

**INSTITUTE OF VALUE MANAGEMENT AUSTRALIA INC
- CONFERENCE 1993: PARTICIPATING IS BELIEVING**

"PARTICIPATING IN VALUE MANAGEMENT"

"Shot gun marriages can work" - unwilling participants often make the best participants, it just takes a little persuasion.

- Richard J Dinham FIVMA, FRAIA

Metaphors can abound, but in Value Management you can drag horses to water and they will drink! This thesis is a compelling case for the VM process and can be illustrated in both the public and private sector.

In the public sector, government policy dictates the need for value review.

In the private sector discretionary environments exist.

The downside of reluctance can be a half heartedly organised study which only when realised early can be managed.

The upside of reluctance (and good management) can be study of great insight with penetrating results.

Management, administrative sponsorship and organisation as a key activity cannot be taken for granted, and this paper will illustrate the power of support, the value of the study management process in getting the best results and most importantly the harnessing of the spirit and skills of all participants - especially the reluctant ones.

The issue must be directed at management, study organisers and participants.

In some areas of our industry the VM process is abused - with the concern of disrepute and lost opportunities.

The direction towards shorter and shorter studies to overcome reluctant participation must be corrected by increasing the effectiveness of the study process together with a changing approach to the organisation of the study.

Issues to be addressed in this presentation include:

- The highs and lows of VM/VE - so much success and so little concrete acceptance
- Study processes and formats
 - Objectives a basis for objection
 - Formats - towards the instant answers
- VMS keys
- The enthusiasts and the recalcitrants - a typology
- Case studies, and
- Directions - some approaches for VMS success.

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VM / VE STATUS

OH1 40 years of VM/VE results should be enough to convince organisations that the process should be a key part of design and construction. But apparently it is not. A review of VM Institutions newsletters, conference papers and journal articles finds a constant stream of remiss and remorse of lost opportunity.

OH2 "VE: is it withering on the vine?"

"Impediments to growing"

"Recognition of VE as a discipline because practitioners have not done an adequate job of selling the advantages"

"Regulate to make VM/VE compulsory"

In the perceivedly organised processes of manufacturing VE/VM is an inbuilt instrument of TQM. In our industry, the similar discipline in our organisations is not evident despite the forests of endeavour in manuals and management mandate.

In the USA Engineering and Construction corporations VE/VM had such great successes but no sustained presence as part of the corporate structure. The large corporations - Bechtel's, the Turners wrote it all up but it is understood that the practice is ad hoc.

OH 3 The Government agencies also wrote tomes equivalent to the size of both the new and old Testaments. In Carter's presidency VE was a part of life for a while but in Reagan's, not evident. While the defence industry has certainly been in the forefront of VM/VE use, it did not endure across Government and American practitioners are now (in 1993) enthusiastic for the signing of the new "OMB-A-131 Circular which requires Federal Departments and agencies to "use VE as a management tool to reduce program and acquisition costs". This is 40 years after Mile's introduction of the technique and well documented successes.

While VM practice is worldwide, the premier practitioner representative organisation SAVE can only boast some 170 international members, other than in Japan where their national organisation is strong. These 170 come from 30 countries and it is noted in the recent journals that quantity surveyors in the UK still talk only hesitantly about VE and no one else seems to refer to it at all. SAVE's cause and effect diagram developed in investigating impediments to increasing membership provides some insight into the problems as perceived by their practitioners. The highest ranked impediments included lack of university outreach and lack of trust among others; there was no mention of lack of success of the techniques.

