VALUE MANAGEMENT – THE OBJECTIVE FORENSIC ANALYSIS TOOL!

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ABSTRACT:

Value management and alternative dispute resolution methodologies have been shown to be quite similar. The application of value management techniques to dispute resolution through mediation or arbitration processes offers promise to resolve conflicts, calm the waters, open avenues of dialog, accelerate the process, and reach a more equitably allocation of costs and liability. Undoubtedly, practicing value engineers can embrace such a “marriage” of these two professional skills. It will be more difficult to convince practicing attorneys of the benefits to be realized by applying value management principles to dispute resolution.

INTRODUCTION

The application of value management (VM) to forensic investigations, dispute resolution, arbitration and mediation is an untapped venue worth assessing. This conclusion comes from personal experience where VM was applied to a specific case to develop alternative repair schemes to that recommended by plaintiff's technical experts. Results minimized financial obligations that defendants faced as the mediation process approached its logical conclusion.

Why apply value management in the legal profession? By focusing on construction defect conflicts, the reasons become apparent. A common scenario in the legal wrangling of two opponents is for plaintiff's experts to generate repair recommendations, and costs, which are large – very, very large. This is done with the hope that once a settlement is reached, which is usually less than that proposed by plaintiff's expert, there are sufficient funds (after the attorneys and experts are compensated) to accommodate reasonable repairs of defects. On the other hand, defense experts generate the lowest cost solution to control losses, should they be found even partially liable. Should defendants prevail, there might be little left to satisfy any damage once attorneys (and experts) have been compensated. Often compensation costs proposed by both sides are vastly different; and, representing the extremes of the case, neither is truly reasonable.

Traditionally, if the deviation in solution costs is very large, an attorney or mediator will bring in a third party expert to assess both sides. By necessity, this new expert will need to spend considerable time reviewing each position and performing their own analyses in order to make a recommendation. This effort takes considerable time and cost lots of money. It also usually results in only one additional solution that might be located somewhere between the two radically opposing alternatives already on the table.

Wouldn't it be beneficial if a method could be applied that generates a reasonable solution and cost that, after all external parties are compensated, would resolve the conflict and correct the construction defects that were the basis for the lawsuit? The method promoted in this paper would be the VM study. In this approach there might be no review of the opposing positions. Rather, the study would focus on solving the problem and developing mitigation alternatives. Then, instead of just one option typically generated by third party experts, the attorneys would end up, very rapidly, with many possible alternatives and costs that have been prioritized/ranked, and for about the same expense (or maybe even less expense) than a single third party expert.

The value management methodology, when applied in an objective, unbiased manner, offers an excellent opportunity to provide solutions that are truly defensible in court. At the least, the process offers the opportunity to calm the waters and open dialog among the parties.

VALUE MANAGEMENT IS:

Many readers of this paper are thoroughly familiar with the definition of value management and the important steps contained in its Job Plan. But this paper is also written for those unfamiliar with the process. If you are steeped in VM lore, please skip to the next section – or read what is contained below as a beneficial reminder of the key components of the process.

Value management, also referred to as value analysis and value engineering (we will use the terms interchangeably), can be described in several ways:

> *Value management is a process consisting of the systematic application of analytical, creative, and evaluation techniques in a multidisciplinary team setting; where the focus is on achieving the required functions, performance, and quality while maximizing value.*
>
> *Value management is an organized effort directed at analyzing the functional requirements of systems, equipment, facilities, procedures and supplies for the purpose of achieving essential functions at the lowest total cost, consistent with the needed performance, safety, reliability, quality and maintainability.*
>
> *Value management is an organized study of functions to satisfy the users' needs with a quality product or service at the lowest life cycle cost through applied creativity.*
>
> *The value methodology is a professionally applied, function-oriented, systematic, multi-disciplined team approach used to analyze and improve value in a product, facility design, system or service.*

Value management is <u>not</u> "checking the calculations", "peer review", "detailed cost estimating", or "quality assurance/quality control", which are a normal part of engineering design.

Value management is <u>not</u> an organized effort to reduce the cost and/or quality of the project or eliminate it altogether.

