

## **GUT CHECK: MARKET ANALYSIS AND POSITIONING OF THE VE BRAND**

### **BY APRIL N. HILLER, CVS, ENV SP**

#### **Abstract**

Value Engineering (VE) is in a current state of crisis. Not only is there a lack of understanding of what it truly means to those with exposure to it (vis-à-vis VE as being viewed purely as a cost-cutting measure), there is an overwhelming lack of exposure to it at all. Increasing competition from other value-enhancing techniques and systems (e.g., Lean methodologies, systems engineering, Lean Six Sigma, operations research, etc.) means its market share is diminishing at a furious pace. This results in several consequences that make it even more difficult to ensure VE's future.

This paper will communicate how certain language, rivalries, and concepts have impacted the market for business and product improvement methodologies, while presenting certain creative branding approaches to overcome the barriers to increasing market dominance for Value Engineering as a whole.

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### **Will the Real VE Raise its Hand?**

The general public does not know about Value Engineering. Full stop. In conversations with family, friends, and acquaintances, I have never encountered a person familiar with VE. The one exception may be those who work in the engineering and architecture professions. And nearly 100% of the time, to this group, VE is synonymous with “cost cutting.” Engineers and architects cringe at the idea of performing VE. But this is because this form of VE isn’t in fact VE at all – it is an improper use of the term. *That* VE is a cheapening of projects and a diminishment of functionality by uninformed stakeholders to reduce their own initial costs without regard to functional impacts – the exact opposite of value. *That* VE does not follow the Value Methodology Job Plan. A search of the internet for Value Engineering uncovered scores of articles and blog posts with a variety of inaccurate descriptions and applications – some even going so far as to “define” VE in entirely inaccurate ways. Unfortunately, the search results also include detailed critiques and limitations of VE, some of which are based on reality, but many are based on false interpretations of *that* VE. This would be less discouraging if they were not placed so high on a search results list, intermingled with only a handful of accurate articles, VE organizations, and general results. It appears, therefore, that the misinformed naysayers appear to have louder voices than the advocates.

Over the years, the use of the word “value” has lost all meaning in the context of a method and practice to deliver functionality at the lowest life-cycle cost. It has become associated with whatever nefarious plan management has procured from some consultant, who drops in seemingly from nowhere, and impose upon the lower echelons of their organizations. These lower echelons have been subjected to countless iterations of whatever new “value” improvement system upper management selects, and subsequently ostensibly decides to discard when said system either doesn’t work or is too hard to manage.

Therefore, it is clear that the VE, as an industry, does not have full control over the terminology. “[Value Engineering] has become overused to the point of becoming a euphemism,” writes Ted Leamy in his article “Define Value Engineering.” The fact is, when “value” is used in a sentence, the typical response is a collective eye-rolling and resistance. Any brand manager would advise that this response is not optimal. What is encouraging, however, is that in casual conversation, the reaction to the real definition and description of Value Engineering is surprise. Better still, it is often met with curiosity.

The general public is made up of all sorts of people – business owners, managers, innovators. If they were fully informed, they would likely investigate using the tool for their own businesses and become ambassadors for us. But first we must build trust – from our investors, and further down the line, from the public in general.

### **Who Invests in VE?**

Value Engineering has not historically placed much importance on the role of investors in its building of market share. This is likely because investors, traditionally defined as those who put something into a pot in anticipation of a larger return, have not been properly identified. Consequently, the return is not large enough to perpetuate continued investment, and the resources (the pot) from which we might grow the brand of VE becomes smaller and less attractive to future investors. Therefore, it is imperative to classify investors and capitalize on their investments. There are three categories of VE investors: the public (in the form of government), currently qualified practitioners, and future practitioners.

#### ***Government as Investor***

Since VE is currently written into law (OMB Circular No. A-131), government is an investor in that it is investing trust in the process, and will either continue to require the use of VE as trust is maintained or discontinue if trust is diminished. More specifically, the government “trusts” numbers. So continuing to provide “good” numbers (i.e., cost savings or number of alternatives implemented) will help to maintain its trust. But these numbers can be volatile and do not represent the overall value of the service provided. Because of the recent [upward] revision to the dollar threshold written into OMB A-131, the potential for

individual project-based cost savings may be increased; however, the opportunities to see such savings is greatly reduced. If high numbers are what get the most attention, then perhaps a higher emphasis must be placed on a normalized value for comparison purposes, which could include something such as value improvement (shown as a percentage, function over cost).

