Value, Values and Value for money

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This paper accompanies the PowerPoint slide set to be distributed in the seminar

Introduction

New and re-furbished facilities for primary schools call for careful planning and design that effectively captures and integrates values of all those involved – parents, community, government, teachers and, of course, the children themselves. The notion of "values" and things that are "valued" have considerable emphasis in the PERI program and need to inform and be integrated into curricula, school programs and, the new and re-furbished facilities.

The desire to achieve and nurture confident children and independent learners in collaboration with families and caring citizens is strongly stated in the PERI literature. We read of "values education" and of nurturing appropriate "values" in students. We read of "passion" and "aptitude" of teachers as qualities that are highly valued. One is impressed with the passionate intentions of the committee and of their determination to see the whole question of "values" permeating and underpinning the curricula. Once planning and design of facilities commences, a further "value-term" will emerge - "value for money" – which will almost certainly be specified as a key requirement.

Is there a connection or relationship between these "value-terms"? Have "values" anything to do with "value for money" and what do we mean by "value", anyway? In this paper/presentation, I will deal with these questions. I will also deal with the way in which we can work collaboratively to capture values amongst stakeholders; to integrate them with other project requirements, and, to deliver best value for money.

In dealing with these matters, I shall describe and use the process of Value Management since this is a process specifically designed and intended to capture values, identify value and, deliver best value for money. I need to make clear at the outset that Value Management is a *collaborative* process that centres upon workshops that include key stakeholders and project-team members. The collaborative nature of Value Management, together with its emphasis on *organisational learning,* and its structured format make it an ideal vehicle to tackle the kinds of challenges that will be encountered in implementing the PERI program. I also need to make clear that we can apply the process of Value Management to whole programs; to the individual projects that make up such programs; and, to ongoing activities of operations.

Value

I will now turn my attention to the subject of value itself. It is indeed a fascinating subject with which philosophers have wrestled for centuries. A problem that immediately arises is that the term "value" is used in so many different ways and in very different contexts.

It is worth asking the question, "Why does anything have value?" Through extensive action-research and practice, we have recognised three core elements or *factors* that, collectively, determine the extent to which anything has value. The first of these three factors is "useful purpose". If an entity is perceived to have no "useful purpose" it is likely to have no value at all (to the one perceiving it). The second of these factors is "benefits", that is to say, the set of benefits that will flow from fulfilling the useful purpose. The third factor is the set of "important characteristics" relating to the entity.

The way in which these three factors work together to determine value may be seen by considering an example such as the Singapore MRT. From the point of view of the passenger, the useful purpose of the train is that it takes one from point A to point B. If the train does not do this, then to the customer, it has no value at all. But assuming that it does take the customer from point A to point B, the question of value does not end there. One benefit of fulfilling the useful purpose might be that the train enables the customer to get to work: so this is also a factor in why the train has value. Something that is most important to the customer is the frequency, regularity and reliability of the service. A more-reliable service is likely to have more value in the eyes of the customer. We could add other points, too, such as personal safety and comfort. Indeed, if we were to bring together a group of MRT

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passengers and discuss these factors with them, we would probably produce quite a long list of elements but we would be able to place them all beneath the headings of: useful purpose, benefits and important characteristics.

If, for a moment, we were to change perspective and consider the value of the train from the point of view of the train driver, an entirely different set of *value factors* would emerge. For example, the "useful purpose" of the train would have nothing at all to do with taking someone from point A to point B. Rather, the useful purpose of the train would be to provide employment. A benefit of this is that it enables the train driver to "put food on the table". An example of something that is most important might be health and safety at work. So even though we are considering the same train, the *value factors* from the point of view of passengers and train drivers are substantially different. We could keep the exercise going and consider the value of the train from the point of view, say, of the Ministry of Finance or a major shopping centre. Again, each would have their own perspectives. So it is with any entity. And so it is with PERI. There will always be multiple perceptions of useful purposes, benefits and important characteristics. In Value Management, we have a structured process that enables capture these perspectives in the collaborative environment of a workshop in which stakeholders and project-team members work together.

Value for money

To this point, I have described the factors that determine the value of something from various perspectives. I have made no reference whatsoever to money. In Value Management, we recognise that "value" and "money" are not the same thing, hence the term, "value for money". When we are referring to "value for money" we are always dealing with comparisons between options. As long as we separate the value from the money we will be able to see which option provides the best value for money. The intention, of course, is to seek the option that delivers most value for least money.

The process of Value Management seeks to create and explore options that deliver most value for the least money, taking a whole of life perspective.

