PERFORMANCE EXCELLENCE THROUGH ACTIVITY VALUE MANAGEMENT

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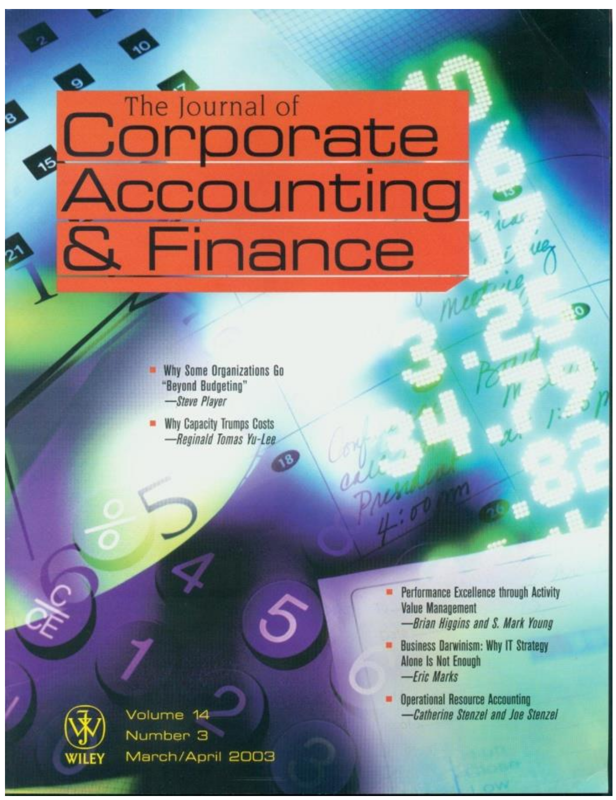


Performance Excellence Through Activity Value Management

This article introduces a new way to think about managing information. This approach, known as "activity value management," focuses on improvement methods and uses a coordinated approach to integrating information. This is necessary because improvement initiatives are often sub-optimized simply because of a lack of coordination. When—as frequently happens—these programs are sponsored by various organizational silos, they often have to compete for resources, funding, management support, and commitment. Because no overarching structure exists to link the outcomes of these various improvement efforts, the overall strategic vision of the enterprise often goes unmet.

Business journals today propose a multitude of ways to improve operating performance, such as programs designed to help a company know its customers better, measure customer loyalty, assess employee commitment, improve quality, and uncover wasted costs. But many of these endeavors ultimately fail to deliver results, while others fail to prepare organizations for the drastic changes required by current economic conditions.

One root cause for the inability of these programs to deliver is a lack of coordinated ownership. Customer loyalty studies, for example, are often sponsored by Marketing, Human Resources sponsors employee commitment reviews, Finance/Accounting supports cost management, and quality improvement by Operations. Such efforts are often sub-optimized by the unintentional lack of coordination of all the improvement initiatives. These programs, sponsored by various organizational silos, often compete for resources, funding, management support, and commitment. No overarching structure exists to link the outcomes of these various improvement efforts so as attain the overall strategic vision of the enterprise.

A major source of information used by management in these programs is the General Ledger (GL)—the repository of all things financial in the organization. But GL systems typically are not designed to provide management information. Using data from GL systems for management decisions can often create a false sense of security. Financial information is also limited, because it does not provide insights about the effects of management decisions on customer loyalty, employee satisfaction, or market share (among other corporate goals). Also, the amount of "shared" resources and costs across an organization is often hidden, and it is nearly always omitted when management makes financially based decisions, which makes the results of those decisions financially unreliable.

CONTEMPORARY METHODS FOR COST MANAGEMENT

Nearly every method used for costing products and services, whether conventional cost accounting or more contemporary activity-based costing (ABC) models, relies on cost pooling and the allocation of average costs. Conventional cost accounting creates large overhead cost pools, while ABC uses smaller, more numerous activity cost pools.

Any time a two-stage method for cost assignment is used, resource costs may be assigned to lines of business, but the necessary audit trails are missing. Having a "bidirectional" audit trail is essential for management decisions about product mix (i.e., both additions and eliminations). For example, if costs are pooled at any stage of the cost-assignment process, it is impossible to determine which resource costs are expended directly to support specific lines of business or other cost targets. A major question regarding product mix is "which resources will be affected if lines of business are modified or eliminated?"

The need for an improved method for cost accounting is apparent because of the ever-increasing reliance on shared services. Shared services makes it difficult to understand the true costs as well as account for management decisions regarding product mix.

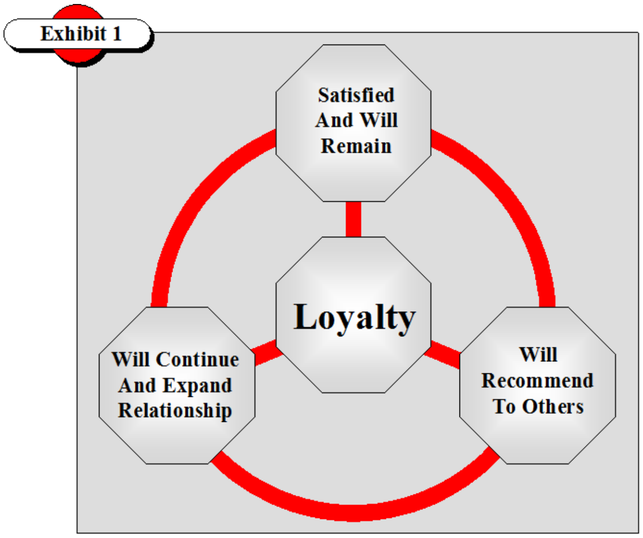
Because, in today's environment, organizations are process-driven, there is a derived demand for processed-focused improvement initiatives. But some unofficial policies and procedures that develop over time in a company are often a much larger reason for process dysfunction. These policies can include (for example) decisions about how to organize, how to price products and services, where and how to perform certain tasks, how processes are staffed and supported, and what training is performed. Such decisions are often just as political as they are practical.