### ***Current Practitioners***

Current VM practitioners are investors in that they expend their time, resources, and sustained livelihood on the continued success of the practice into the future. These practitioners have spent years developing their careers by continued education, mastering the art of facilitation, and developing new clients.

Unlike a SixSigma Black Belt or a Project Management Professional (PMP®), a CVS® does not necessarily ensure future career stability for holders of the title. Both Black Belt and PMP are extensions of their respective brands, and their designations are recognizable and communicate very distinct professional skills and qualities. “Certified Value Specialist” smacks of dubious jargon. Most importantly, the holder of a CVS designation cannot assume – as does a Black Belt or PMP – this certification is self-promoting. In essence, if a CVS holder aims to find new employment, there can be no expectation of a red carpet; it is only transferable to those who already know what it means (a limited population to be sure). So why would a newcomer to the industry even bother?

A limited value placed on a CVS indeed limits the breadth of expanding VE’s horizons to different industries and systems because a CVS cannot easily move across that horizon. Therefore, we cannot expect to keep VE alive if we cannot offer legitimate, worthwhile career prospects and advancement. It appears to be worthwhile to develop a focused marketing approach to expand the designation as it already exists.

### ***Future Practitioners***

Future practitioners are investors because they trust that their futures will be secured by pursuing VE as a career. The current means by which newcomers are introduced is largely by exposure to a VE study. I have witnessed on many occasions a sub-consultant, VE team member, or project development team member witness the power of the VE facilitation process and ask questions as to how to get involved or obtain further training. While this is personally rewarding to the facilitator and encouraging to the industry, the spark often withers and dies on the vine. After interest is expressed in pursuing a career change, the interested party must then return to their regular job (typically as an engineer or architect), and the challenge seems overwhelming. There are obstacles to becoming certified as a professional in the field and this requires a time and career investment above and beyond what one has already achieved.

This is not unlike the kinds of obstacles to any other type of career change. For example, the MBA is considered by many – whether based in reality or not – as a solid step towards advancing one’s perhaps stagnant career. According to the 2014 mba.com Prospective Students Survey Report, “The ability to drive prospective students to a school’s most valuable channel—its official website...begins with an informed individual, someone who is aware of the school.” This wisdom can be applied to the endeavor to obtain prospective VE practitioners. It is already clear that most in this group are “uninformed individuals,” so it is crucial that we lead these prospects to VE-related marketing channels.

One fairly easy approach to address this gap is by having on hand some sort of marketing document focused specifically to those seeking a career change to VE – a pamphlet, brochure, or even a card – highlighting the benefits of a career in VE and an overview of the steps needed to pursue it.

This medium does require direct, face-to-face contact with a prospective practitioner, the opportunity for which is rare. Therefore, other means to attract “fresh blood” to the practice should also be employed to a broader audience. This could include marketing via social media, either directly (to industry groups, by corporate or SAVE status updates, or direct messaging via LinkedIn) or indirectly, by way of “tweets” or creatively formulated hashtags via Twitter, which first requires building a Twitter “following.” Growing the following should also be systematically developed, but this often involves “following” other users to alert them of our presence, to which many will “follow back.”

We cannot, however, stop marketing endeavors once some initial awareness is developed; we must continue to educate prospects. To communicate our commitment to the endeavor of business and value improvement and develop prospective practitioners, we must literally write the book(s) on the subject for newcomers to learn the concepts and principles of the Value Methodology. A recent search on Amazon.com for the terms “value engineering,” “Six Sigma,” and “Lean manufacturing” produced 1,508 search results, 13,110 search results, and 10,673 search results, respectively. There is obviously significant room to build this number.

