GETTING THE THUMBS UP!
SUCCESSFULLY JUSTIFYING YOUR IDEAS

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ABSTRACT

This paper identifies several reasons why Value Management (VM)M proposals may not be readily accepted and implemented by upper management, especially if higher technology is involved. It also suggests several simple techniques which can be adopted by the VM practitioner to enhance the probability of acceptance.

INTRODUCTION

These are exciting times to be in the metal forming and manufacturing industries. VM has helped put technologies to work that were only futuristic dreams even a decade ago. Such technologies as numerical control and electronic coordinate measurement and data linking are well known in most factories today.

VM will help auto makers with an eye on the 21st century to create electronic cocoons on wheels designed to protect passengers better and help them avoid collisions. Function analysis has identified a need for smart air bags that distinguish between a frail 6 year old girl and a burly 40 year old man, and adjust the inflation parameters accordingly. Equally brainy seat belts may cinch and loosen, depending on the passengers personal physique and age.

Value Engineering (VE) may bring forward techniques to control speeds so cars travel at safe distances from other vehicles and apply automatic brakes when collisions are imminent. Microwave radar and laser sensors may detect cars, poles and other obstacles drivers can't easily see while other night vision devices and heads up displays may aid navigation in darkness and bad weather. It is even possible that automobiles might achieve the function of communicating information with each other and the highway system to promote streamlined traffic flows.

VM process studies may help industry find the technology to build a complete lights out man-ufacturing facility which can:

1. Receive alphanumerical product specification from its customer on a data linked communication system.
2. Develop electronically, a manufacturing process plan and numerical control programs to drive its production resources.
3. Select and disperse the material to the various production resources for processing.
4. Cut and form the material and forward the pieces to robotic assembly stations, returning unused material to storage and remembering how much was left, and in what shape.
5. Assemble the components accurately and with the right amount of dispensable materials such as glue and grease.
6. Prepare the products for shipping.

Most of this could be done without human intervention and more quickly.

In another scenario, a lumber company can cut down a tree and by comparing its chemical and physical properties to a database, predict the characteristics of the boards and panels it will produce. By continuing to measure those properties through the various finishing processes, the company can enhance the reliability of the prediction as the lumber is processed.

The firm will deliver value by being able to anticipate precisely how much, what kind, and what quality of boards and panels will be available and when the customer can expect them.

At some point, when the sensor technology permits, the company will know what it will get from a tree before it is cut down, so the company will be able to be very precise in tree selection and conserve natural resources.

This data management system is readily available to all industries, as is the basic sensor technology. All that is lacking is the VM process to break loose the imagination to put it together. The VM technology which is lacking in a number of companies is the one tool that can translate what is already available in a convincing and financially viable program that management can accept.

THE PROBLEM

The report phase of the VM job plan must be convincing because senior managers must be confident that the proposed program has been thoroughly planned and thought through. Most managers, at one time or another, have put money into what turned out to be a hair brained scheme. Therefore, they can be skeptics when a valid VM proposal makes its way to the boardroom.

VM programs must be financially viable. Even the classiest and most exciting new technology has to pay for itself. There is no way around this, regardless of what someone would like, and regardless of what technology magazines might say.

The following reasons for rejecting the proposal are often given to the VM team when talking about streamlining factories:

1. You cannot justify the idea.
2. Management will not accept it.
3. Management just does not believe in it.

Finally, there will be those who blame the U.S. managers short term investment policies for turning down their pet advanced technology projects.

These reasons may be cop outs. The following may be the real reasons VM proposals are turned down. Note that not one of them has anything to do with management reluctance to invest in VM, technology, or the time frame to recover the investment.

Nobody did the research work. When the proposal is presented to the senior manager, and there are no answers to his first 10 questions. None of these questions is particularly difficult and generally do not go deep into the technology being presented.

No answers are provided because no one on the VM team got into the details of how the program was going to work, or what real effect it would have. The VM idea, which might have

been a good one will be defeated in a mixture of mumbles and mutterings.

Generally when the VE T-charts are used, the situation examined in detail, and accurately planned, the budget shrinks because there is less cushion built in to provide for the unknowns and oversights. This allows for easier approval of the VE proposal.

The proposal really does not solve a problem. This is a common reason for a request to be turned down. Management may not understand the real problem or how the proposal affects the solution of the problem. If the proposal does not affect management's perception of what is wrong, there is no value in presenting the idea.

It may sound strange, but some companies often spend large amounts of money on projects that have no value, and they usually find it out after the fact.

Whatever the VE idea, it must reduce costs,produce a more salable product, open up new markets, or achieve something good and measurable. Just implementing advanced technology is not reason enough to spend money.