Value management is <u>not</u> intended to replace or direct the design or to embarrass the designer by emphasizing mistakes made in design.

Value management is a strictly adhered-to process that follows specific steps and procedures. Without turning this paper into a Module I training course, the specific steps in the VM/VE process are as follows:

> *Step 1. Preparation* – developing a basic understanding of the client's/user's needs and requirements, specific goals and current costs with an agreement on the scope of the study.
>
> *Step 2. Information* – which is gathered prior to and during the study, and is reviewed and discussed with the team.
>
> *Step 3. Function Analysis* – defines the functions of the project through an organized use of the Function Analysis System Technique (FAST) diagram that shows how the functions are related to one another. This is a most important step in the process.
>
> *Step 4. Speculati*on – also known as creativity – is the application of brainstorming techniques to develop a large quantity of ideas.
>
> *Step 5. Evaluation* – reduces the large quantity of ideas to a few high quality ideas.

Step 6. Development – the concepts identified in the evaluation phase are developed into specific recommendations that have been technically validated and quantified as much as possible.

Step 7. Report – containing the team's recommendations and a presentation to the management group to achieve their understanding of, and/or receive their approval of, these recommendations.

Step 8. Implement and Audit – tracking the implementation of recommendations and auditing the results to measure the effectiveness of the value management effort.

Merle Braden, URS Corporation, developed a succinct description of the value management process and benefits that he employs in his business development literature. With his permission[1], the following discussion is taken from this literature:

> The heart of a successful VM study is the function analysis and the Function Analysis System Technique (FAST) logic diagramming. Demonstrated skill in constructing and uniquely using FAST diagrams is imperative. FAST diagrams are the key to achieving a meeting of the minds of the varied parties involved in planning. Functions are the common language for the many disciplines involved; however, it is their relationship defined by building the FAST diagram that fuses contention and leads to understanding. FAST diagrams display client objectives and present grand scale proposed solutions on one sheet of paper. The end result will optimize the client's objectives against life cycle cost considerations.
>
> The VM process has proven to be the ideal format to bring a variety of interests together and focus them on the client's goals. VM is a holistic problem solving system in which functions form the common language. Functions are easily understood, they are clear and they are honest. They disarm most bias and learned response. Functions are the building blocks for FAST diagram construction. This activity coalesces strangers into a team. The FAST diagram is presented in a common language that crosses all technologies. As a group activity, it also supports team building and consensus. It allows multi-disciplined team members to communicate with each other while objectively analyzing the project during interdisciplinary reviews.

Often the "value" is realized in cost-savings to the project (and it is important to recognize that this is a life cycle cost savings rather than just a first cost savings). This is accomplished by eliminating redundancies, substituting better materials, using different alternatives, etc. to accomplish the same function. Sometimes, the VM study will recommend changes to the project that will significantly improve its value while increasing construction cost, life cycle cost, and/or both. If the performance and delivery of a project can be improved with a corresponding decrease in cost, then this is ideal.

The above discussion is enhanced by a plethora of publications and brochures available through SAVE International – 'The Value Society'. Those unfamiliar with VM or SAVE are encouraged to visit the SAVE web page at www.value-eng.org.

ALTERNATIVE DISPUTE RESOLUTION IS:

This section is presented for those who do not practice in legal circles and need to know more. Litigation, in most cases, is an inefficient and costly process. Fortunately there exist alternatives that can, if properly applied, shorten the process, improve efficiency, reduce the costs to be borne by participants, and achieve a fair and equitable resolution; hopefully, avoiding the animosity generated through litigation that often leads to long lasting acrimony among the parties. These alternatives are grouped under the title of alternative dispute resolution (ADR).

In 1992, Michael Adams[2] (we will examine his paper in more detail later) listed the ADR options, in order from least to most control of the parties over the outcome, as follows:

- Arbitration
- Summary jury trial
- Mediation-arbitration (med-arb)
- Mini-trial
- Mediation
- Conciliation
- Negotiation

For descriptive purposes, let me quote some from Michael's paper with regard to some of these options:

Arbitration, a quasi-judicial process conducted before a panel of neutrals [or neutral individual], *is the most time-tested ADR approach.* Sometimes in the form of binding arbitration, it is an old technique that has been applied to the construction industry for a long time. The discovery process is often relaxed or even eliminated in the arbitration process to the point where both parties may not be able to examine the other's documents and positions.