## **The Competition is Indeed Fierce**

In his 2008 *Harvard Business Review* article, “The Five Competitive Forces That Shape Strategy,” Michael E. Porter writes, “In a world of more open competition and relentless change, it is more important than ever to think structurally about competition.” The VE industry, on the whole, ignores the competition – an arrogant stance that has decidedly impeded growth. VE, as an industry, does not see a real rivalry with its competitors. It is assumed that VE is the best methodology, and no substantial communication effort is made to detail its distinctions, benefits, and domination. Porter goes on,

When the threat of substitutes is high, industry profitability suffers... If an industry does not distance itself from substitutes through product performance, marketing, or other means, it will suffer in terms of profitability – and often growth potential... The degree to which rivalry drives down an industry’s profit potential depends, first, on the intensity with which companies compete and, second, on the basis on which they compete.

## ***Lean and Six Sigma***

For VE, there *are* substitutes and there *are* rivals. Because the VE industry does not recognize the competition, it is assumed it’s not a competition at all. “When all or many competitors aim to meet the same needs or compete on the same attributes, the result is zero-sum competition,” writes Porter.

America’s penchant for the perception of humility bore the old adage, “There’s always room for improvement.” In addition, the current trends of “clean eating” and “detox” – that we don’t, as humans, need grains, sugar, or dairy for instance, and that our bodies must occasionally be flushed of “toxins” [although the validity of both is debatable] – is pretty clear evidence that Americans also have a morbid fascination with “waste” and “defects” and rooting out irregularities. These concepts are fundamental to the Six Sigma and Lean processes, with resounding success.

The two main competitors to VE in manufacturing process and business process improvement are Lean and Six Sigma (often combined). Six Sigma focuses on solving business problems from a statistical standpoint, then develops business solutions based on the analysis of those statistics (Cook, M.J., 2000). At the heart of Six Sigma is the reduction of defects in the business process. Lean, much like Six Sigma, is a business improvement tool used in manufacturing and production processes, the focus of which is “cutting out unnecessary and wasteful steps in the creation of a product so that only steps that directly add value to the product are taken,” according to Villanova University.

On a micro level, Six Sigma creates a “hero,” which American culture, and indeed most cultures throughout history, celebrates. Joseph Campbell explored the theme of legends in what he calls the “monomyth.” Wikipedia summarizes it as follows: “In a monomyth, the hero begins in the ordinary world, and receives a call to enter an unknown world of strange powers and events. The hero who accepts the call to enter this strange world must face tasks and trials, either alone or with assistance.”

In Six Sigma, the analysis and implementation is performed or overseen by one person (the hero). Six Sigma even offers a level of certification called a “Black Belt.” Come now: if this isn’t a hero – a Bruce Lee character that swoops in and eliminates all the bad guys – what is? These techniques comprise seemingly complex formulas and require statistical analysis. The select group at an organization that have these skills must be heroes.

Because it doesn’t have the same level of recognition and a culture of heroism, VE sounds like just another fad – a fly-by-night, snake oil technique that will surely go out of fashion, like all the others before it.

In “Overcoming Resistance to VE by Integrating Commitment and Dialogue,” Rae Cook writes, “The VE process is credible because it has very good surface logic.” The truth is its simplicity also makes it appear *simplistic*. VE is a team effort and no one person is celebrated. The VE facilitator is often a consultant, hired to come in and facilitate a simple process (with immediately visible positive results), but are not present for the long-term to oversee the implementation or to champion the process on an ongoing basis. The person who initiates the VE process on a project or product is usually a person who has been thrown into the position and has other responsibilities; they are not necessarily the person that comes up with the ideas. (At U.S. Army Corps of Engineers districts, the Value Engineering Officer is typically an engineer assigned to some organization within the district and also assigned the task of managing the district’s VE program with a maximum 10 percent of their time dedicated to this task.) All the analysis takes place after the fact by the people who designed the project/product, so all the glory is diffused. The creativity/alternatives are singular items – boxes to check off in a week’s time– nothing to analyze over time, which Americans also celebrate: continual improvement.

How can all this compete with Six Sigma’s commitment of 2 percent of an organization’s staff dedicated full-time to thousands of Six Sigma project implementations per year, and the rest of their employees dedicating 10 to 15 percent on Six Sigma projects? (Cook, M.J., 2000) It can’t; and it shouldn’t.

