COST CULTURE THROUGH COST

Companies traditionally approach value creation through one of two ways—increasing revenues or decreasing costs. Organizations are primarily focused on one of these levers in order to create value at any given point in time. Creating a cost culture through the cost management maturity model provides a way to overcome this value creation paradox. Accelerating revenue growth while maintaining low costs is a matter of organizational and cost management maturity. Successful organizations have been able to create a transformative culture in which cost management is perceived as a continuous process.

MANAGEMENT MATURITY MODEL

The goal of an organization should be to create and sustain shareholder value. Competitive organizations create value by building a culture that focuses on maximum sustained value and encouraging proactive decision making. Traditionally, companies approach value creation through one of two ways—increasing revenues or decreasing costs. At any point in time, organizations are primarily focused on one of these two levers in order to create value.

Companies that are focused on the revenue lever make decisions that impact sales to create value. General Electric is an example of such a company that is striving to impact the revenue lever. After decades of concentrating on reducing costs and increasing productivity under the leadership of Jack Welch, GE has started to shift gears and focus on revenue growth. Recently, GE announced its vision to focus on technology innovation and globalization. GE plans to grow in emerging markets such as India and China and make significant investments.

BALA V. BALACHANDRAN and SUDHAKAR V. BALACHANDRAN

Bala V. Balachandran began his teaching career in 1988 while a graduate student at Ahmadabad University, India. In 1995 he joined the Kelley School of Management faculty, and was appointed Distinguished Professor of Accounting and Information Systems and Joseph Lyttle Professor of Accounting and Information Systems in 2006. He is also director of the Accounting Research Center, Professor Balachandran's teaching interests include managerial accounting, auditing, management information systems, and mathematical programming. He has authored more than 15 research articles and is currently writing a managerial accounting textbook with emphasis on the management of an automated decision-making environment. He is department chair in accounting for Management Science, associate editor for The Accounting Review and on the editorial boards of Contemporary Accounting Research, and the Journal of Accounting, Auditing, and Finance.

Sudhakar V. Balachandran conducts research in cost management, performance measurement, incentives, and valuation. These subjects are sometimes referred to collectively as "shareholder value management." Specifically, he creates new frames of cost information, and performance measures to align the interests of managers and shareholders and create shareholder value. Professor Balachandran brings a rich mix of business experience and academic rigor to his research. He has more than 10 years of business experience in a Management consultancy and corporate finance. As a management consultant he worked as an information technology with Arthur Andersen Consulting, which became Accenture, and with Ernst & Young, which is now part of Cap Gemini. Professor Balachandran was also a partner executive at Bower Healthcare Corporation. He has worked in a diverse set of industries including telecommunications, utilities, industrial manufacturing, and healthcare. He teaches managerial accounting in MBA and Executive MBA students at the University of Nebraska at Omaha.

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ments in those countries. In India, GE plans to grow revenues from $800M currently to $5B by 2010. It plans to achieve this goal by significantly increasing its investment in the areas of infrastructure, research and development, and financial services. Another way that GE plans to grow is by increasing its investments in technology and innovation. The company invests 50 percent more in high-technology and "high-intelect" growth industries than it did in 2006. This would help GE bring solutions to the market at a greater pace than its competitors.

GE's plans related to developing world markets and fast-growing industries are definitely in line with its goal to increase revenues. However, GE would also increase its costs significantly in order to achieve its goal.

Contrarily, companies that concentrate on the cost management lever aim to create shareholder value by decreasing costs. General Motors and Ford are examples of organizations that are currently in the cost reduction mode. Faced with stiff competition from Japanese automakers and high fuel prices, both GM and Ford have announced plans to cut jobs and spending. GM plans to cut 25,000 jobs in North America in the next three years and Ford plans to cut 1,700 salaried jobs this year. Both Ford and GM, in their focus to manage costs, have been reluctant to invest in new hybrid technology that would use both electrical and gasoline power. While this decision by both companies would create value through reduced costs, they would also be constraining their revenue growth.

Focusing on one of the levers of value creation seems to directly contradict the other. Also, focusing on revenue growth without any concern about cost helps a company create value, but it becomes doubtful whether value can be sustained. At the same time, cost reduction alone will not create maximum sustained value for a company. If a company has no revenues, there will essentially be no cost to reduce. No com-
pany can achieve greatness simply by shrinking.