Ref: Interactions June 1993

Cause and Effect Diagram
Chapter Leadership Forum
 May 1, 1993

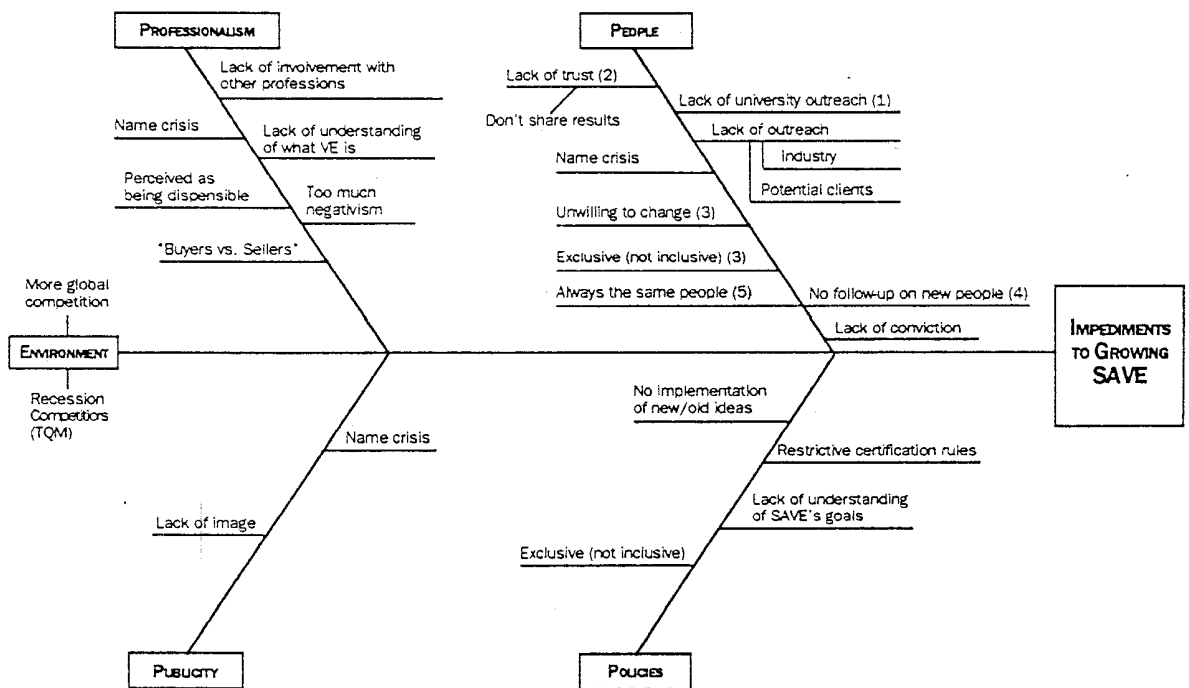


Figure 1: Cause and Effect Diagram

OH 4 In Australia, one of the major construction groups, Leighton introduced VM into their corporate culture in the early 1980's and in their training program over the next 8 years were responsible for spreading VM skills more broadly than any other construction group (and a significant number are represented in active practice today).

The enthusiasm of the Leighton Executive saw their program mature, however, while VM is still very much a part of their corporate culture, their VM practice has generally moved outside the organisation. A cursory review of a range of contractors, engineering and design consultants shows that VM is still not a concrete part of the construction industry. There is certainly some growth in the area with maturity being heralded by the IVMA organisation and by the establishment of an educational outreach at tertiary level, however, we have a long way to "real" acceptance.

In the public sector, only NSW has a VM mandate and even with the regulation and a strong organisation, general acceptance of the process is desultory at best (with some exceptions, particularly in the TAFE sector where the corporate mentality accepted readily the opportunity for review). It seems that in many areas both public and private that VM is perceived as "just another layer of effort that adds cost and delays to getting the job done".

- OH5 Why the problems when the results are so evident? Why the lack of consistency in application of the processes. The techniques are not difficult, but it is recognised that the organisation is. VM is a discipline and perhaps discipline is not part of our culture. Given reluctance in our society and in other, at least western cultures, it seems that the problem is attitudinal. An attitude issue perhaps as basic as fear of correction or fear of losing control.
- OH6 The preferred solution to elevate the status of VE is to make it mandatory, to generally address "strong wording of regulation rather than recommendation", perhaps that is the reason for lack of consistency in application. "A case of dragging a horse to water" and given that the problem is probably attitudinal, there is an innate reluctance, it is this we must address.

STUDY PROCESSES

- OH7 The potential of VM is well known to this audience and the opportunities are broad as the process should be entered into each phase of the project system. We all have examples at all such phases, such as.
- At project idea to develop strategy,
 - At strategy acceptance to confirm management,
 - On verification of brief,

- At design review,
- At concept enhancement,
- In documentation, and
- and on.

The study objectives for each of these study phases are varied but generally must be in terms of value adding, of saving, of correcting and of confirming direction. The objectives are generally performance based and certainly look to making a project better.

The objectives being generally corrective might be part of the attitude issue. The fact that a project is to be reviewed in VM is often enough to generate a great deal of emotion on the heart of a project designer, and most of it negative. To the designers it means that some unknown person is going to second guess their decisions.

