

REINVENTION EQUALS VALUE ENGINEERING

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ABSTRACT

The most influential development of the past few years in public administration at the Federal level has been the spread of "reinvention" efforts sparked by the *National Performance Review (NPR)*. With its principal goal of making government work better and cost less, the reinvention initiative has much in common with value engineering (VE). This paper reviews the purpose and methodology of reinvention and finds striking similarities with VE, although the contribution of the Federal VE program has not been recognized. The paper concludes that a more visible profile for the VE profession is needed if VE is to fulfill its potential.

INTRODUCTION

The term "reinvention" comes from *Reinventing Government*⁽¹⁾ which is devoted to identifying ways that government can be made more effective. The authors refer to an "entrepreneurial spirit" that can transform the public sector. Vice President Gore picked up on this theme and sponsored the *NPR*, whose report of September 1993 developed hundreds of recommendations for making government work better and cost less⁽²⁾. The President has incorporated reinvention concepts into an Executive Order that directs Federal agencies to further the *NPR*'s goals⁽³⁾. The following discussion compares the features of

reinvention with those of VE in an effort to show how similar the two approaches are.

TEAMWORK

The common thread of reinvention efforts is reliance on teamwork to achieve results. Osborne and Gaebler stress the need for decentralized government, in which hierarchical structures are replaced with participation and teamwork⁽⁴⁾. The *NPR* took this as its basic organizing principle and turned to Federal employees to find ways to improve the bureaucracy, forming them into a series of teams examining both agencies and cross-cutting issues. It was these teams that produced the recommendations for a better government⁽⁵⁾. The Vice President has spoken of his vision of helping staff cross organizational boundaries to work effectively as a team, for collaboration solves problems⁽⁶⁾. The key to reinvention is "empowering employees to get results," which means decentralizing decision making power, giving employees the tools they need to do the job, and holding them accountable for results⁽⁷⁾.

In its basic orientation, there is thus a close affinity between reinvention and VE, as is illustrated in the standard VE textbooks. Arthur Mudge notes that the VE approach does not involve seeking outside efficiency experts to tell you how to do your job better, but rather it is built on the premise that employees of an organization are best able to evaluate its operations and change them for the better⁽⁸⁾. Carlos Fallon discusses the importance of face-to-face

communication and value task groups⁽⁹⁾. Jerry Kaufman describes the disciplined approach to value engineering using VE task teams⁽¹⁰⁾.

Throughout the VE literature, there is a consistent focus on the need to use teamwork, rather than direction from above or outside the organization, to accomplish desired results. From its inception, VE has encompassed the analysis of government, as reflected in Larry Miles' classic work⁽¹¹⁾, so the *NPR* and related reinvention efforts merely continue a long tradition begun by the VE profession.

CHANGE

The *NPR* report opens with a discussion of change. The Vice President states that the *NPR* is about historic change in the way government works, specifically the need for a long-term commitment to and investment in change⁽¹²⁾. In this, the reinventers have seized upon another basic tenet of VE: improvement requires change. Mudge insists that change is crucial to leadership and creative leadership can spur invention⁽¹³⁾. In Government contracting, the VE program uses as its basic tool a mechanism whose very name incorporates this concept: the VE change proposal, or VECF⁽¹⁴⁾. In its organizing approach and its basic theme, the *NPR* borrowed from VE the means to improve government.

COST

It has been said that we are living in a new era of scarcity⁽¹⁵⁾, where downsizing and cutbacks are the norm. It is for this reason that *Reinventing Government* emphasized the need for greater efficiency in the public sector, more "bang for the buck," and the necessity of identifying the true cost of government services⁽¹⁶⁾. The *NPR* cites reduction of cost as one of its twin missions, and it claims that savings of \$108 billion over five years will be attained if its recommendations are implemented⁽¹⁷⁾. The report further insists that a government that puts people first will be invented by cutting unnecessary spending, "cutting back to basics," and "doing more with less⁽¹⁸⁾."