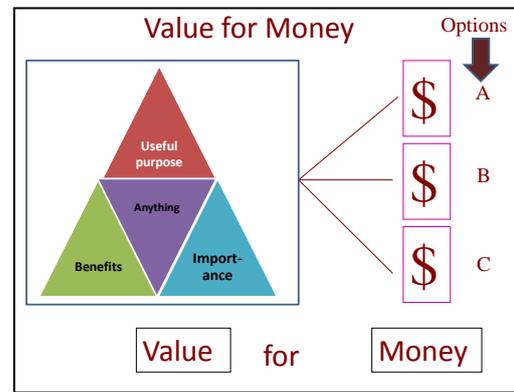This concept of value for money is shown diagramatically in figure 1.

Figure 1

Values

When we speak of "values" we usually mean those things that are particularly important to us; things we believe in; principles that guide our decisions and actions. A number of these are expressed in the PERI literature that includes values such as:
- integrity,
- humility,
- respect for others, compassion, and
- the responsibility to contribute back to society

It is during that part of a Value Management workshop when we are establishing the *value factors* that these "values" come to the fore. In particular, they are identified when we ask the question of each individual in the room "What is most important to you (about the entity being studied)?" By having all of the key stakeholders and project team members working together on this activity, a great learning opportunity is presented. The group as a whole is able to learn of the values held by individuals in the group (again, relating to the entity being studied) and to integrate those with other important characteristics desired from the program or project.

The value factors

The value factors of any entity comprise the useful purposes fulfilled by the entity, the benefits delivered and the important characteristics and it is recognized that there are multiple perspectives of each of these. Our challenge in Value Management is to capture these multiple perspectives and build them in to proposals for programs and projects.

Establishing the value factors is the first step in building *shared knowledge and understanding* amongst stakeholders and project team members in the Value Management process. Here again, the emphasis is on *learning*. Of these factors, I believe that achieving "unity of purpose" is the

single-most important challenge in bringing groups into alignment, thus minimising risks of duplication and omission in planning, design and construction.

The following example of value factors is taken from the workshop proceedings of a Value Management study of the proposed new facilities
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for the Science Centre Singapore. The workshop was conducted during early stages of planning and design in the first task of the workshop group was to establish the value factors. Box 1 shows samples of the material produced in the value factor exercise

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SAMPLES OF "VALUE FACTORS" FROM *SCIENCE CENTRE SINGAPORE*[*] VALUE MANAGEMENT STUDY

PRIMARY PURPOSES

The primary purposes of the new Science Centre (i.e. the whole "living entity") are to:
- *Promote interest, learning and creativity in science and technology, through imaginative and enjoyable experiences*
- *Contribute to the nation's development of its human resource*

The primary purposes of the new __facilities__ are to:
- *Accommodate SCS activities*
- *Create a new science learning hub*
- *Create a new face for SCS and support its re-branding*
- *Attract people (students, children, tourists, families, etc)*
- *Showcase innovation in the form of a green building*
- *Symbolise Singapore's emphasis on science*

BENEFITS OF FULFILLING THE PRIMARY PURPOSES

Educational benefits
- Allows the Centre to contribute in a much bigger way to the educational system – nurturing
- Enables students and schools to partner with science education
- Engenders more interest in science and technology as a career
- Enables the Centre to bring in more new concepts an refresh existing ones

Recreation and Tourism benefits
- Allows the expansion of a greater range of experiences for visitors
- Contributes to the development of a third recreational hub in Singapore
- Attracts many more people
- Creates many public spaces for people to enjoy
- Creates a buzz – vibrancy
- Creates opportunities to extend length of stay – tourists

THINGS THAT ARE MOST IMPORTANT

Important characteristics of the new facilities

(Note: each of the points listed below is a category heading where each category incorporates a number of separate "importance" statements)
- *Iconic building*
- *User-friendly*
- *Accessibility and Connectivity*
- *Building Efficiency and Maintenance*
- *Building Structure*
- *Activities and Use of Space*

*Used with permission

Box 1 Example of Value Factors

Integrating all facets of a project

The value factors provide the foundation upon which all further planning and development can proceed. Of course, a program such as PERI has many facets all of which need integrating into a "program-whole" so as to achieve the best

outcomes. The value factors will inform all of this. In Value Management, we encourage an approach that does not deal with programs or projects *in isolation;* rather, it deals with such programs or projects in the context of a *whole system.* This recognizes that the primary schools do not exist in isolation but are connected systemically. The

workshop helps in developing shared understanding of the connections and relationships within the system that the primary schools operate, therefore helping to build shared understanding of the system *as a whole*. This involves capturing those things that are subjective (such as individual and collective values), as well as those things which are objective - things we can actually measure and count (such as the number of students, the number of schools, the "bricks and mortar" of the buildings). Systemic connections and relationships such as those found in educational and social networks as well as the physical connections such as access, school layout and linkages all fit together to make the system work.