Negotiation, at the other end of the ADR spectrum, is a process involving the parties directly and jointly in seeking a mutually acceptable solution without outside assistance.

Conciliation is a process whereby a third party brings the parties together and assists in maintaining lines of communication between them as they negotiate a settlement.

Mediation is a facilitated negotiation process. A neutral, selected by the parties, provides assistance with issue definition and development of settlement options. The facilitator, process, and agreement, however, are all fully under the control of the parties. The mediator, who possesses the confidence of all parties, tries to get the sides to reach a middle ground acceptable to both. The mediator will gain sufficient knowledge of all positions so that he or she understands the minimum resolution acceptable to each.

Not included from Michael's list are two additional ADR techniques:

- Resolution by experts

- Private litigation

Resolution by experts can work quite well in purely technical disputes. Here, each side selects an expert, they in turn select a third expert to act as the chair, and these individuals then reach a solution to the technical issues that will be accepted by all parties.

Private litigation (perhaps the 'mini-trial' in Michael's list above) involves engaging the services of a private jurist, typically retired, to act as the judge in a private court all parties agree to fund. Normal litigation rules for civil cases apply to this process, which excludes a jury and can reach resolution very swiftly for potentially significant savings to all participants.

A new approach to ADR involves merging the ADR concepts with partnering. Jim Chodzko[3], in his unpublished paper *Disputes and Dispute Resolution*, has created this merger in what he terms a Dispute Management Program (DMP). A DMP provides the framework and components essential to the support of partnering. *Everyone benefits. Contractors are paid and project owners pay no more than a fair price for extra work and legitimate construction impacts. Project designers, construction managers or contract administrators, and owner representatives are able to focus on building the project while avoiding haggling and potential liability for alleged errors.* Jim identifies seven components of DMP that, when all are present, would help the process run smoothly perhaps avoiding the 8th and final step, binding arbitration if the program fails in some way. As paraphrased from Jim's paper, the components are:

1. Total Quality Project Management that would include policies, procedures and teamwork to insure better project management with fewer errors, changes and other sources of conflicts.

2. Improved People Skills, through training, for all project personnel so as to improve communications and interpersonal dynamics while lessening tension and conflicts.

3. Partnering, in the traditional sense, involving all participating parties to promote a successful project environment where all parties work together and claims are avoided or readily resolved.

4. Dispute Avoidance and Collaborative Problem Solving Techniques used to avoid disputes and jointly solve problems, build a sense of teamwork, and employ the results of creative value management proposals that reduce cost while maintaining or enhancing the work performed.

5. Win/Win Negotiation which includes looking for mutual benefits and seeking increased value in order that both parties examine the basic interests instead of positions on an issue, crafting a solution meeting each party's needs.

6. Change-Order Management Programs to help contractors and project owners identify, track, document and negotiate settlement of extra work and impacts without adversely affecting partnering.

7. Standing Neutrals consisting of experienced construction experts (neutral expert or a dispute review board) who monitor progress in order to understand and help resolve problems as they develop.

Regardless of the technique employed, the objective of ADR is clear – reach a settlement avoiding costly depositions, exhibits, and ultimately trial, with the inherent risk of undesirable outcomes and eternal acrimony. Disputes can be resolved if the parties want them to be resolved. This is most important for ADR processes to be successful. Without a mutual desire to resolve the disagreement among all the parties, litigation becomes the only recourse.

The value management process offers the most promise in mediation. Once all stake holders have agreed to abide by the results of mediation, the mediator can use the VM process to seek out the best solution. For the results to be acceptable, the plaintiff needs to be satisfied/"made whole" where the defects, in construction cases, are corrected, returning the facility to its original condition - but no further. The defendant agrees to a solution that does not add enhancements to the project. For more information, the reader is encouraged to examine the Dispute Resolution Board Foundation website at www.drb.org.