The issue of likely change, of associated delays, of interruptions to the process of design are all at large to the design consultants. Central here is the planning of the design process where foreshortening of the design phase to cope with badly organised programming puts a greater pressure on design time. Clients are generally not sympathetic to such complaint as their own lack of understanding of the additive design process means that they fail to appreciate why the whole design is not "correct" on the first draft. It means they assume that consultants have perfect knowledge.

Middle management, ie program and project managers have a different mindset, being driven by a broader (?) responsibility. In this case, the VM study may range from a "tool of convenience" to a "hammer of correction". A method to control perhaps, but in the same instance there is a fear that correction to direction will mean program change and concomitant wrestling with management for more time, more fees, even though the VM program may well have resulted in capital cost reductions.

- OH8 Examination of the disciplines needed for building and engineering projects (taken from a 1993 manual prepared by the US VM firm Smith Hinchman & Grylls) shows the common complexity of a mix of stakeholders. This model is good for review because we can easily demonstrate the constant change in our industry with new roles to meet new challenges and an even more complex mix of disciplines which need to be added to the VM forum, such as:

- the project manager
- the asset manager/the facility manager
- the financier
- legislative/legal representative
- the insurer
- the taxation specialist, and so on.

In addition to these specialist roles, the "client" will include a range of managers and users, with different objectives. Identification and acceptance of all stakeholders and their stake is a key factor in a study.

The process of design and construction is complex. The level of knowledge of all parties is only boundedly perfect at best and hence the VM process will always provide some positive results for all. However, the fact that all participants may face correction and have their level of ability "checked" is central to the reluctant participant. Somehow, the process is seen always as more "stick than carrot". This needs attention.

The formats for VM are broad, tailored to particular purpose. In general these include:

- the traditional 40hr workshop: ie, total project review often one off;
- concurrent workshops, held regularly but pre-programmed and sequential;
- package workshops on a needs basis to suit tender processes;
- variation reviews on a needs and crisis basis to assist resolution in construction;
- project audits for strategy and direction of a total project;
- strategy workshops, to investigate options for action and assist corporate decision making; and
- so on.

Study times range from, at best, the 40 hour basis which is well understood in terms of input requirements and expectation of outcome to the scale of diminishing returns with study programs reduced to 2 days, 1 day, and even half day charades held just to satisfy bureaucratic regulation without understanding the nature of the work, or carried out by project managers to suit a hidden agenda.

Study time is more often than not a function of organisation reluctance, the 2 day study is often the "best you can get" in terms of commitment of consultant time, of lack of preparedness to meet longer study costs, or of management impatience. However, the appropriate length of study time is not tied to "never mind the quality, feel the width", it is related to the actual value study process, ie the recognition of the need to undertake a range of sequential activities to achieve study objectives.

The final reduction of study time to "no need as we do it all the time" is final evidence of lack of understanding by management or managers and designers, of the value process.

VMS KEYS

OH9a Every part of our industry has quick keys for success. Property developers used to hang on to the 3L's:

- Location
- Location
- Location

This became more sophisticated in facility selection, 5 more keys were added to the 3L's - the Loos, Lobby, Lighting, Lift and Landscape as key success factors in building tenancy.

OH9 In VM, I suggest we could have the 7 (seven) C's, certainly we need:

- Co-ordination, in organisation;
- Co-operation, in team building;
- Caring, in terms of interest and enthusiasm;
- Consultation, in increasing shared knowledge; and
- Commitment to the outcome of the study.

We also need to add some COERCION, and overall the VM process must be keenly CONSIDERED. A study must be appropriate, must fit and must be complete.

OH10 David Steven's workshop model presented at this conference last year is clear in outlining the basis for a good workshop:

- a structured format;
- external facilitation, and
- tools or techniques for idea creation and analysis.

He included commitment, equity, trust, mutual goals, continuous evaluation and timely responsiveness in his model to illustrate the partnering process. However these issues are also directly applicable to VM technique. The reluctant promoters of VM are often careless of format, they do it themselves to get it done and do not bother with technique - as they do it naturally - all the time!

The issue of organisation is the key. A study without shared recommendations, monitored action and a documented interactive report is worthless.

Study climate is another factor and will vary from study to study. There is a view that "constructive discontent" is a necessary part of a good study. Certainly total acquiescence is often concerning rather than welcome. However, the issue of reluctant participants needs special attention, for to turn these into contributors adds additional value to study success.