The Value Management workshop provides an opportunity to see and learn about these various facets and their interrelationships and, therefore, helps the group to understand their program or project from a whole system perspective, bringing together the subjective and the objective. The integration is shown conceptually in figure 2.

Examples from a system of educating primary school children

- integrity,
- humility,
- respect for others,
- compassion, and
- the responsibility to contribute back to society

Personal values

- Students
- Schools
- Programs
- Activities
- Time
- Cost
- Quality

Objects/Entities

Subjective

Objective

Collective values

Systemic relationships

- Community harmony
- Well-rounded children
- National reputation for excellence

- Social networks
- Educational networks
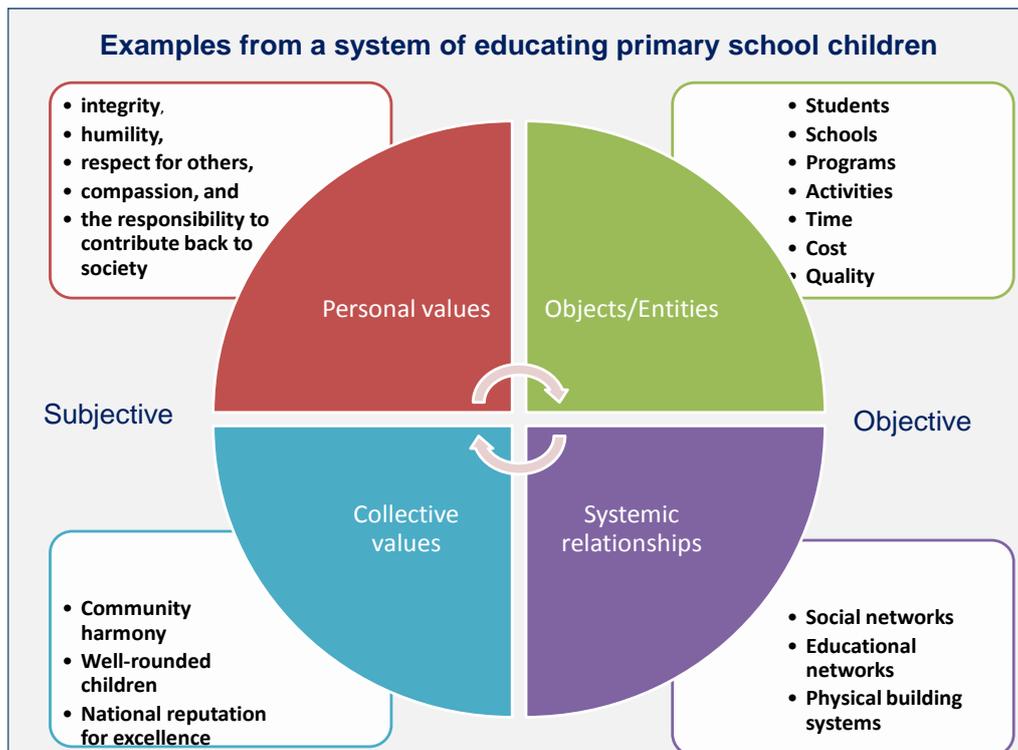- Physical building systems

Figure 2

Extracts from a Value Management study

The following extracts are taken from the proceedings of a Value Management study of the proposals to expand the St Andrew's Village (SAV) educational precinct. At the time of the study (2001), SAV was planning a full multi-level pre-tertiary education campus, to be the first of its kind in Singapore. The concept comprised bringing together 4 levels of education (i.e. the pre-primary, primary, secondary and junior college) within one campus and involved the following elements:

- Relocating St. Andrew's Junior College (SAJC) from Malan Road to Potong Pasir under the JC Redevelopment Program;

- Upgrading of St. Andrew's Secondary School (SASS) under the PRIME program. (Note: The PRIME program is a school upgrading building program of MOE to bring older school facilities

up to current modern standard and covers both the primary and secondary schools);

- Upgrading of St. Andrew's Junior School (SAJS) under the PRIME program; and

- Upgrading/redeveloping the facilities under the Anglican Diocese of Singapore (DOS), including the kindergarten, the church buildings and the Boarding House.