ARE ATTORNEYS LISTENING OR EVEN INTERESTED?:

When you broach the topic of applying VM principles and methodology to cases in litigation, the reaction, even from those practicing VM, is not as positive as one would hope. Some argue that attorneys have little or no vested interest in the VM approach. Some true skeptics claim that attorneys only want to "maximize" the return to the plaintiff or minimize the damage to the defendant – depending on which side they represent. I have heard the term "tunnel vision" used where attorneys are set in their ways on how they do things that can incorrectly appear to the public as if they are "milking the system". In reality, they see an absolute necessity to go through all of the steps, including depositions, to satisfy themselves that they have identified the "smoking gun" that will bolster their position. They would be reluctant to use the VM methodology if it could sidestep some portion of this legal journey, achieving a solution in less time and/or reducing plaintiff's award, or increasing damages borne by the defense.

Is there any hope of marrying VM into the legal process? Actually, as others have examined, there is an excellent correlation between the two professions, particularly when applied in some of the techniques associated with alternate dispute resolution (ADR) including mediation and arbitration.

THERE IS A VM/LEGAL CORRELATION:

Surprisingly, I have been unable to identify much literature on this topic. Two papers brought to my attention address or focus on this topic. In 1990, Virginia Willingham[4] (now Ginger Adams, CVS Life Member and Past President of SAVE International) wrote a paper entitled *Value Analysis: Universal Applicability, Limited Usage*. Contained in the paper is one small section, "Value Analysis in the Legal System". Here, Ginger compares the VM Job Plan with the Legal Process and notes the significant similarities reproduced below:

VM Job Plan	Legal Process
Information Phase	Discover process, depositions
Speculation Phase	Research; looking up precedents; considering what opposing counsel will present
Analysis Phase	Application of precedents to case at hand; counter arguments to opposing counsel's case
Development Phase	Development of case presentation; which precedents to use in court; what defense/prosecution to present
Presentation Phase	Hearing/Trial
Implementation Phase	Verdict
Follow-Up Phase	Freedom – Sentencing – Probation

The second paper, mentioned earlier, is a much more in-depth examination of the application of value management in the legal arena. Michael Adams'[2] 1992 paper, titled *The Value Managed Mediation of Construction Disputes*, examines how ADR, specifically the mediation process, exhibits similarities to the value management process. As this paper represents the only detailed discussion of the topic published, to my knowledge, we need to examine it in more detail.

In focusing on the mediation process as the most likely ADR technique to find value management an acceptable tool, Michael quotes two papers by Cooley[5] and Moore[6,] also referenced herein for the readers' benefit. Each describes the mediation process in a series of steps with Cooley having eight and Moore twelve. Michael takes these and reorganizes them into seven groups for comparative purposes, as follows:

Cooley – Eight Phases of Mediation		Moore – Twelve Phases of Mediation	
Group I			
1.	initiation	1.	initial contacts with the disputing parties
2.	preparation	2.	selecting a strategy to guide mediation
		4.	designing a detailed plan for mediation
		5.	building trust and cooperation
Group II			
3.	introduction	3a.	collecting background information
4.	problem statement	6.	beginning mediation session
		7.	defining issues and setting agenda

Group III

5.	problem clarification	3b.	analyzing background information
		8.	uncovering hidden interests of the parties

Group IV

6a.	generation of alternatives	9.	generating options for settlement

Group V

6b.	evaluation of alternatives	10.	assessing options for settlement

Group VI

7.	selection of alternatives	11.	final bargaining

Group VII

8.	agreement	12.	achieving formal settlement

Now, if the reader reviews the earlier section describing the value management Job Plan and understands all the steps that the facilitator takes in the VM process, it becomes clear that, by creating the seven groups, Michael has cleverly developed an association between mediation and value. The relationship would then be:

Mediation Components ⇨ Job Plan Components

Group I ⇨ Step 1: Preparation
Group II ⇨ Step 2: Information
Group III ⇨ Step 3: (Function) Analysis
Group IV ⇨ Step 4: Speculation (Creativity)
Group V ⇨ Step 5: Evaluation
Group VI ⇨ Step 6: Presentation
Group VII ⇨ Step 7: Implementation

The VM step requiring a report is omitted as, in legal cases, a report is rarely if ever prepared. A report can be incorporated into Step 6 as desired.