Companies can usually do much better by examining "why" rather than "how" businesses perform. Strategic decisions that have been made without adequate information about the marketplace and internal capabilities often add significant unnecessary and avoidable costs. For example, decisions to provide customer support through the Sales organization in addiion to a centralized customer support function is a decision that sub-optimizes the performance of both organizations; it also affects employee commitment, hurts, customer loyalty, and consumes additional costs.

QUANTITATIVE VERSUS QUALITATIVE INFORMATION

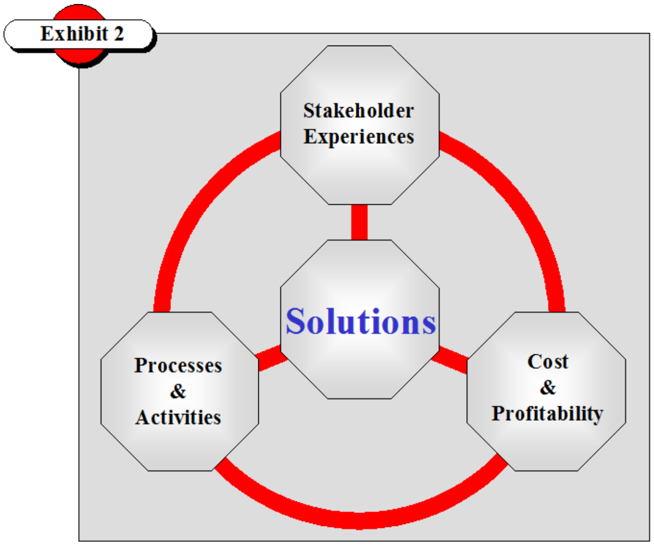
A key element, almost never included in financially based decisions is the inclusion of the experiences of stakeholders (e.g., customers, employees, and stockholders, vendors). Both quantitative and qualitative information is required for sound management decisions, though most improvement interventions focus only on one type of data or the other. The work performed by Johnson and Gustafsson[1] underscore the importance that qualitative information has on improving performance.

It is generally accepted that highly loyal employees contribute to highly loyal customers. Whether measuring employee or customer loyalty, there are three major characteristics that define loyalty (see Exhibit 1 — Characteristics That Define Customer Loyalty). Given that loyal employees and loyal customers are important, how can this information be used to influence management decisions that have a positive impact on bottom-line performance? The integration of qualitative and quantitative information in a meaningful fashion has been a daunting challenge.



MANAGING VALUE—THE KEY TO ACHIEVING EXCELLENCE IN EXECUTION

Activity Value Management (AVM) is a management tool that effectively integrates quantitative data and qualitative experiential information in a comprehensive, yet comprehensible, manner (see Exhibit 2 — Components of Management Solutions).

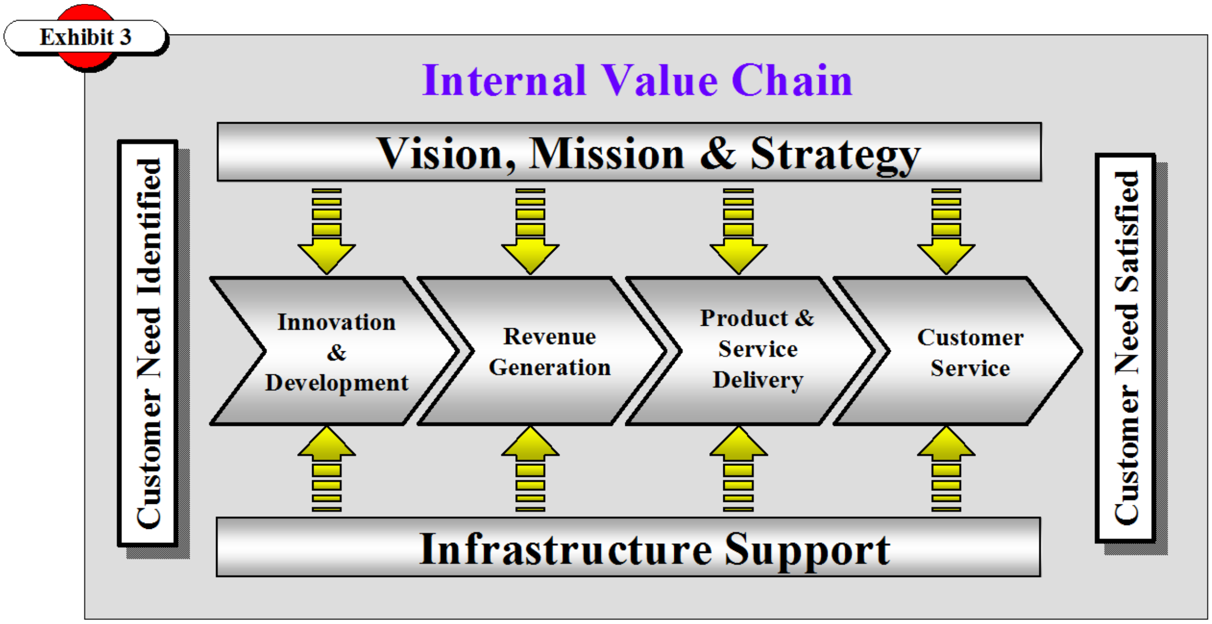


This fosters improvements in performance by linking critical business information. Principally, critical information is associated in new ways that assure performance excellence.

The foundation on which AVM is built is an all-inclusive list of organizational processes and activities in which all costs, efforts, and stakeholder information are assigned.