There were two main stakeholders for the project being the Ministry of Education (MOE) and the Anglican Diocese of Singapore (DOS). Both of these stakeholders were represented in the workshop, together with staff of the school, a couple of the school's Old Boys, planners and designers. The workshop was convened during the very early stages of planning and design. Details of the workshop are shown in Box 2.

St Andrews Village Precinct[*] Value Management Study

The specific purposes of the study were to:
- *build common understanding of core values, project objectives, issues, constraints and opportunities;*
- *address outstanding planning and design issues,*
- *develop guiding principles and a design philosophy,*
- *develop value adding proposals,*
- *seek commitment from all stakeholders, and*
- *develop an action plan*

Core Values established at the commencement of the workshop:
- Fostering the group strength and synergy of the schools;
- Facilitating interaction among the students to enable character formation;
- Developing church, school and community inter-relationships;
- Delivering effective Chaplaincy services;
- Harnessing resources/skills to effectively serve the communities (within SAV and beyond);
- Recognising and building on St Andrew's traditions and heritage.

By the end of the two-day exercise, the group had accomplished all that it set out to do. In particular, it had:
- Developed a vision and mission statement
- Established core Values to underpin planning and design
- Developed project objectives to guide the designers
- Established a set of guiding principles relating to:
  – Land and Facilities
  – Use of Diocesan buildings
  – Heritage and tradition
  – Traffic flow
  – Networking/bonding and a sense of belonging
- Developed proposals to deliver best value for money
- Developed an Action Plan to progress the project forward from the workshop.

*Used with permission

Box 2 – Outcomes from a Value Management study

By working collaboratively and learning together in the structured environment of a Value Management workshop, the group was able to produce those outcomes. Feedback from the participants highlights various aspects and benefits of conducting the value management workshop. Some of those comments are listed in Box 3.

"The Value Management workshop allowed us to see the different concerns and points of views of the various stakeholders. It was an insightful experience. .. Out of the workshop emerged broad areas that could help focus future dialogue and discussion to help the project to proceed forward".
Principal, SAJS.(2001)

"I greatly appreciated the opportunity for everyone to be frank about their hopes and their fears regarding this project. It was very useful hearing other people's perspective about developments. At the same time, the structure and discipline imposed by the external facilitator was very helpful and brought things together."
Principal, SAJC. .(2001)

"The Workshop served to identify the conflicting requirements of some of the stakeholders; decisions taken by some parties that had not been clearly communicated to others. False assumptions were exposed. This will result in a much more effective SAV when all the issues are resolved".
SAV Board member. .(2001)

"What struck me most was the informal and friendly manner in which various different interest groups were able to express themselves openly and frankly."
One of the SAV Old Boys. .(2001)

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Box 3 – Feedback from workshop participants
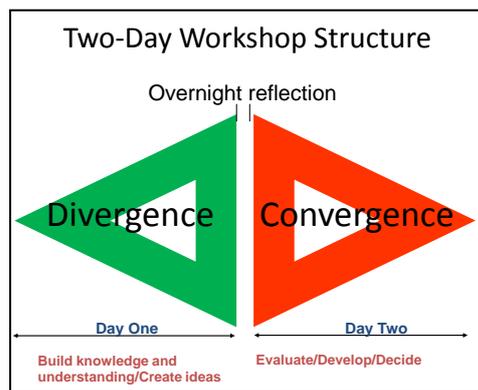
The process of Value Management

I will now turn my attention to the process of Value Management, itself. The core of the process takes place within a workshop in which stakeholders, project-team members and others (as appropriate) actively participate. The workshop is typically conducted over two consecutive days but there are many variations to this. Before the workshop takes place, there is a lot of preparation to be done. This includes writing objectives for the workshop, selecting participants, organising the venue, gathering and distributing relevant information and, briefing the participants.

A critical issue when preparing for a Value Management study is selecting the area of application of the entity being considered. For example, when planning Value Management for PERI, the initial area of application could be the overall program and would target value factors and guiding principles to guide all implementation. As implementation proceeds, the Value Management focus would shift to individual projects or groups of projects and the application would be to the preparation of project briefs, conceptual design, detailed design, construction and, ongoing operations.