AN EXAMPLE:

I recently had the opportunity to apply value management to a California case where the parties had agreed to mediation. The fundamentals of the process employed and the outcome achieved can be described for the benefit of this use as an example where VM can be applied in the legal arena. The issues in the case revolve around alleged construction defects with a Geogrid mechanically stabilized earth (MSE) retaining wall. Significant lateral movement and settlement of the MSE wall

backfill had caused damage to the pavement at the top of the wall. The following four photographs depict the Geogrid wall and some of the typical damage to the parking lot behind the wall:

Photo 1 – Geogrid Mechanically Stabilized Earth Wall

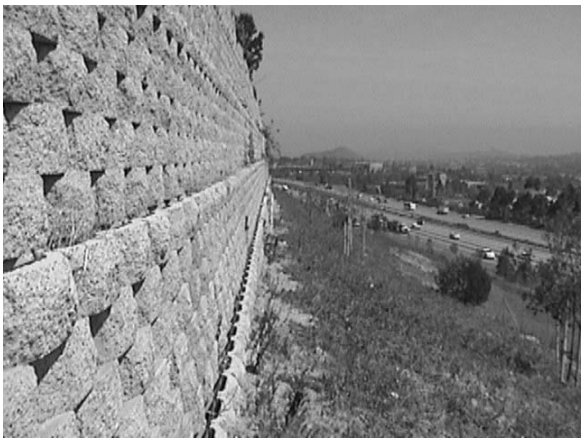

Photo 2 – Close-up of Geogrid Wall

Photo 3 – Extensive Pavement Cracking Behind Wall

Photo 4 – Close-up of Pavement Cracking with Sinkhole

The VM workshop was requested by defendants who were searching for lower cost alternatives to the repair recommendations proposed by plaintiff's expert. The recommended repair was extensive and expensive; but, would resolve perceived problems associated with the project. As the facilitator, I assembled a team of geotechnical engineering, retaining wall design/construction, cost estimating and other experts, some representing different defendants named in the case. Originally, I conceived of a team of experts who had no previous involvement in the case. However, since the study was funded by the defendants rather than jointly with the plaintiffs (the preferable approach), the defendants' experts were also invited to participate at their request. This team composition created certain requirements of the study. Experts for the plaintiff were invited to participate in the beginning of the study in order to present their recommended repair alternative and respond to the team's questions. They were then asked to leave so as not to hinder the free discussion of the project or the creativity of the team. To satisfy the participation of all, all oral or written communications generated from the study, including (but not limited to) repair recommendations, scope of repair, and cost of repair, would be deemed to be protected pursuant to the Mediation Privilege (California Evidence Code Sections 1115et. Seq.).

It was explained to the participants that the VM process would lead them to acceptable solutions to mitigate distress at the project. Furthermore, in order for the recommendation(s), generated by the workshop, to be acceptable and defensible, it was made quite clear that participants had to leave their biases and independent representations for their clients, if such existed, at the door. Even the hint of a conflict of interest or non-objectivity would destroy the results of the study and waste everyone's time and money. Objectivity was the key to success. This demand was repeated frequently throughout the study, which, for economic and scheduling reasons, lasted only two days. Again, the reader is reminded that this is a less-than-ideal situation with true independency preferred. Thus, the team recognized and accepted that the generated recommendations might be acceptable to all defendants, but might not be well-received by the plaintiff. Still a good solution might strengthen defendants' position before the mediator, and more reasonable cost of repair.

Once all understood and accepted the rules of the game, we rapidly proceeded through the VM process, while taking certain liberties demanded by the concentrated two-day schedule. The team recognized and accepted my definition of the function of the project, which was quite clearly to repair an allegedly damaged retaining wall. Thus, we did not spend additional time developing a FAST diagram. Additionally the attorneys did not request a formal report. An oral presentation of our findings and recommendations was sufficient. All remaining steps in the VM Job Plan were adhered to, although I had to "crack the whip" to keep things moving along and on schedule. There was little room for extended conversation. Everyone had to remain focused on the task.