In its emphasis on cost, reinvention shares VE's charter to eliminate unnecessary costs⁽¹⁹⁾. VE is likewise designed to extend the use of scarce resources amid shortage conditions⁽²⁰⁾. VE itself has its origins in the crisis of resource distribution of the late 1930s⁽²¹⁾, just as the *NPR* has its genesis in the resource crisis of government in the 1990s. The

Federal Government's annual reporting requirement for Executive agencies is also framed primarily in dollar terms⁽²²⁾. The very name of the professional association for VE shows its commitment to cost savings, so VE and reinvention are congruent in this goal. In addition, the focus on saving by concentrating on basic functions of government immediately brings to mind FAST diagramming, the distinction in VE between basic and secondary functions, and the desire to eliminate unnecessary functions⁽²³⁾.

Unfortunately, in its persistent emphasis on cost-cutting, the reinvention effort has been subjected to the same criticism that VE has faced, namely, that it appears to be strictly a budgetary exercise rather than a genuine improvement effort. A recent report by the Brookings Institution noted that one of the chief problems of the *NPR* is that it has focused on savings over performance⁽²⁴⁾. It is ironic that VE and reinvention should share so many traits, including criticism by others.

CUSTOMER

Osborne and Gaebler attempt to chart a new course for public administration by stressing the concept of customer-driven government that meets the needs of its customers rather than those of the bureaucracy⁽²⁵⁾. Gore's *NPR* constantly points to the need for government to serve its customers and to measure success by customer satisfaction⁽²⁶⁾. Reinvention involves defining your customers and surveying them to ensure that government meets their requirements⁽²⁷⁾.

VE similarly takes its cue from what the customer wants. Larry Miles insisted that all cost is for function⁽²⁸⁾, and what the customer wants is function. Value is defined in terms of the function with which the customer wants an item to operate⁽²⁹⁾. Sovereignty of the customer is the most important principle for VE practitioners⁽³⁰⁾. Using the VE approach makes clear what functions the customer wants, thereby enabling the organization to address customer satisfaction more efficiently than in the past. In this respect, reinvention simply adopts an idea that VE has been advocating for years.

PRODUCTIVITY

The subtitle of Osborne and Gaebler's book is "How the Entrepreneurial Spirit is Transforming the Public Sector." They define "entrepreneurial" in a

broad sense, meaning the shifting of resources from an area of lower productivity to a place of higher productivity⁽³¹⁾. The *NPR* chose this reinvention focus in stating that a chief aim of the *NPR* is to seek higher productivity in government and to eliminate what we do not need⁽³²⁾. Unfortunately, the *NPR* never once mentions VE, which is surprising because existing Federal guidance on this subject, the OMB Circular on VE, specifically states that VE is an effective tool for increasing productivity⁽³³⁾. The VE literature is replete with statements as to the usefulness and practical application of VE as a method of improving productivity. Yet the reinvention initiative has failed to notice the contribution that VE has to offer.

STREAMLINING

Another term used frequently in reinvention efforts is streamlining. With regard to government contracting, a whole chapter of the *NPR* is devoted to "Streamlining Procurement⁽³⁵⁾." The goal of making the contracting process simpler was one of the reasons for passage of the Federal Acquisition Streamlining Act of 1994, which built upon reinvention initiatives⁽³⁶⁾. The stated reason for concern is this: "The procurement system adds costs without adding value⁽³⁷⁾." The whole foundation of the VE program is based on eliminating such costs, yet nowhere does the *NPR* recognize that the Federal Government even has VE programs in place.

Another example of streamlining in the catalog of *NPR* accomplishments is shrinking six different government forms into a single, simplified form to be more customer friendly⁽³⁸⁾. The goal of eliminating unneeded paperwork has been part of VE since its beginnings⁽³⁹⁾. VE is no stranger to streamlining. OMB Circular A-131 on VE states explicitly: "VE contributes to the overall management objectives of streamlining operations⁽⁴⁰⁾." Mudge even sounds like a reinvention sage when he notes that many roadblocks to improvement are due to mental conditioning⁽⁴¹⁾, which leads to the next area where reinvention and VE share common ground.