## **We Don’t Need Another Hero**

It is impractical and naïve to believe that VE can simply take the place of Six Sigma or other systems already in place, given the resources already sunk into implementing them. Oved Friedman, in his 1981 paper, “It’s Time to Move: a Marketing Oriented VE,” summed this up as follows.

Top management has a wide spectrum of expectations whenever new programs are considered. Further, top management is generally more cautious in approving programs which require people-related changes (e.g., attitude, activities, etc.) in various parts of the organization. Such programs do not get a second chance; therefore, it is imperative that the planning and execution of ‘Selling the Program’ be done well.

This hasn’t changed in the nearly 35 years since Friedman observed this. Therefore, it is critical to home in on the holes left by these systems and demonstrate the ways VE can fill these holes and manifest a fully functional system.

One suggestion to overcome this perception of VE as simplistic is to own its simplicity. Communicating that VE acts as Occam’s razor – that the simplest solution is usually the correct one – allows us the opportunity to define “value” on our terms. Value equals function over resources; there is just enough complexity in this equation to provoke questions. What is value? What is function? What are resources? We can eliminate over-simplification but also over-complexity. Rae Cook discusses the delicate balance for VE consultants of these two competing forces:

To feel better about value engineering, VE consultants may exaggerate either the simplicity or the complexity of the process, depending upon their personal needs. If consultants exaggerate the simplicity of the process, they may think that they are making the process more acceptable and irresistible... If they exaggerate the complexity, they add to their self-importance and drive home the point that the client will need a smart consultant to help them. Either way, VE credibility and commitment are compromised (Cook, R., 2000).

In the words of the R&B icon Tina Turner, “we don’t need another hero.” The mission of VE is not to present ourselves as heroes in a journey, but to create and foster heroism for our clients. In the current monomyth, we as VE practitioners are there to assist those people that must face tasks and trials. Michael Cook writes, “What is unique about Six Sigma is that it is a disciplined methodology that is data-driven, with improvements that are implemented based on statistical validation, not on guesswork or gut feel” (M.J. Cook, 2000). This is in fact a more powerful driver than we acknowledge. Removing “gut feel” diminishes the professional intuition shaped by experience that guides most people in their daily work lives, rendering them feeling helpless and not in control of their results.

Therefore, the message we need to send is clear: “*Value Engineering: Making heroes in business every day.*” That is, VE is the method to improve overall value, which is not too simple, but not too hard, for anyone at any job in any industry to implement, and Value Engineers are the guides in that process.

## **On Spin**

In the context of the VE study per se, reducing spin is important as this is the fundamental basis of function analysis. Value Practitioner Gary Myers writes, “Value practitioners aim to stop the spin so that the product can be seen clearly for what it is.”

However, the VE industry typically takes the same approach to marketing its services as it does in the context of a VE study: without spin and with form following function. Unfortunately, in selling VE to a broader audience, this falls flat. It assumes that the public has a general comprehension of the technique, and thus, the wherewithal to make the connection in order to apply it to their own needs.

VE tends towards the highly technical, even nebulous, to make a sale – an acuity which one would think would dazzle a prospective client. However, it leaves the layperson feeling nonplused and even of inferior intelligence. One would also think that this is the best frame of mind to allow an “expert” to jump in and fix all the prospect’s business problems. On the contrary, most folks don’t like being made to feel stupid, and shut down any further attempts at comprehending the material for sale. It isn’t like buying a high-definition television, where a salesperson can delineate all the advanced features that make the picture crystal clear; the customer may not care as long as the image quality is in fact superb on the showroom floor right before their eyes. But for more complex products (or services), what the customer is ultimately seeking may not be known to them yet. The very first lesson in Advertising 101 is to describe benefits, not features.

So how can we distinguish ourselves as the leader? VE is the only process improvement technique to have the backing of the federal government. The general public does not realize that the Federal government requires VE for projects that receive a certain dollar threshold of Federal funding. This is news to them. The general school of thought – no matter the person’s politics – is that the government regularly and haphazardly wastes taxpayer money, and that there are no checks and balances in place to control for waste in spending.

According to the 2015 Edelman Trust Barometer, trust in the US government has risen 4 percentage points from 2014 to 2015. If the general public knew the power of VE, there would be a vast public outcry calling for its expanded use. Therefore, the clear imperative is a concerted lobbying effort for the widespread use of VE in government. (This could also entail a reduction in the funding threshold written into OMB Circular No. A-131.)