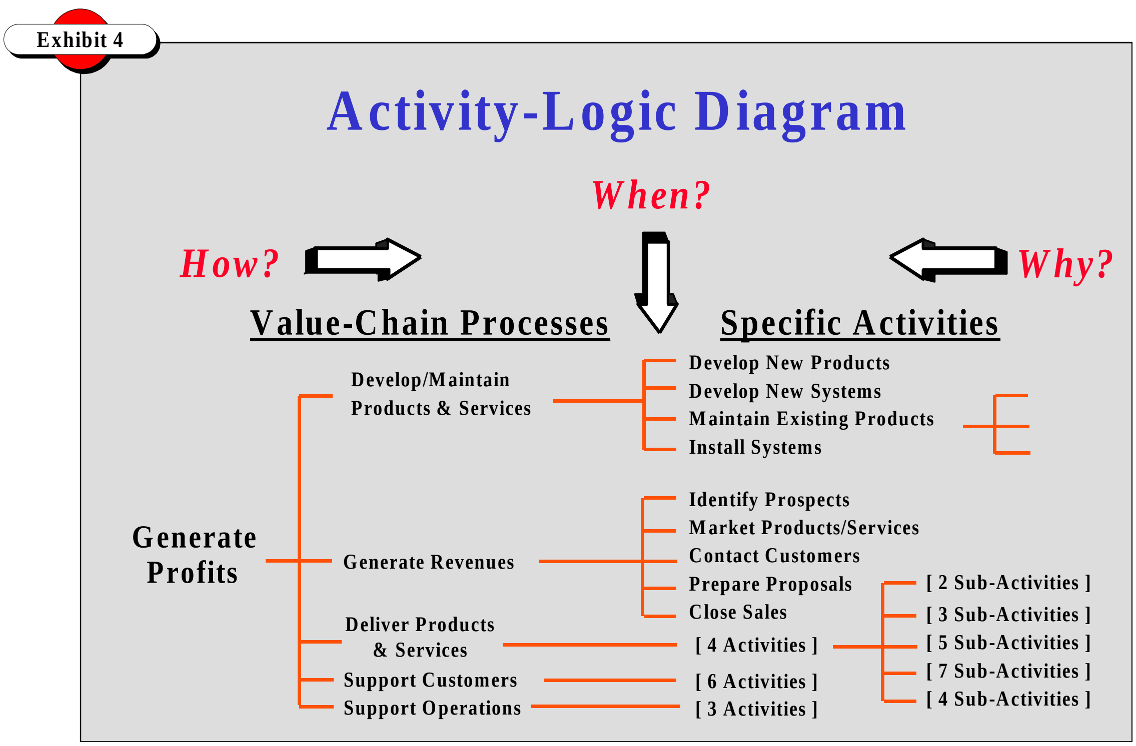
Identifying Organization-wide Processes and Activities

The process/activity analysis begins with the internal value chain activities (see Exhibit 3 — Internal Value Chain Activities).



Once the internal value-chain processes for a company are defined, they are expanded into a complete hierarchical structure of all processes and activities performed within the organization (see Exhibit 4 — Hierarchical Structure of Processes and Activities).

Typically, 400–500 activities are defined to which all resource costs will be directly assigned.



The processes and activities are arranged in a hierarchical fashion that facilitates the understanding of the relationship between specific activities and organizational processes. Additionally, such a structure or relationship between activities and the processes to which they belong permits both a strategic (see the left side of Exhibit 4) and a tactical (see the right side of Exhibit 4) view of organizational costs and efforts.

Direct Assignment of Costs—The Key to Accurate Cost and Profitability Measurement

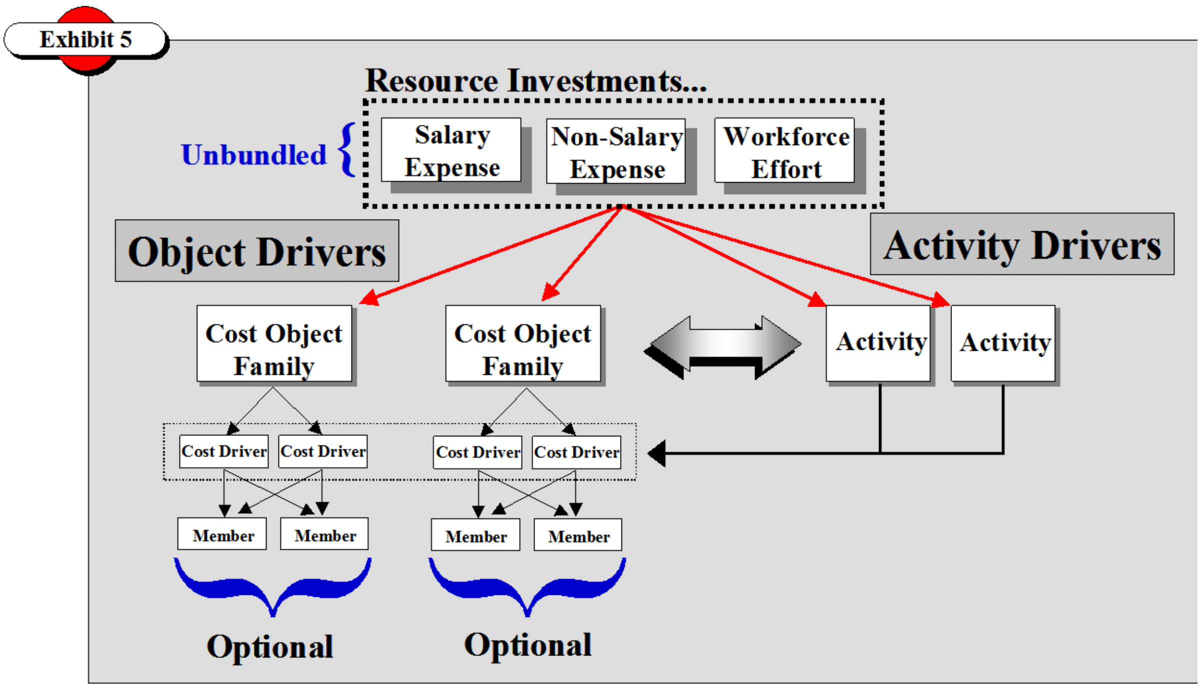
AVM uses several types of resource measurements to cost processes, activities, and lines of business. In addition to the financial measure of cost, effort and hours per week are also used to provide insights about how employee efforts are expended. Measuring and assigning employee effort provides a number of capabilities not normally available when working solely with financial information.

