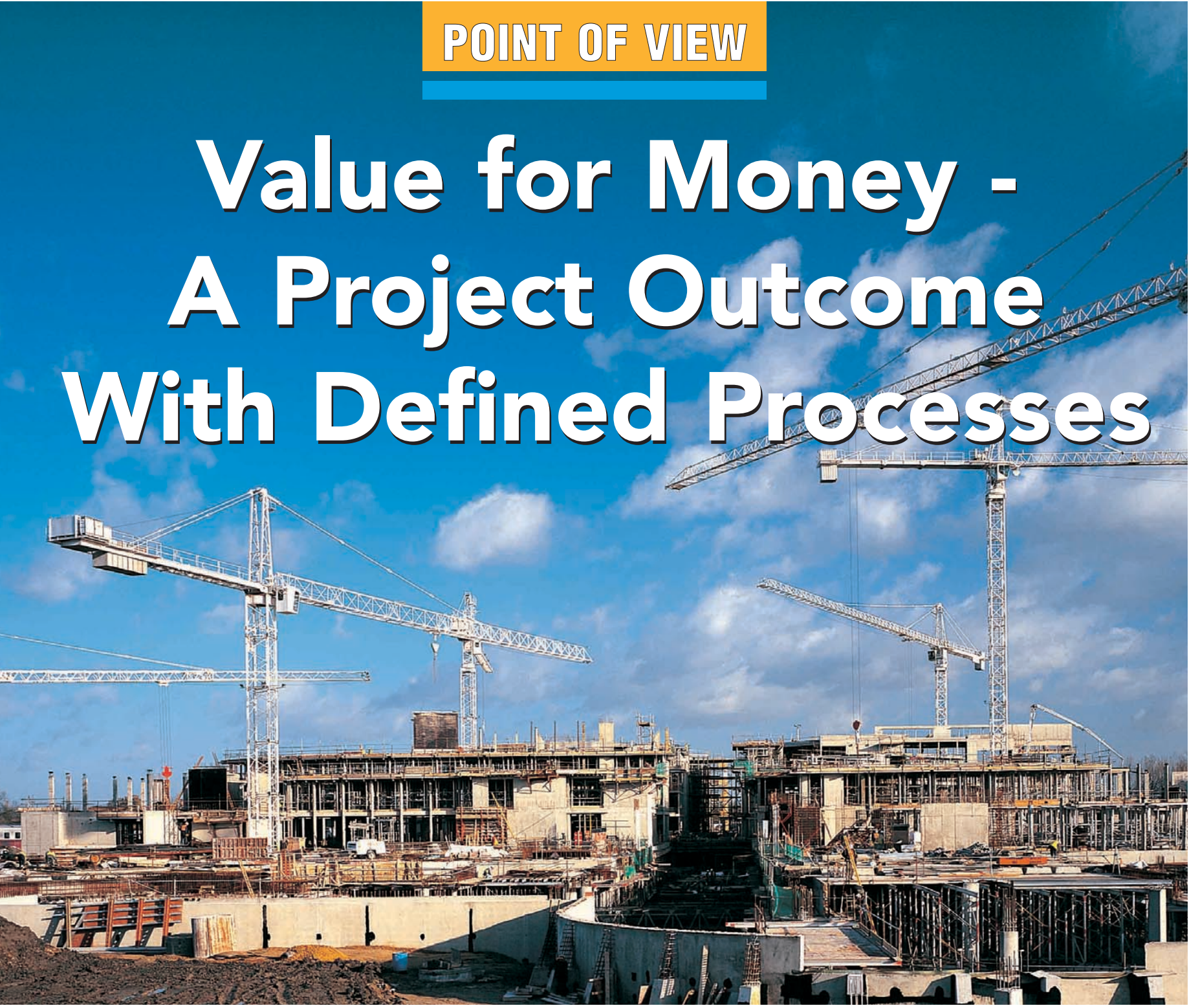
POINT OF VIEW

Value for Money - A Project Outcome With Defined Processes



A central focus of the next National Development Plan 2007 – 2013

There are a number of things that we now know about the Government's plans for maintaining the financial and physical progress that has been achieved under the current NDP for the period 2000 – 2006. We have recently learned that the overall objective of the 2nd NDP is to create an environment within the Republic that allows the private sector to be competitive within the international business community. This means that the Republic's physical infrastructure, social facilities and economic environment must, during the period, progress and mature to a level that is commensurate with their competitors.

To achieve this we are told that the next NDP will be:

- A strategic plan, meaning that it will not be a tactical one offering a listing of projects;
- Financial allocations to each sector will be indicative in nature and will be based on national, not regional, requirements;
- Funding for the 2nd NDP will ostensibly come from the Republic's Exchequer and not from the European Commission;
- All capital investment will have to satisfy Value for Money (VFM) outcomes.

The VFM objective is to be achieved through (sic) *rigorous appraisal and best practice management of all capital projects by the implementing Agencies and Departments.*

It would seem inappropriate for those organisations assigned to be responsible for implementing projects to also be the auditor for ensuring that the management processes used and the ongoing performance will produce successful outcomes and will ensure that what actually happens is what was planned. Best practice management, and past history of public sector performance, tells us that it is very unwise to have the 'implementers' also acting as the 'police force'.