CREATIVITY

The book that launched the reinvention program advocates an "enterprising government" that relies on innovation to meet challenges. The authors provide many examples of what they consider innovative thinking in government. Osborne and Gaebler recommend that organizations create institutional

"innovation champions" to spur employee creativity in the service of the taxpayer⁽⁴²⁾. In this vein, the *NPR* cited Federal regulations as contributing to the problems of governing because they stifle innovation⁽⁴³⁾.

A commonly-heard charge in contemporary government is to "think outside the box," to be creative and innovative in analyzing and solving problems. Few professional fields have spent more effort in this area than VE. From the famous nine dot problem⁽⁴⁴⁾ to emphasizing mental flexibility, VE has a long tradition of relying on creativity to improve the workings of an organization. In the VE framework, taking risks is part of creativity⁽⁴⁵⁾, so VE and reinvention share a common entrepreneurial bent.

Larry Miles explained that we must prepare the mind for the value analysis technique⁽⁴⁶⁾, because VE involves discarding old ways of thinking. In fact, all VE methodologies described in the literature specifically identify a creative phase as a critical step in any VE activity or job plan⁽⁴⁷⁾. It is safe to say that without innovation and creativity, VE would cease to exist. The same can be said for reinvention.

INCENTIVES

Advocates of reinvention realize that mere exhortation is not enough to change government; incentives are the key to success. Osborne and Gaebler speak of shared savings and earnings, reward programs, and the need to use incentives, not commands, to make programs succeed⁽⁴⁸⁾. The *NPR* supports this orientation by proclaiming that regulations should be replaced with incentives⁽⁴⁹⁾. Other reinvention veterans agree that government systems work best when designed with the correct incentives in place⁽⁵⁰⁾. The implementation of VE in the Federal Government has long recognized this principle. The VE program that has been in effect for many years in Government contracting provides a significant incentive to the contractor to submit VE change proposals, for the firm shares up to 50% of the savings produced⁽⁵¹⁾. In-house VE programs in Federal agencies are the subject of awards programs that provide financial and professional recognition to members of VE task teams.

Along with incentives, investment is also crucial to improving government. Osborne and Gaebler cite the need to spend money to save money, to invest for a return⁽⁵²⁾. The Vice President reiterates the need

for long term investments in greater productivity and change⁽⁵³⁾. In contracting, the total cost of an item should be considered, not simply initial price, so that all factors will be considered and "best value" offers will be accepted.⁽⁵⁴⁾ Once again, the focus on value places the reinvention initiative clearly in the lap of the VE profession.

CONCLUSION

Despite all the talk and publicity about reinvention in Washington DC, a poll conducted one year after release of the *NPR* showed that two-thirds of Americans surveyed had never heard of reinvention⁽⁵⁵⁾. Apparently, the connection between VE and reinvention is even more obscure, since there has been no mention of VE during the reinvention process, despite the multitude of similarities between the two. In 1990, Jerry Kaufman seized on the popularization of total quality management (TQM) in government and industry as an opportunity to point out that TQM is simply another VE initiative⁽⁵⁶⁾. The time has come to recognize that reinvention is yet a further instance where the principles of VE have been adopted without attribution. This is an historic opportunity for the VE profession to expand its reach and promote the use of VE in government by publicizing the commonality between VE and reinvention.

Instead of a bridge to reinvention efforts, the most prominent aspect of VE in recent years inside the Beltway has been an emphasis on regulatory solutions and legislative proposals that have proved to be fruitless. These initiatives fail to reach the employees who can actually apply VE to their jobs. This is an unfortunate development, because the solution to the problem of increasing awareness of VE lies not in Congress but in ourselves. Activities such as "Congressional Educational Receptions," new regulations, and legislative proposals mandating VE⁽⁵⁷⁾ are doomed to failure. VE, by its very nature, depends on the voluntary action of individuals working in teams.

Organizational culture cannot be changed by laws or regulations, especially in government, where confining rules are plentiful. A legislative remedy is inconsistent with one of the fundamental tenets of both VE and reinvention, namely, that meaningful improvement must come from within, not from external dictates. It is time for reinvention to acknowledge the debt it owes to VE, and for VE to let the world know how large a role it can play in

reinventing government.

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