OH22 We can learn from Peter Senge's "The Fifth Discipline" in the art of team building. He proposes a range of disciplines:

- System thinking;
- Personal mastery;
- Mental models;
- Building shared visions; and
- Team learning.

From the fifth discipline he lists a range of everyday laws which are most applicable to the VM process. The list reinforces the pragmatic basis of VM enhanced only by systematic application. If we achieved real team building, we would have great study success and greater universal application rather than reluctant participants.

TYPOLOGY

In any study the reluctant participants from management and designers can include:

- OH11 - the know alls
- the unaccountables
- the done its
- the always do its
- the been doing it for years
- the passengers
- the insecure, and
- the mischievous, and

the worst are those holding second agendas as there are "VM users" and there are "users of VM".

In a study, the participants also group into another set of types - Bulls and Bears, jammers, clogs, footballers, undertakers (and "project" managers). We certainly also have the antagonists and the negotiators and as you are aware, we can tell those at the start of a study by the places they sit!

The facilitators role, to get the best out of a study, is to research participants, understand their stakeholding, their role and their relationship with the team. A focus on the group's dynamics and some subsequent manipulation and interaction is necessary to ensure that the team drops their guiles and guises and works towards the study objectives, not their own.

Again reference to David Steven's models of last year is of value - a good facilitator has good group counselling skills, knowledge of learning theory, some psychology and a command of linguistics. To these skills should be added, a sound knowledge of the complexities of the industry.

CASE STUDIES

The study objectives, rather than project objectives are critical to VMS success. The setting of the objectives, most often performance based, is of key importance.

The objectives may well be initially set by the study promoters, however ownership by the study team is key, just as ownership of the study results always obviates reluctance and objection.

Analysis of some 50 recent projects and a small sample in this paper shows clearly that each study has its "necessary" discontent, however the sample most importantly indicates that the results will only be implemented post study if management accepts and signs off the study result. The case material reviews examples of all disciplines from management, owner, client and user groups to design consultants, project management and the involvement of community.

- CASE STUDY 1 REVIEW OF STRATEGIC DECISIONS AND COST BENEFIT:
- CASE STUDY 2 INFRASTRUCTURE: IDENTIFICATION AND REMOVAL OF RESOURCES MATERIAL:
- CASE STUDY 3 JOINT EDUCATIONAL PROJECT INCLUDING FEDERAL AND STATE JURISDICTION AND FUNDING:
- CASE STUDY 4 RELOCATION OF GOVERNMENT SERVICES TO REMOTE REGIONS:
- CASE STUDY 5 CONSOLIDATION OF SERVICES FUNCTIONS FOR NSW GOVERNMENT:
- CASE STUDY 6 REUSE OF HISTORICAL COMPLEX:
- CASE STUDY 7 REVIEW OF EDUCATIONAL DEMAND IN CONFIRMING DESIGN BRIEF
- CASE STUDY 8 OLYMPICS 2000:

DIRECTIONS

OH21 This paper has in a descriptive form raised a number of participatory issues in VM practice which need correction. These include:

- a lack of real commitment in our industry
- implementation dependant on regulation
- performance objectives as "sticks rather than carrots"
- studies in haste
- lack of understanding of development management
- need to broaden study discipline base
- contracted study formats
- lack of professionalism in the use of VM, and
- identification of reluctant participants

THE ISSUE OF COMMITMENT TO VM/VE IS TO DO WITH PERSONAL ATTITUDE AND THE CORRECTION IS IN EDUCATION. Striking at corporate carelessness is not enduring. The value process is bottom up just as implementation of Quality Assurance, may be "top down requested" but it can only be implemented with acceptance at all levels and driven from the workforce.

SIMILARLY IMPLEMENTATION BY REGULATION WILL NOT ENDURE. However with a greater concentration on education, such regulation will be more acceptable and not avoided.

DESIGN PROFESSION'S ATTITUDE IS ALSO EDUCATION DEPENDENT, as is the need to recognise the complexity of the process and product of our industry. Such recognition might bring a greater acceptance of our boundedly rational behaviour and the acceptance of review, correction, opportunity to value add as a necessary part of life.

SIMILARLY, THE ATTITUDE OF PROJECT MANAGEMENT, OF CLIENT AND OWNER IS IMPORTANT. It is necessary that the nature of the design process be understood and that idea of review is part of that process not one of ambush.