Deliberate steps were taken to improve objectivity, minimize bias, and create recommendations that could be convincingly presented to the mediator. The team initially developed performance measures (criteria) by which each idea would be evaluated, and weighted the performance measures from most to least important. The creative process developed 43 ideas. In reviewing the 43 ideas, I took the team through a second initial level of rating each idea. This was done again to impart as much objectivity as possible into the process that would select those ideas worthy of becoming recommendations. Many received low ratings and were rejected; 11 were written up as recommendations with order-of-magnitude cost estimates. These 11 were then subjected to a final rating system where each was numerically ranked from excellent to poor when compared to the original performance measures. A mathematical matrix was developed that multiplied the ranking times the weighted value for the measure. For each idea/performance measure combination, the total (sum) weighted measures was calculated. This number, when divided by the estimated cost for the recommendation, created a value ratio for each. Those three recommendations that had the highest value ratio were selected for presentation to the attorneys.

When all was said and done, the VM team gladly admitted that the exercise was extremely valuable, that a large number of alternatives were available to resolve the problems at the site (more than each participant had anticipated), and that recommendations generated were truly objective and defensible. Regardless of the role of their clients in the case, the recommendation(s) developed represented the best choice for resolution. Specifically, for those readers who prefer numbers, the solution with the highest value ratio had an estimated cost of about 25 percent of the original solution proposed by plaintiff's expert.

HOW TO MAKE VM A SUCCESSFUL COMPONENT OF ADR:

As stated earlier, the goal of the VM process is to generate an alternative, recommendation or solution that is objective and defensible. Once achieved, it becomes difficult for either side to promote arguments that debunk the results of the study. Below are some additional suggestions that would enhance the successfulness of the VM study:

1. Assemble a team of experts truly independent of the case/project, with not even a hint of conflict among them. This would increase the objectivity/accessibility of the process/recommendations. A team of independent experts, and the recommendations they generate, would be of significant value to the mediator/arbitrator who, ideally, would commission the study with full support of both plaintiffs and defendants.

2. Assemble a team of independent experts with experience and skills specific to the nuances of the issues. Neither side should be able to challenge the participation of any team member. For example, in a construction defect case involving building settlement, relevant experts would include a geotechnical engineer experienced in foundations and ground stabilization; a structural engineer experienced in soil/structure interaction and load distribution; and a contractor experienced in settlement-related repairs, grouting and ground stabilization. For a retaining wall study, the team would include a geotechnical engineer experienced in earth pressures, drainage and the design of different types of retaining structures; an individual with expertise in proprietary wall types/design; perhaps a geotextile expert; and again a contractor with relevant repair experience.

3. Include a qualified independent cost estimator in each study. This is extremely critical. Any objections levied at the selected recommendation(s) will likely center on cost estimate accuracy rather than on the method or repair proposed. The estimates prepared must include anticipated soft engineering costs (additional design, investigation, construction management, etc.), other contingencies, inflation, and life-cycle costs. The details and accuracy of the estimates must be greater than what is normally developed in value management studies during the typical one-week workshop. It may be best to retain the cost estimator for a period of time beyond the completion of the workshop to allow the preparation of more detailed estimates that will be defensible and acceptable to all stake holders.

4. As demonstrated in the case history above, there are occasions where team members can be individuals who have participated in the project or are experts designated for the case. Most likely, this would be a study supported only by the defendants and runs the risk of rejection by the plaintiffs. Still, the study could assist the defense in solidifying/unifying/strengthening its position. The participation of the team members must come with conditions to maintain the objectivity and defensibility of the study:

    a. Have at least one, preferably more, totally independent team members.

    b. The team members already “attached” to the case must understand and accept that they leave their biases and ‘advocacy’ for their client outside the room at all times.

c. They must be totally objective in creating, promoting and developing ideas and recommendations.

d. The facilitator must continually remind/emphasize that all recommendations developed must be objective and free of any perceived bias – otherwise it will not be defensible later on and the entire effort would have been wasted. The input of bias into a solution will likely backfire on the individual responsible for violating the "rules", negatively impacting everyone else as well.

e. The facilitator must be the "role model" of objectivity for everyone.

f. The cost estimator on the team should be completely independent without bias or conflict. The reasons/benefits of this were already stated above.

g. The team must accept the fact that this effort, and its results, may be a "hard sell" to the other side who, regardless of the professing of objectivity, would view the results as biased and suspect. Even so, the solidified conclusions and recommendations may be of great value to the mediator assisting him in bringing both sides closer to resolution.