It is this aspect of ongoing appraisal and best practice which is to underpin VFM, the central focus of Government's plans for the next seven years, that this article seriously questions.

Value and its Relationship With Construction Outcomes

It would be interesting to know what the Government, and the Minister, mean when they use the term 'value for money'. Are they perhaps using it mistakenly as just a new way

of measuring financial performance? The term has a much more profound meaning, as will be briefly explained.

The current thinking on the creation of value started during WWII in the USA at the company General Electric when they were faced with demands to support the war effort at a time when there were key material shortages. They found something quite remarkable and unexpected. By substituting an alternative material for one that they had used continuously in their manufacturing process but was now in short supply, they discovered that the cost of the product was reduced. They also found that the product was actually better than what they had been producing before.

They found that superior value was achieved when improvement came from the underlying functional requirements being enhanced and the overall cost being reduced. This became known as providing 'better value for money'. Better value is therefore a combination of enhancing benefits while reducing what is termed 'life cycle costs'. Life cycle cost (LCC) refers to the initial capital cost of something, plus its operating cost, its maintenance and eventual replacement costs. LCC is therefore concerned with the assessment of costs over the life span of the product or element under consideration.

This approach initiated some 60 years ago has now evolved into a set of processes that have become known as Value Management.

During President Clinton's second term of office a VM clause was inserted into all US public sector, and most private sector, contracts; the US contracting industry invariably refers to it as value engineering. But this term is synonymous with VM. The clause universally requires contractors to submit proposals during, and often prior to, the period of construction but after the letting of contracts. These proposals offer ways for the implementing agencies to consider options, within the project detailed work scope, to increase benefits and reduce LCC. There is normally a formula quoted in the contract documents that states how the financial savings of any approved and accepted proposal will be shared between the implementing agency and the contractor. The approach has been successful. It has generated better project outcomes. It has reduced the cost to the implementing agencies. It has, through sharing cost savings, increased the net profitability to contractors of undertaking projects.

An Overview of Value Management

All projects involve the allocation of scarce resources and, when complete, need to satisfy a range of requirements set by the implementing agency, the end-user and the range of other stakeholders that impact on, or are impacted by, projects.

The philosophy and techniques of VM provide a structured approach to the examination and development of a project that will increase the likelihood of achieving these requirements at optimum value for money. To be successful VM must be applied as a continuous process through the phases of conceptualisation, feasibility, scheme design, detail design and construction.

VM uses a set of creative problem solving techniques within a project stakeholder team to evaluate rigorously the key project decisions. The basic stages of creative problem solving, usually carried out within participating workshops, are widely recognised as follows:

- Define the problem;
- Identify different options for resolving the problem;
- Evaluate the options;
- Select the option offering best value for money.

The timing of the workshops is very important. They should be tied closely to key phases and stages in a project's development to provide the best opportunity for identifying needs and challenging key design and construction decisions before they are made.

Project cost targets are an important component of VM; but targets are not set to be achieved, they are set to be beaten. The aim of VM is always to deliver each element of design or of the project at a lower cost without detriment to the function of the elements. It is often found that about 80% of a project's cost is often contained within about 20% of the elements. This helps in focusing VM efforts on those elements that have a major impact on the cost.

Value management can be implemented irrespective of the chosen procurement strategy. Whether the approach is traditional, design and build (or any of its derivatives), management contracting, construction management, etc, VM can play a major role in making the cost reduction process more effective.

The basic premise of VM is that there is a certain amount of unnecessary cost inherent in every design. It is usually only possible to eliminate this unnecessary cost by identifying another solution that provides the same function (or benefits) at a reduced cost. Unnecessary cost is the difference in cost between an existing design solution and a better one (which may not yet exist). Because of the complexity of construction design, it is rarely possible to identify an optimum solution. But, in all too many cases, the first workable solution is what is found in contract drawings and documents. It is important to overcome this tendency by adopting the VM approach.

It would be of enormous benefit to the Irish construction industry if the Government recognised the importance of Value Management by including a VM clause in the new public sector contracts.

Pay Back

As you would expect, there is a cost in using VM. Typically between 0.5% and one per cent of the project cost can be spent in total by all stakeholders on VM effort. However, historically, the returns have been attractive. Capital cost savings, through using VM, are nearly always possible. It has been found that savings of the order of 10% to 25% are achievable on capital works projects.

Through using a VMCP (value management change proposal) clause in contract documents an incentive is provided to contractors to work more closely in partnership with the implementing agency. A good partnership enables a contractor to focus on aspects of the project that they know can be done more effectively and cheaper than set out in the contract documents. It also enables the implementing agency to consider proposed changes to design elements that will result in overall cost savings to the agency.

VM generated cost savings are shared between the agency and the contractor. If the agency pays the contractor for the effort in submitting VMCPs, the contractor typically receives 25% of the approved cost savings. If the contractor funds their own costs of submitting VMCPs, then typically 55% of the cost savings can be paid to the contractor.

It would be of enormous benefit to the Irish construction industry if the Government recognised the importance of Value Management by including a VM clause in the new public sector contracts. However, there is deep suspicion that the Minister uses the term Value for Money erroneously as a means of measuring financial performance. Accordingly, it is highly likely that an opportunity will be missed for creating a real win-win for Government, on behalf of the taxpayer, and for those companies engaged in providing Ireland's future infrastructure.

REFERENCES:

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