## **Reach**

Currently, advances, innovations, and current events are directed mainly toward other practitioners (“InterActions” and *ValueWorld*). Occasionally, VE practitioners will branch out and publish findings in a publication of what may be considered crossover industries (e.g., those with a readership of construction contractors, engineers, or architects, etc.). Doing so in a non-systematic way does not offer enough reach to first, pique interest in the subject of VE, or second, effectively educate about what it is VE can accomplish.

Currently, the VE industry reaches customers primarily in three ways: OMB Circular No. A-131, and thus various state and municipality requirements; repeat business, and thus cold-calling past clients; and word of mouth, typically from within an organization in which a previous contract was performed. None of these are very far reaching as they require primarily person-to-person interaction. If, for instance, one party in that back-and-forth leaves their job, the line of communication dies and with it, the continuation of VE at the organization. Therefore, the process must start again.

A measured approach to expanding reach and educating the public should be pursued to reaching audiences. The first step of which is indeed establishing the appropriate target audiences. “While it’s

tempting to sell to everyone, you should focus your resources on those most likely to buy,” writes brand coach Graham Robertson. It is essential that, as an industry, we identify those demographics.

### **Target Audiences**

In 1981, Friedman rightly sensed a need to develop a marketing-based approach to selling VE. However, his paper focuses only on overcoming organizations’ internal barriers to implementing a VE program. An internal task force, consisting of a marketing expert, an educational training expert, and a Certified Value Specialist, was formed to tackle the promotion of internal VE programs. He writes:

The group had three main objectives: First; to review management planning processes and their impact on the ways that different organizations use them in their operations. Second, to value analyze the problem of promoting and selling VE programs. Third, to structure a selling method which could be applied to different organizations (manufacturing, services).

While the details of this approach are inarguably effective on an internal basis, and while it seems to have benefits that should sell themselves, it fails to answer the question of how to get in that CEO’s office in the first place.

Targeted brand expansion techniques, such as advertising targeted to certain regional markets and to the general public could be utilized.

- Advertising (newspapers, circulars, and billboards) in regional markets with high manufacturing centers (numerous plants and headquarters).
- Advertising in state and national capitals, whereas public funds are often constricted and a frequent cause of worker frustration.
- Advertising in various markets targeted to the general public, such as highway billboards and radio spots indicating the success of VE (cost, schedule, and risk reduction) of the road travelers are traveling on.

It must be stated that all of these channels are well and good until the topic of paying for such reach emerges. On an individual basis, VE consultants have limited, if not zero, resources to allocate to such broad reach, especially when considering the additional competition to secure VE contracts. In recent years, the strategic tactic of merging engineering firms into mega-firms, such as employed by Parsons and AECOM, make it harder for smaller VE firms to compete because the capital required to effectively market VE as a project improvement tool and the dispatching of services is readily accessible and more easily absorbed by larger firms. As an industry, however, we can use this to our advantage. The saying goes, “a rising tide lifts all boats.” To ensure the longevity of VE, it’s crucial that we work together. These mega-firms have the resources to do the collective marketing that individually is inaccessible. We must implore that they use such resources to advance VE.

Other, less costly alternatives to such broad marketing measures include cooperative marketing/advertising with private sector clients with high brand recognition (General Electric, for example), maximizing search engine optimization (SEO) for the internet, or reaching out to news radio and television networks to speak as commentators on the topic of VE. Any combination of these approaches can vastly increase VE brand awareness and generate buzz to direct the audience to other sales channels.

### **Conclusion**

Listening in at any VE conference, it is no secret that the Value Methodology, as an industry, faces tremendous challenges in terms of growth, or even continued existence. This can be linked to a lack of full control over the terminology, competitive forces in the business improvement arena, and most importantly, a general lack of awareness of the industry itself by the public at large. By taking measures to expand brand awareness by way of public relations and traditional advertising, as well as lobbying for expanded use of VE in the public sector and treating current and future practitioners as the brand investors that they are, we can overcome the challenges and ensure a future that will continue to create value for business and employ us as its arbiters.

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