The cost culture pyramid
So how does a company overcome the value creation paradox? Can an organization accelerate revenue growth while having the lowest costs? Creating a cost culture through the cost management maturity model that this article recommends provides an answer to both these questions. Referring to Exhibit 1, the first three levels of this model help an organization achieve confluence between revenue growth and cost management decisions by focusing on the traditional levers. Successful organizations in today’s business world have achieved this confluence. These organizations have been able to create a pervasive culture in which cost management is perceived as a continuous process. The last two levels of this model are forward looking and go beyond the traditional levers. Very few organizations, if any, have achieved this level. Scaling these final two levels requires a paradigm shift in the way companies perceive cost and revenues. Levels 4 and 5 are three-dimensional in approach, as opposed to the two-dimensional approach of levels 1 through 3. Once a company reaches Level 5 of this model, it will be able to utilize cost management as a potent leadership tool and trend indicator through which the CEO can make decisions that result in profitable revenue growth.

Level 1 (BASIC)
The first level of the cost management model is to ensure that the organization has the basic systems and processes in place to account for its expenses. Most large corporations have the technology and processes to understand their costs; however, smaller organizations might lack the discipline or process controls needed to maintain documentation of costs. This is a serious issue, especially when the company is selling multiple products, and results in value depleting decisions.

Consider a company, say XYZ, which sells five products with $8.8M in sales and 11 percent gross margin. The management of the company is satisfied with its performance and rewarded its employees for their achievement. The summary of XYZ’s income statement is shown in Exhibit 2. XYZ’s CEO hired a consulting firm to explore further opportunities to expand its product line and increase its growth. Since XYZ did not have a basic costing system in place, the consulting firm performed a cost management analysis. Surprisingly, the consultants discovered that two of XYZ’s products were making significant losses.

<table>
<thead>
<tr>
<th>EXHIBIT 2 Summary of XYZ’s income statement</th>
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<tbody>
<tr>
<td>All Numbers in $M</td>
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<tr>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Total Sales</td>
</tr>
<tr>
<td>Total Variable Costs</td>
</tr>
<tr>
<td>Contribution Margin (CM)</td>
</tr>
<tr>
<td>CM %</td>
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<tr>
<td>Total Fixed Costs (Mfg)</td>
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<tr>
<td>Gross Margin (CM) (Total Sales - Cost of Goods Sold)</td>
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<td>GM%</td>
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<table>
<thead>
<tr>
<th>EXHIBIT 3 Income statement for XYZ’s five products</th>
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<tbody>
<tr>
<td>Income Statement Analysis</td>
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<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Product 1</td>
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<tr>
<td>Product 2</td>
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<td>Product 3</td>
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<tr>
<td>Product 4</td>
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<tr>
<td>Product 5</td>
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<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Price/Unit</td>
</tr>
<tr>
<td>Cost/Unit</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td>Contribution Margin (CM)</td>
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<tr>
<td>CM %</td>
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</table>
Also, the growth in XYZ's revenues over the last two years was from these two loss-making products. The income statement for the five products analyzed by the consultants is shown in Exhibit 3. Based on their study, the consultants recommended that XYZ withdraw products three and four which were making significant losses for the company. The company's revenues would decrease to $4.8M; however, its gross margin would increase to 1.85M, without having to invest in any new products. This is shown in Exhibit 4.

Without basic systems in place to evaluate the profitability of its individual products, XYZ would have invested significant resources in identifying new areas of growth or expanding its loss-making products. An organization needs to understand the concept of cost centers to differentiate between profit-making and loss-making products. It has to maintain discipline to ensure that all costs are booked and accounted for under the correct cost center. One way to do this is to organize the cost accounting department as a sub-function of the finance department. Also, managers need to believe in the value of a robust costing system and processes.