For example, employees may expend similar efforts but may have significantly different salaries. In this case, financial information alone might lead to one conclusion, whereas financial information in combination with measurements of effort may lead to different conclusions. As another example, a manager might conclude, after observing two groups of individuals who expend comparable efforts and perform similar activities yet are paid substantially differently, that the activities could be performed by less-expensive personnel, thus yielding savings in costs. Financial and non-financial measurements are necessary to identify misapplication of effort and/or misplaced activities.

Cost pooling, which occurs in traditional cost accounting as well as alternative approaches (including activity-based costing), distorts product and service costs. Any time costs are "pooled" or aggregated and then assigned to products and services based upon allocation methods (or average cost driver rates, as happens in ABC), product and services costs are distorted—some lines of business are over-costed, while others are under-costed.

In the case of ABC, a two-stage assignment method is employed. First, resource costs are assigned and aggregated to activity "pools," then activity costs are assigned to lines of business based on average or weighted driver rates. Any time a multiple-stage assignment process is used, the forward-and-reverse audit trails are lost. In ABC, for example, costs can be traced from the General Ledger to activities, then to lines of business. But the opposite is not true (i.e., tracing costs from cost objects back to the resources), because resource costs were aggregated, or blended, at the first cost-assignment stage when resource costs were assigned to activity cost pools.

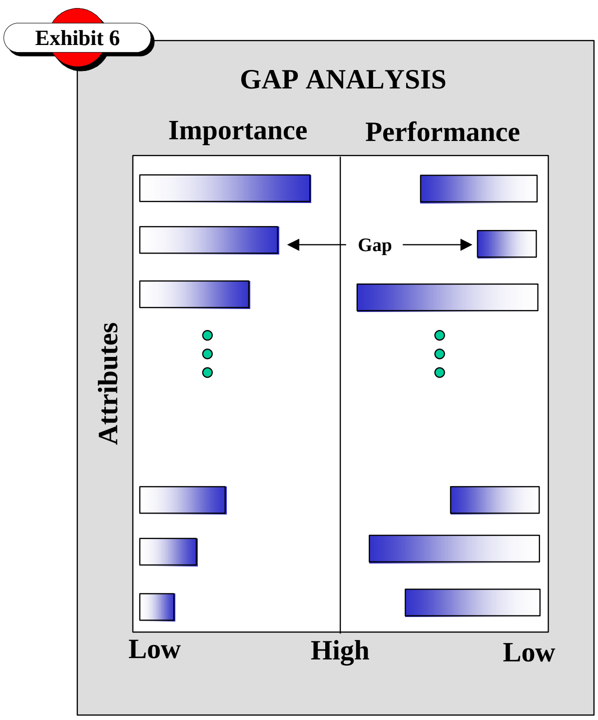
AVM assigns costs completely differently. Not relying on averaged or weighted cost driver rates, nor on a two-stage assignment process, all costs and efforts are assigned directly and simultaneously to both activities and lines of business (see Exhibit 5 — Activity Value Management Costing), thus preserving the bi-directional audit trails linking costs, activities, and lines of business. In doing so, traceable audit trails between resource costs, activities, and lines of business are maintained. Costs and efforts can be traced from resources directly to activities and directly to lines of business. This method of cost assignment is important to directly measure the impact of product mix changes and perhaps the elimination of unprofitable lines of business. In the case of unprofitable lines of business, the reverse audit trail allows the identification of specific resources affected by the elimination of product or service offerings.



The Missing Ingredient to Effective Cost Management—Stakeholder Experiences

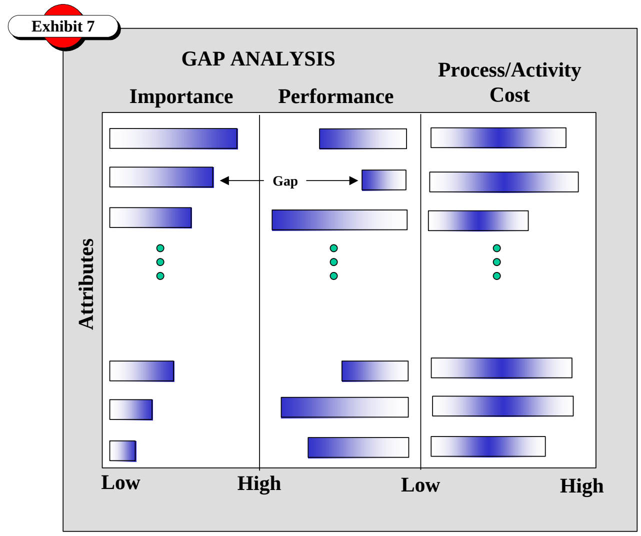
Most financially based and quantitative methods for performance improvement are devoid of qualitative stakeholder information. Information from customers, employees, vendors, and other stakeholders describing their experiences is an important factor for effective performance improvement.