NOW THE HARD PART – A CONCLUSION?:

I doubt that it would be difficult to convince practicing value engineers that they can provide their expertise to the legal profession, particularly those who have forensic/expert experience. After all, this would represent an expansion of their value management practice. Where the difficulty arises is in convincing attorneys and "combatants" that they would benefit from the application of value management to their situation. A logical step in achieving this goal might be to enlist the support of carriers of errors and omissions (E&O) insurance. Michael Adams has suggested incorporating the use of VM in dispute resolution through a partnering approach with insurance companies providing E&O coverage. This certainly is worthy of consideration as part of the implementation process. Jim Chodzko is suggesting another partnering path with the Dispute Management Program that offers considerable promise if implemented at the start of construction while merging a value management process as an integral component within the program.

But, returning to attorneys, the role of the legal participants will impact their willingness to use VM in their case.

Plaintiff's Attorney – least likely to support the application of VM as they typically seek the highest cost alternative that allows them negotiating room in which to maneuver. It becomes difficult to convince them that the lower cost alternatives recommended by the VM workshop will be in the best interest of their client. However, plaintiff's attorneys might consider accepting the VM method if they believe that their position is weak and VM can strengthen this weakened position by providing a reasonable, defensible alternative.

Defendant's Attorney – more likely to support the application of VM as they are seeking defensible solutions that will reduce the exposure of and/or cost to their client (that is once they overcome the 'tunnel vision' described earlier in this paper). This assumes that they lack the evidence needed to prepare convincing arguments for dismissing their client from the case. They may also harbor some fear that the VM process might generate acceptable solutions at costs greater than anticipated. They might feel "trapped" by the recommendations that could be generated by the workshop. But, if VM produces 8 or 12 ideas, none of which have been designed, then the attorney might find it advantageous to argue a mitigation cost that represents the average cost of all of the VM-generated alternatives, because some (usually the lowest cost option) may not prove out in design while others might be too costly.

Mediator/Arbitrator/Special Master/Judge – most likely to accept the VM process. These individuals are attempting to reach a solution to a problem that is reasonable in cost, makes each party as whole as possible, and is acceptable to all, and to do this in the quickest manner so as to minimize the legal costs. Value management can be a very cost-effective, forensic analysis tool for achieving these goals.

Expecting attorneys to quickly embrace value management is truly a naïve, idealistic view. It will be difficult to convince attorneys and their clients that value management does not threaten their position, negatively impact their clients, or cause a significant reduction in their income. Acceptance and implementation of value management in the legal arena will be a slow, painful, uphill battle. Those interested in seeing the success of this effort must be willing to carry the banner and weather the storm (allowing latitude for platitudes). Successful applications that are well publicized will be the best ammunition in this battle.

Over 20 years of forensic experience has taught me that, contrary to the popularized negative image of attorneys as greedy individuals out to "milk the system" (although there are a small number who fit this description), the vast majority are professionals seeking to best represent the interests of their clients. Given this reality, the value management profession should be able to develop convincing reasons why the process can benefit the case. And in those few situations where we encounter the unscrupulous lawyer out to extend a case in order to maximize their profit in lieu of serving their client, we will never be able to get them to accept the benefits of value management. However, the attorney opposing these less-than-professional lawyers might embrace the tool and find ways to use it to strengthen their position.

Additionally, the reader is reminded of the close similarity of the two professions as described by Ginger and Michael Adams. This parallel methodology relationship should allow open discussions between the two professions of how value management and alternative dispute resolution can benefit from a "marriage" of skills. Once embraced, attorneys, mediators and arbitrators will find that, as a minimum, value management will "calm the waters" and open dialog making early resolution achievable.

It is going to take a few courageous attorneys to get the ball rolling and promote the use of value management as a forensic investigation tool. We just have to approach it one case at a time.

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