The VE proposal was not well packaged and presented. Major programs must be sold which means that the entire VM story must be well told in a logical sequence and format, just like the job plan.

Just doing the project research and solving a real problem are not enough. Management has to see and understand the picture clearly and believe in the value of the proposal, the solution, the team, and the presenter. This requires preparation and rehearsal.

In companies where there is a competition for resources, rest assured that approval will be left with the project that is well packaged and presented in most cases.

The proposal came out of the shadows. Some talented engineers and scientists have a tendency to work alone on highly technical projects. It is not unusual for them to develop solutions for problems that no one in senior management knew existed.

It takes the awareness generated in the information phase of the VM project to define the opportunity for improvement. When management approves the participation of the team, they are indicating an acceptance that the project is worth doing. Management further backs this resolution by the commitment of funds during the report phase of the VM process.

The proposal had no sponsorship from upper management. For anything other than minor expenditures, it is critical that someone in senior management be committed to the project before it is presented to management as a whole. This is the role of the VM sponsor.

It is a credibility builder to know that at least one other manager is supportive. It removes some of the anxiety that accompanies going it alone in signing off a major expenditure.

The proposal was the twenty first the president had to consider; he funded the first twenty and they all failed. It is tough to follow failure. Once burnt by a technology and proposal he did not really understand, a manager must be forgiven if he is more reluctant to sign off on the next one.

On the other hand, if one's competition is making a similar investment as a result of their VM program successfully, it might be a good idea to consider joining them before you are left in the dust.

The team never finished the project. It is especially painful when a VM team fails. This pain is caused by the fact there was a need when the project was initiated, and is amplified because there is only one way for a VE project to fail, and that is to fail to conclude.

Every VM team would like to hit a home run and save millions of dollars for their company. But the truth is that there are more singles than home runs, and more savings available a dollar at a time.

Even when the team has to report that an idea to improve a particular function is not feasible, they have not failed. They have merely taken a practice shot and can return to function analysis to select a new opportunity for improvement.

These are some of the reasons teams do not get their VM proposals for advanced technology projects approved. It is sad, if the rejected technologies can make it possible for firms to compete successfully with anyone, anywhere, regardless of lower labor rate, government subsidy, or exchange rate advantages.

THE SOLUTION

Taking the right steps in developing the VM proposal for advanced technology can often mean the difference between viability in the market place and failure as a business. There are several easy steps in the VM program that can be taken. They are not at all difficult to follow.

Understand in the information phase of the project where the firm is going. It is much easier to know how today's technologies can be valuable to a firm if the VM team takes time to investigate where the firm expects to be tomorrow or in five years.

Horror stories are told about the firms that have made major financial commitments to VM projects on products that were phasing out long before the investment could be recovered. There have even been facility upgrades when a higher level of management in the firm had every intention of closing the facility.

It is an often ignored truism that investments in the advanced technology recommended by VM must fit the direction and strategy of the firm.

Use the evaluation phase of the job plan to find something that makes sense. Another truism is that there has to be a value to solving the problem. Otherwise, it is nothing more than a nuisance, and there is no value in that. Often, large amounts of money are spent on a nuisance, and those who spent it are puzzled when there is no return.

There is another aspect of that sensibility. The project has to be relatively risk free, technologically, financially, and politically, if senior management is going to approve it.

The VM team is expecting too much to ask an executive to risk his career on a proposal with a 50/50 chance of success, regardless of how exciting it might be technologically.

Recruit and use the VM team. Too often engineers moan, The accounting system will not recognize the value of the proposal. Usually the problem is not the accounting system at all; the proposal just does not have value.

Even when the roadblock is the accounting system, it may be because the accountants have been advised at the eleventh hour that the entire method costs are allocated and the budget has to be changed. Of course their reaction is hostile.

Or put the shoe on the other foot, it may be that the VM project is salable only if the product is completely redesigned, or if marketers can sell 75 percent more products when they are already having trouble getting rid of what they currently have to sell.

The key is to structure a good VM core team to get everyone involved early in the process so the accountants will understand how the cost structure will change and can be part of designing the changes and reallocations. The marketing people on the VM team can match cost, price, and the changes in the market place and be a party to the new quantities to be sold. The product engineers and designers on the VE team can see the impact of the streamlined production resources, realize the importance of changes, and incorporate them into any new product designs and update the existing products.

Another aspect of building the VM team is that it must be a team in fact as well as name. The VM recruiters and coordinators must seek and accept participation. Warm bodies

just wont do. If the VM team is not active and does not meet regularly, the VM project will fail either in being accepted or in producing value if it is implemented.

Find an active VM sponsor. If no one in senior management has an interest in the project, it will not be accepted, regardless of how attractive it might be. This is why training programs fail or are cancelled in times of duress, because they do not have an interested sponsor, looking for a result.