There are a number of ways to capture stakeholder preferences. Surveys, focus groups, and direct interviews are the most common ways of capturing this information. However, it's important to relate the findings to the lines of business and underlying activities that support the lines of business. Often gap analysis is employed to determine performance improvement needs—measuring the gap between rated importance and performance (see Exhibit 6 — Gap Analysis).



Once the attributes are measured with respect to their importance and performance, assigning process/activity costs to the various attributes helps link the attributes to bottom-line performance (see Exhibit 7 — Gap Performance With Cost Assignment).

To gain superiority and excellence in performance, market needs must be matched with unparalleled delivery systems that achieve value as defined by the stakeholders. Relying solely on internal sources for market information, such as opinions from the sales force, is no longer valid for market dominance.



MANAGING VALUE — TOOLS TO ACHIEVE EXCELLENCE

As often stated, the right tools are required to do the job right. This axiom applies to effective cost management as well. Compiling information without an efficient means to dissect and analyze the data in a timely manner is often a contributing factor to failure.

Management seeks a return on improvement dollars spent within the same calendar year in which the initiative is undertaken. Management's patience often runs thin when initiatives fail to deliver on their promise in terms of delivering timely and meaningful improvements.

Downsizing—False Hope

Without adequate information and the tools to initiate change, the most common option in cost management is to achieve profit improvement through downsizing. If the workload does not change, achieving financial improvements through this type of action is only short-lived. Numerous independent studies have proven that long-term viability is negatively affected. It is difficult, if not impossible, to achieve long-term productivity necessary to compensate for the people who have been removed.

A recent article in the *Atlanta Journal Constitution* ("The Collateral Damage of Cutbacks: Left Behind" by Tammy Joiner, October 20, 2002) cites the negative affects of downsizing when the work itself does not decrease. An IBM employee who is quoted alludes to the problems on his team when the staff is cut by 25 percent even though the number of accounts has doubled, thus forcing them to work what has become a standard 6-day work week. Employees have to perform non-mission-related activities to do the work of the laid-off workers—in addition to their own primary tasks.

One critical hidden cost of downsizing is health care cost associated with psychiatric counseling and other stress-related illnesses for employees who have been fired and those who remain in the organization. As morale declines, it becomes impossible to build and maintain a base of loyal customers without a base of loyal employees.

Tools for Change

In addition to the obvious benefits associated with understanding the true cost and profitability of products, services, and market channels, the following describes some of the tools used by AVM to achieve breakthrough improvements in performance. Many of the tools can be easily adapted to your own cost management initiatives.

- ***Activity Scoring***: This is an extremely simple yet powerful tool that can be adapted to any improvement initiative. When measuring customer satisfaction, terms such as "importance" have well-defined meanings. But words such as "importance" and "value" are often difficult to define when they are used internally. It is very "important" (in terms of the survey) to resolve customer problems, but the point is that you'd rather not have customer problems in the first place! Perhaps a more consistent term than "importance," therefore, is the word "relevance," because it pertains to how well an activity aligns itself with the strategic direction of the organization. Once activities are defined, each activity can be scored as to its "relevance" and "performance." The following scoring schema (see Exhibit 8 — Relevance and Performance of Activities) has proven useful in understanding the contributions of organizational activities.

Exhibit 8

Relevance…

10 – Contributes to market dominance
8 – Significantly Relevant
6 – Moderately Relevant
4 – Maintains Status Quo
2 – Marginally Relevant
0 – Non-Productive

Performance…

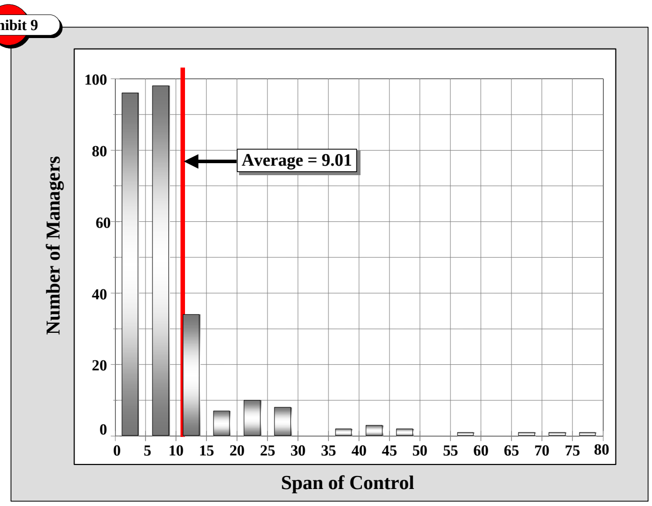
10 – Performed Perfectly (Rare Score)
8 – Performed Well
6 – Performed With Few Problems
4 – Known Problems Exist
2 – Unreliable
0 -- Terrible

Each score must be clearly defined with odd scores used as tie-breakers. What is essential is to measure the validity of activities as compared to their performance or reliability. In application, have different work groups "score" organizational activities and identify differences they perceive between the groups. Adding the cost to perform each activity adds an additional dimension to select those activities that require corrective action.

For example, one user of AVM discovered that planning activities consumed over $7 million annually, required over a dozen iterations before it was complete, yet its accuracy was debatable. Executive managers, middle managers, and first-level managers scored the activities, and what they discovered was symptomatic of a failure to properly plan. All three groups gave planning high "relevance" scores but strongly differed with respect to "performance." Executives thought they did an excellent job of planning, while first-level managers proclaimed that "they don't know what they are doing from week to week." Once the issues were discussed, changes led to a reduction of over 50% of the cost while also improving the planning process, thus driving planning down through the organization.