Once the workshop gets underway, we go through quite a structured process that involves several steps. First, we build shared knowledge and understanding amongst the group members of the entity being considered and, importantly, the context in which the entity sits. This is an important part of the *learning* aspect of Value Management to which I have already alluded. We establish value factors, describe the journey that the entity has taken, clarify givens and assumptions, find out about current proposals and costs and, analyse functions of the various components that make up the entity. After this time of knowledge building, we change pace and activity and spend some time using innovative and creative techniques to generate multiple ideas of how to achieve the study's objectives whilst delivering best value for money.

Those two steps - building shared knowledge and understanding and generating multiple ideas - usually take the whole or at least most of the first day of a two-day workshop session. The third step is about evaluating the ideas and selecting those that show most promise. The fourth step is to take the selected ideas and develop them up into proposals. Much of this work is done in focus groups and, from time to time, the whole group reconvenes to consider the proposals emanating from the focus groups. The last step in the workshop is to make recommendations (or take decisions), draw conclusions and produce an action plan to move forward the recommended

proposals. After the workshop, a report is produced and the action plan implemented.

Two-Day Workshop Structure

Overnight reflection

Divergence Convergence

Day One — Build knowledge and understanding/Create ideas

Day Two — Evaluate/Develop/Decide

Five success factors have been identified for the process of Value Management. The first of these is a common workshop structure or work plan and it is important that this plan is adhered to. The second success factor concerns the mix and commitment of workshop-group members. This is critical and is determined by examining the Value Management study objectives and deciding who needs to be participating in the workshop in order to achieve those objectives. Managing the Value Management process is the third success factor and this includes all of the preparatory activities described above. The process needs overt commitment and support of senior management. This is the fourth success factor. It is usual for the most senior person in the organisation to be present and open the workshop and, in some cases, this person stays on and actively participates for the whole workshop session. The fifth and final success factor is effective facilitation. It is usual to engage external facilitators skilled in Value Management to conduct the workshop. If all five of these success factors are handled well, there is a very high likelihood that the Value Management study will achieve its objectives and make a significant contribution to the work at hand.

Benefits of Value Management

We can see benefits accruing at various organisational levels from undertaking Value Management studies. At a Ministry level, the major benefit is the confidence engendered from knowing that a transparent review process is being consistently applied and that best value for money is being systematically sought. In the case of PERI, this would apply to key investment decisions, the overall program and, individual projects, groups of projects and ongoing activities. Also at the Ministry level, there is the benefit of achieving improved alignment between the overall program and individual projects and, also, alignment between the program and other programs of the Ministry as well as government priorities.

At the levels of programs and projects, benefits commence with delivery of best value for money outcomes but certainly do not end there. A major attraction of Value Management is that the process enables and encourages participation of stakeholders such that clients become actively involved in planning and design. The establishment of value factors in the collaborative workshops means that everyone is working towards the same end rather than to their own assumptions. This, too, is a significant benefit. The collaborative workshops accelerate *learning* and enhance communications across a broad spectrum of stakeholders and project-team thus potentially reducing project development time.

Potential applications of Value Management to the PERI program

It seems from the current documentation that there are many opportunities for Value Management to assist the PERI program applying the methods and approaches that I have described in this paper. I envisage a number of sequential workshops commencing with the overall program, following on to planning, design and ongoing operations. The first step would to establish a set of value factors and over-arching principles across the whole program. This would form the basis of any further Value Management activity. The value factors and over-arching principles could then be used to establish guiding principles for planning the new generation of primary schools, as well as principles for accommodating the non-academic elements of the school program. The workshops could be used to establish priorities for changes in adapting existing school facilities to new curricula as well as establishing priorities for work across the whole program. Procurement strategies could be developed and prioritised. In each of these applications, the workshop groups would always seek pathways and solutions that provide best value for money taking into account whole of life costs and the overall system of education in which the primary schools fit.

As planning moves into conceptual design, detailed design, construction and then ongoing operations Value Management workshops would continue to focus on delivering best value for money across the whole system but would focus in each study on more detailed aspects of the program. The value factors establish at the commencement of the Value Management journey would continue to guide decisions and recommendations. The values enunciated in the current documents, for example, those to develop confident children who are independent learners - involving families and caring citizens – would be carried through and be evident, either explicitly or implicitly, in all outcomes. Recommendations regarding planning and design of facilities would always reflect the core requirements of enabling effective, engaging teaching methods in implementing new curricula.

Conclusion

The collaborative, learning, approach of Value Management will substantially assist program-development through its focus on value, values and value for money. The Value Management workshops provide excellent opportunities for stakeholders and project-team members to work together, having unity of purpose. This will help to procure facilities that encourage and enable teaching of new curricula, thus developing confident children who are independent learners - involving families and caring citizens