Finding a VM sponsorship must come early too. It will be much tougher to build a team if no one at a higher level has an interest, and even tougher congregating the team during normal working hours.

It is better to seek sponsorship informally, offhand, and usually with someone with whom there is already some relationship. It is much more difficult to start from scratch.

Get an outside opinion. Whether right or not, having someone from outside the VM team test and confirm the proposal helps acceptance. This person can be from outside the firm, or merely another individual who has not participated in the VM study under consideration. This person can act as a devils advocate, conduct rehearsals, or just ask Why?

Many times the VM team does not have as much experience as they may wish on a particular technology. An outside opinion can supplement the VM team's experience and assist the team at defining how an idea can be made into reality.

By having to explain an idea to an impartial and unbiased outsider, the VM team will also be forced to do a better job of explaining their proposal. The techniques used in function analysis and speculation phases of the VM job plan will be fleshed out and developed for presentation to upper management.

Develop an incremental action plan for implementing the idea. It is important that the VM team go into the report phase of the workshop with a positive mental attitude. The team demonstrates their confidence in function analysis and the job plan when they present an implementation plan right with the VM proposal.

During the presentation of the VM proposal, someone always asks, " What happens if things change"? That is precisely the point. Things will change, and one can alter, adapt, or modify the plan to fit the change. At least the team has developed some realistic expectations on what the benefits of the VM proposal will accomplish and how the idea can be implemented.

Also, doing things one step at a time instead of one gigantic leap is usually easier. The team can give management a vision and destination for the valued proposal, and mileposts along the way on how the firm can benefit from the VM project. It prevents surprises to management when change does occur, because a gigantic leap usually leads to an equally gigantic crash.

Financially, another obvious advantage is in not needing all the investment money at once. One cannot forget the time value of money, even when making a proposal to enhance the value of the goods and services supplied by the company.

In addition, when one part of the plan works right, it builds confidence, not only managements confidence in the project, but the confidence in the team member, the VM team, and the VM process. Additionally, the VM team members increase their aspiration level and confidence that the proposal can and will succeed.

Sell the ideas. Of course, if the VM team follows the job plan and the previous suggestions, this will be easy. It is still recommended that the presentation be carefully planned and rehearsed. This is also an area in which outside help can be valuable because there is a technology to presentations too.

The VM team really does not need to worry about the acceptance of their proposals by upper management if they have followed the job plan and done their job, they will have considered what value is, evaluated the best of their ideas, and considered the potential investments while developing proposals to enhance their firms value. Properly presented and justified proposals are generally accepted without an extensive question and answer session. If a VE proposal has a bottom line, then the proposal will also help the firms bottom line.

The time spent in preparing the VM presentation is also well spent because usually therewill be others in the company who will need to hear the ideas. Even after top management approval, middle management and even the hourly work force will be concerned on how the ideas will affect them. Careful presentation of the ideas can also enlist their support with the implementation of the VM proposals.

Get out there and do it! This might seem obvious, but there is no value to any VM project until one acts. Someone needs to ask for a decision and the VM team must reach closure by getting a signature on a work order, a purchase requisition, an appropriation, or even a letter of intent. The amount of the investment is unimportant, it is the action of a signature that tells the VM team they have done a good job.

There is at least one known case of a firm that saw value in group technology during the early 1970s and formed a committee to study how it might use the technology. The committee has been meeting weekly since then.

Members of the committee have retired and been replaced. Others have left the firm. Fathers could have been replaced by sons, mothers by daughters. There is a group technology committee Christmas party and summer picnic.

Still there is no evidence of the group's technological proposal being implemented, and all the value the firm might have gotten from that implementation has been lost. There was a lot of precise aiming, but no one ever actually fired a shot.

SUMMARY AND CONCLUSION

This paper began by illustrating examples of advanced technology VM proposals and how they benefit the companies that are able to successfully use VM to implement high technology. The reasons why many projects that might have been valuable to a firm do not get funded were outlined and a series of suggestions within the framework of the VM job plan have been offered for gaining approval. These suggestions will help develop conclusions to VM projects that will be accepted and successful.

VM is a technology that over the last several decades has been proven to work, and may help make any firm that uses it correctly able to compete with anyone, regardless of the current advantages in cost or environment their competitors might enjoy.

Manufacturers must use the VM job plan to define an opportunity and develop the advanced technology to solve the problems and convince management to implement the VE teams ideas. To do this, the VM team needs the imagination and vision to see what technology for their specific forming and fabricating operations can be effectively employed and how to use this technology.

And finally, the VM team must learn how to use the advantages of following the VM job plan to convince management and fellow workers that the proposals have merit and can be used to enhance the value of goods and services supplied to the customer.