- ***Organization Analysis***: Many studies show that a manager's span of control directly correlates to the performance of the work group. There are guidelines as to what is a desirable span of control based upon a number of contributing factors. Often an average span of control of at least 6 to 1 is recommended, but averages can be deceptive: Some managers may actually have far too many direct reports, while many others might have far too few (see Exhibit 9 — Span of Control).

Exhibit 9



Although the organization depicted in Exhibit 9 has an acceptable "average" span of control, this average does not portray the true situation. The high number of managers who have spans of less than 5 and of greater than 20 contributed to this average span; some managers are overtaxed, while others are not carrying their loads, so the company ends up spending more than it should for management. Of note, there was a strong correlation between employee turnover, morale, and poor performance and the high spans of control.

- ***Mission Analysis***: Mission analysis is the time work groups spend on activities related to their mission. The goal is for people to do more of what they should be doing and less of what they should not be doing to higher productivity.

Exhibit 10

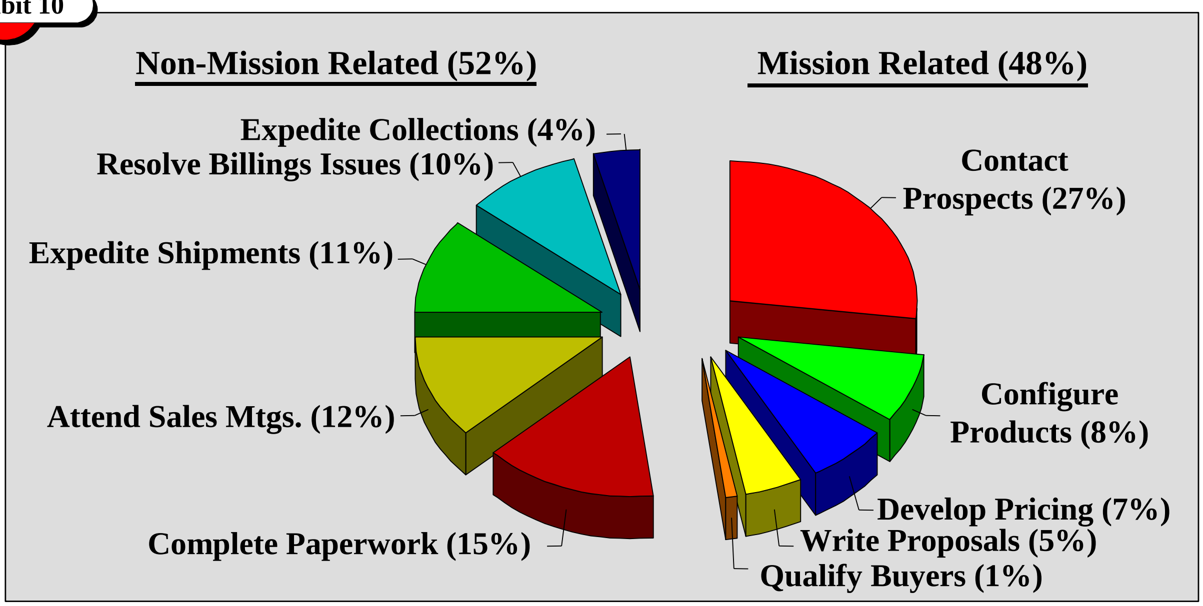


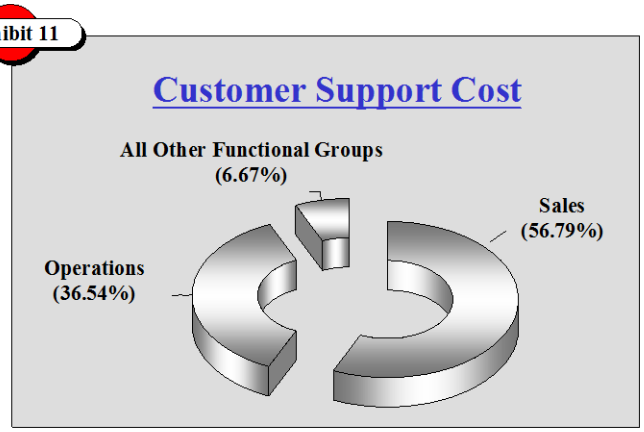
Exhibit 10 — Distribution of Effort Across Activities — displays a composite of a number of sales organizations that have undergone an AVM analysis; the exhibit shows the distribution of effort across activities.

From such an analysis, it can be concluded that a 20% increase in effectiveness can be achieved if only 10% of total effort is shifted from non-mission-related activities to mission-related activities.

- ***Misplaced Effort*:** As with measuring the effort expended in non-mission-related work, many work groups perform activities that should be performed by other groups. One example is the time work groups spend on "servicing" their PCs when they do not receive adequate response from their MIS support organization. Such efforts are often referred to as "hidden" or "shadow" costs.

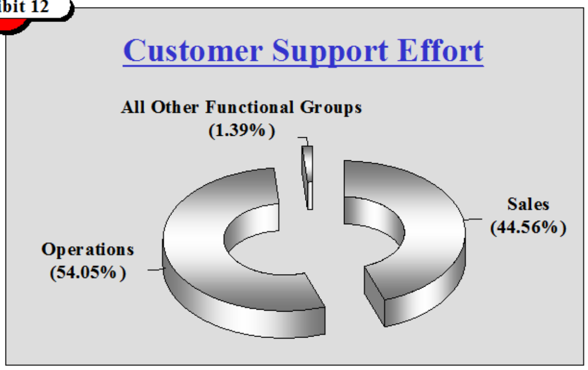
When a nationally recognized company in consumer services surveyed its clientele, it discovered that customer support was a market differentiator and that it lacked the competitive edge. Using AVM and performing a cross-functional evaluation (i.e., measuring the overlap and duplication between functional work groups), the company discovered that although the Operations group was primarily responsible for customer support, Sales was duplicating many of these activities. With over $20 million annually consumed in customer support, a lot was at stake with regards to improving this function. The distribution of cost by work group is shown in Exhibit 11 — Distribution of Cost by Work Group:

Exhibit 11



Examining customer support in terms of effort expended, another story is told as illustrated in Exhibit 12 —Customer Support in Terms of Effort Expended:

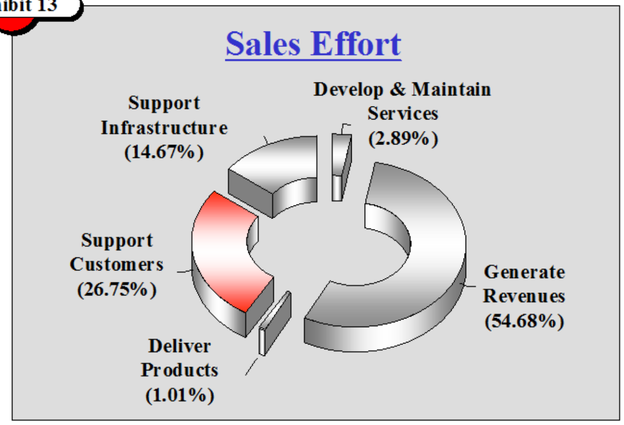
Exhibit 12



Because Sales contributes most of the costs though a much smaller percent of effort, this implies that the personnel involved in providing customer support in the Sales organization are more costly than the employees in Operations. In fact, the organization discovered that it was paying a premium of over $6 million annually to have these activities performed within Sales, not including the expense associated with the duplication of work.

Additionally, as Exhibit 13 — Customer Support in Sales — shows, although customer support is not the mission of Sales, it represents a substantial portion of their effort.

Exhibit 13



The solution became apparent only when the information was presented and discussed. Customer support was shifted to Operations, which liberated substantial resources in Sales that were then shifted toward the real mission of Sales—"Generating Revenues." The financial benefits associated with this discovery were many. First, economies of scale associated with the consolidation of these activities were achieved. Second, there was reduced duplication between the organizations. Since more cost-effective personnel performed customer-support functions, Sales achieved a significant boost in revenue generation, and customer loyalty also improved, because customers received more consistent and uniform responses to issues.

Composite Analysis**:** Unique to AVM is the ability to directly link resource costs to lines of business. Under most costing scenarios, if a line of business is eliminated because of underperformance, it is commonly assumed that the total cost of the line of

Exhibit 14

Acme Manufacturing Company — **Composite Cost Report**

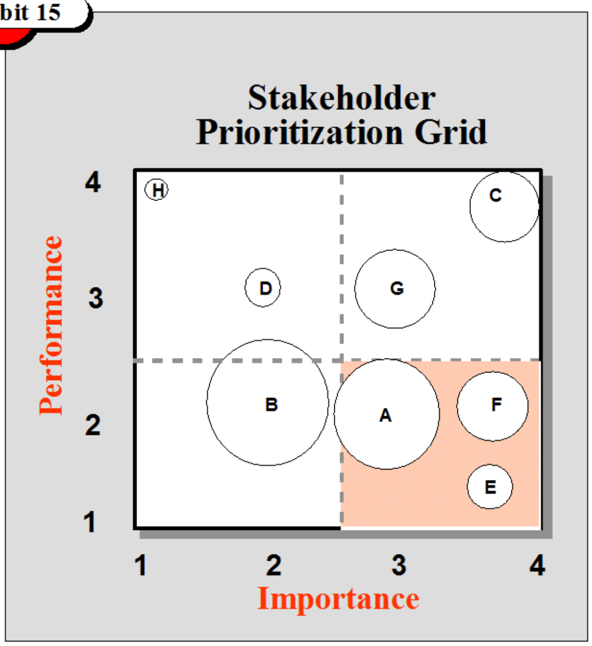
RESOURCE ITEM	TOTAL	A - WHATITS COST	%	B - DINGBATS COST	%	C - WIDGETS COST	%
MATERIAL HANDLING							
RAY RADFORD, SUPERVISOR	$44,100	14,125	32.03%	7,995	18.13%	17,128	38.84%
CAROL HUMMBART, MAT'L HANDLER	$28,980	9,216	31.80%	6,405	22.10%	11,331	39.10%
SUB-TOTAL (allocated only)	**$73,080**	**23,341**	**31.94%**	**14,400**	**19.70%**	**28,460**	**38.94%**
ASSEMBLY							
DAN WENZL, GENERAL FOREMAN	$52,290	15,227	29.12%	7,823	14.96%	20,874	39.92%
SUB-TOTAL (allocated only)	**$52,290**	**15,227**	**29.12%**	**7,823**	**14.96%**	**20,874**	**39.92%**
WHATITS ASSEMBLY							
DAVID HULL, FOREMAN	$44,100	44,100	100.00%				
THOMAS KLEIN, ASSEMBLER	$26,460	26,460	100.00%				
STEVE LAWSON, ASSEMBLER	$26,460	26,460	100.00%				
SAM ROBERTS, ASSEMBLER	$26,460	26,460	100.00%				
JULIA SUGERBAKER, ASSEMBLER	$26,460	26,460	100.00%				
SUB-TOTAL (allocated only)	**$149,940**	**149,940**	**100.00%**				
DINGBAT ASSEMBLY							
PAUL PARKER, FOREMAN	$44,856			44,856	100.00%		
JAMES APPLEGATE, ASSEMBLER	$26,460			26,460	100.00%		

business will be eliminated. This assumption is often inaccurate, given the shared costs incurred in most organizations today. Exhibit 14 —Tying Resources Directly to Cost Targets — illustrates how, through AVM, resources are tied directly to cost targets.