PERFORMANCE BASED OBJECTIVES ARE KEYS TO MEASUREMENT OF SUCCESS, they give the opportunity to benchmark, however in line with the attitudinal issue above, we need to establish the VM study in a positive ambience to encourage all participants not with the emphasis on correction. More "carrot less stick".

THE HASTILY STRUCTURED STUDY, FITTED IN RATHER THAN PLANNED INTO THE WHOLE PROJECT PROGRAM ADDS NO VALUE. The truncation of design time is an industry wide problem. Design in 1 week, document in 4, build in 50 and then repent with results of low quality and commercial failure. The much heralded Japanese manufactured "3 day car" and "3 day house" are only possible with long design lead times developing product and processes. Like most planned strategies, the time at the front end is key to project success.

THE CONTRACTED STUDY FORMAT IS SIMILARLY DEBILITATING TO VM SUCCESS. Experience shows that less time will be spent in completing a study within the discipline of the study format than outside it. The issue is time budgeting and programming to ensure that all participants are prepared for the project and that remuneration for the study is a part of the project budget. (The return on investment needs no further promotion),.

THE VALUE PROCESS NEEDS THE DISCIPLINE, the interaction - at least the 5c's of co-ordination, co-operation, caring, consultation and commitment, as well as the opportunity for continuous evaluation, ie a structured set of activities.

THE BROADENING OF THE STUDY DISCIPLINES is also important in assisting the whole team cope with the complexity and accountability required for building. Building performance as an investment with attendant shareholding adds a new discipline to the whole process.

THE LACK OF PROFESSIONALISM MUST BE MORE EASILY CORRECTED WITH EDUCATION AND THE NEWLY ESTABLISHED NATIONAL CENTRE FOR VM MUST BE AN OPPORTUNITY.

The issue of professionalism must be directed to promoters and practitioners. The expression "it will be all right on the night" is only, in theatrical circles, said when there is confidence that sufficient planning, direction and practice has been put in place.

VM should be in all architectural and engineering design curriculum at least, and at best the promulgation of study results could be a part of the industry media. VM should be part of technical training for facility managers and for all skills in the industry.

VM IS A CO-OPERATIVE ACTIVITY - self administration is impossible at least, ineffective at best.

IN ADDITION WE MUST CONTINUALLY UPDATE THE VM PROCESS. The education process is key and it is most necessary to see VM, not as a strange left field activity carried out by strangers to your project but, as a part of the ongoing management activities which make up the processes of design and construction.

THE RECALCITRANTS ARE A CHALLENGE FOR THE STUDY ORGANISERS AND FOR THE FACILITATOR. The study research, agenda and subsequent structure should take full cognisance of the personality of the participants. The early group dynamics can also help, however pre-planning, task allocation in the study and post study to ensure ownership of the outcome is necessary.

THE STUDY OUTCOME, RECOMMENDATIONS, ACTION PLAN AND FINAL IMPLEMENTATION WILL ALWAYS RELY ON ACCEPTANCE OF THE STUDY DOCUMENT. THE POTENCY OF THE STUDY IS IN "SIGNING OFF" BY ALL PARTICIPANTS - THE DIFFERENCE BETWEEN A VMS REPORT BEING USED AS A DOOR STOP OR AS A STRATEGY DOCUMENT FOR PROJECT DIRECTION IS OWNERSHIP BY STUDY PARTICIPANTS, IE THOSE WHO BELIEVE IN THE OUTCOME.

Thank you.

Richard J Dinham

PS:

AN OLYMPIC 2000 POSTSCRIPT: A REAL OPPORTUNITY TO PLAN:

Given the importance of the Olympic 2000 decision, there is need to ensure that the process is continuous and effective. Through the NSW Government mandate the VM process was put in place at the commencement of planning. Continuation of the process into the seven year development period leading to the event is necessary. It is hoped that a Olympic VM program might read:

Completed VM1 At concept stage in 1990

Completed VM2 At system confirmation stage but a little too late for great change in 1992 prior to finalisation of the Bid.

To be done VM3 Risk analysis for management strategy

To be done VM4 Village Strategy

To be done VM5+ For each project element

AN INTEGRATED PLAN OF VALUE MANAGEMENT SHOULD BE PROGRAMMED AS A PRIORITY ISSUE.

Richard J Dinham
October 1993