Clearly, from this example, if the Dingbats line of business is to be eliminated, some resources will be directed affected by the decision, while other resources whose time is shared among other lines of business may not be affected. However, the costs associated with unaffected resources must be redistributed to the remaining lines of business, which will affect their profitability and the overall profitability of the company.

- ***Stakeholder Experience Analysis*****:** Linking stakeholder perceptions to costed activities creates a scenario that links the stakeholders to bottom-line performance. Exhibit 15 — Stakeholder Prioritization Grid — illustrates this concept:

Exhibit 15



The circles represent the relative costs of the activities associated with the attributes that drive customer loyalty. This type of analysis targets costly activities that are not important; it also identifies the costs associated with important activities that are not performing to levels required or anticipated by the stakeholders. This is the first step in creating customer-focused change that drives market performance.

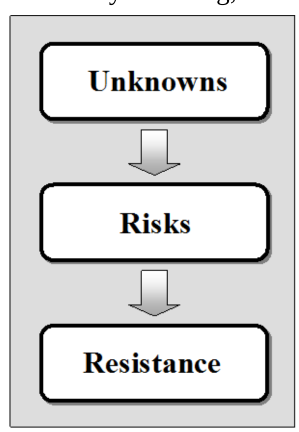
A company in which the authors worked introduced a new product thought to be more convenient to use than the product it was replacing. After applying the concepts described in this article, this company learned several important facts:

- The premise under which this product was introduced was incorrect; convenience was only a secondary benefit for customers
- The costs associated with the new product were much higher, yet it was being sold at the same price as the old product, thus driving down profitability
- Customers were being migrated from the old (and much more profitable product) to the new product, thus driving down overall profitability.

These are only a few of the dozens of tools utilized by AVM, and many can be applied without the detailed analysis associated with an AVM study.

MANAGING VALUE—THE ENEMY IS THE STATUS QUO

The biggest challenge facing all change initiatives is resistance to change from the status quo. It is clear that people are comfortable with what they are doing; otherwise they would be doing something different. Resistance is caused by the uncertainty of dealing with the unknown and the risks associated with change. One cure for resistance to change is to create compelling reasons for the change that offers only one choice — implementation. A compelling reason for change can be created only by capturing and linking stakeholder experiences, defining the processes and activities performed, and the costs and efforts required to support those activities.



If any improvement process is to be successful, it must be produce overwhelming evidence that it is more uncomfortable to maintain the status quo than it is to change.

However, there are a many useful tools that can be used to facilitate change. Realizing that people change only if it is less comfortable to maintain the status quo, Exhibit 16 — Considerations When Introducing Change — is a reminder of the considerations that must be made when introducing change. (Note that the dashes shown in Exhibit 16 do not mean negative consequences; they simply imply that there was no impact associated with that behavior.)

Exhibit 16

	Old Behavior	New Behavior
Rewards	-	+
Consequences	+	-
Level of Effort	+	-

After an AVM analysis at one company, a new order process was introduced but faced resistance from the salespeople, who felt more comfortable with the previous process. However, given the premise displayed in Exhibit 16, resistance was overcome by providing positive rewards for using the new process (the salespeople received their commissions), there were consequences for adhering to the old process (they had to redo their sales orders, which delayed their commissions), and, finally, there was additional effort associated with the old behavior, because it took more work before the orders could be processed. It didn't take long before the new process was fully accepted by the sales force.

Another tool used in psychology to compartmentalize fears is to create a boundary around concerns regarding changes in behavior. The authors have used the following tool on numerous occasions to address the fears associated with change (see Exhibit 17 — Concerns Regarding Changes in Behavior).

This is a very powerful tool. If the change proposal is based on sound evidence, the dire outcomes associated with the worst-case scenario of the status quo will outweigh the risks of the worst-case outcomes related to the change. In other words, is the organization willing to risk the worst outcomes associated with the change to avoid the best case or—even worse—the worst-case outcomes identified with the status quo?

MANAGING VALUE—TOOLS MUST BE MALLEABLE

Most cost management tools are financially based, so they are of most value to the financial organization. They tend to lose support from work groups that do not directly benefit from the outcomes of the study. For any tool to be successful, it must appeal to all parts of the organization and complement the work currently being done. By incorporating stakeholder experiences, process identification, accurate costs, and the ability to filter this information for every functional organization, change proposals can be developed that will improve the productivity across the entire organization while improving customer loyalty and employee morale.

For example, Six Sigma is a powerful process-based intervention that has generated significant improvements for companies such as General Electric, Motorola, and Allied Signal. However, after investing over a $1 million in Six Sigma training, one large financial services organization was disappointed in the initial results. It therefore decided to complement its Six Sigma program by applying AVM to identify opportunities that would give the company's quality improvement initiative a jump start. After only a few months, over $25 million in annualized financial improvements were identified then implemented through Six Sigma, which affected nearly every part of the organization. These improvements were accomplished without resorting to demoralizing downsizing and the changes focused on profitable growth.

Exhibit 17

	Best Case	Worst Case
Attempt	The most positive outcomes associated with the change	The worst case outcomes associated with the change
Don't Attempt	The best case outcomes associated with the status quo	The worst case outcomes associated with the status quo

SUMMARY

AVM takes ABC to the next level of performance. Integration of stakeholder experience, coupled with the direct linkage of resource costs simultaneously to both activities and cost targets, offers unprecedented opportunities for improving short-term performance without sacrificing long-term viability. Based on the application of these concepts over the last several years, users of AVM average over $6 million per 1,000 employees in financial improvements, equivalent to 5%–10% of revenues in annualized improvements. Again, these improvements were accomplished while improving both customer loyalty and employee satisfaction.

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