The key characteristics of a BASIC company in the cost management model are:
1. Presence of cost centers
2. Cost accounting as a sub-function of finance
3. Processes and systems for capturing expenses of different cost centers
4. Discipline in cost booking
5. Documentation of processes so that they are not dependent on any specific individual
6. Regular departmental and management review of expense reports

**Level 2 (STRUCTURED)**
A STRUCTURED organization is one where there is a congruence of goals between revenue acceleration and cost management (Exhibit 5). In such organizations, there is a permeation of vision across all departments and functions. Employees have a

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**EXHIBIT 4 Summary of XYZ's income statement after changes**

<table>
<thead>
<tr>
<th>All Numbers in $M</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Sales</td>
<td>4.8</td>
</tr>
<tr>
<td>Total Variable Costs</td>
<td>2.75</td>
</tr>
<tr>
<td>Contribution Margin (CM)</td>
<td>2.05</td>
</tr>
<tr>
<td>CM %</td>
<td>45%</td>
</tr>
<tr>
<td>Total Fixed Costs (Mfg.)</td>
<td>0.2</td>
</tr>
<tr>
<td>Gross Margin (GM) (Total Sales - Cost of Goods Sold)</td>
<td>1.05</td>
</tr>
<tr>
<td>GM %</td>
<td>35%</td>
</tr>
</tbody>
</table>

**EXHIBIT 5 Cost Management and Revenue Growth Congruence**

<table>
<thead>
<tr>
<th>Level 1 Company</th>
<th>Level 2 Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Little Value Created</td>
<td>Significant Value Created</td>
</tr>
<tr>
<td>Incongruent Cost Management and Revenue Growth Levers</td>
<td>Congruent Cost Management and Revenue Growth Decision</td>
</tr>
</tbody>
</table>

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common understanding of the company’s vision, and decisions made in one department are in harmony with the decisions of others. Knowledge is shared among departments and geographically dispersed operations through databases, ERP systems, and cost accounting and management systems. Such a company understands and utilizes the relationship between profits, revenues, and costs in order to achieve collective synergistic functioning of its different departments. The convergence between revenue growth and cost management decisions helps the STRUCTURED company increase the amount of value created as illustrated in Exhibit 5.

A STRUCTURED company understands that costs are as market driven as sales and prices. In the 70s and 80s, companies regarded costs as an independent variable that impacted sales. They would manufacture the product at their least possible costs and fix the price to the customer by adding a markup over costs. Their view of the relationship between sales and costs was as follows:

\[ \text{Sales} = \text{Costs} + \text{Profits} \]  \hspace{1cm} (1)

In recent times, however, companies view sales and prices as being dictated by customers. Therefore, the goal of the companies is to reduce costs to a level where they can maximize firm profits. This is given by the equation:

\[ \text{Profits} = \text{Sales} - \text{Costs} \]  \hspace{1cm} (2)

Though both equations are essentially the same, the way they are represented dictates how the company behaves. In the first equation, Sales is the dependent variable, whereas in the second equation, Sales is independent. While the first equation makes sense in the case of monopolies, it is not appropriate for most companies in today’s environment which is characterized by intense competition. On the other hand, companies that make decisions based on the second equation consider sales and prices as market driven and strive to achieve a cost structure based on market forces to maximize profits. A STRUCTURED company in the cost management maturity model would understand the relationship between these levers and make value-maximizing decisions based on both market driven revenues and internally driven costs.

A successful STRUCTURED company would have the following characteristics:

1. Permeation of vision and goal congruence across the organization
2. Understanding of the relationship between sales, costs, and profits
3. High interaction between different functions and departments
4. Collective synergistic functioning
5. Goal sharing across departments and geographically dispersed operations

**Level 3 (FOCUSED)**

A FOCUSED company uses cost management as an operational decision making tool. It understands the dynamic relationship between cost management and revenue growth. Therefore, such a company chooses the right lever to increase value creation.

A FOCUSED company deftly uses cost management to make decisions regarding where to focus its resources and efforts. It utilizes cost analysis to help make operational decisions such as capacity increases or productivity improvements. Consider two single product companies, A and B. For the sake of simplicity, let us assume that the cost structures of both companies are 100 percent variable. Both companies have sales of $100 each. However, while company A has costs of $80, company B has costs of $40. The management of both companies would like to understand which lever to choose to increase value creation. Option 1 is to increase sales by 5 percent and option 2 is to reduce cost by 5 percent (5 percent was chosen arbitrarily to illustrate the point). By concentrating on sales, both companies would increase their profits by 5 percent. This is because, while revenues increase by 5 percent, so do costs, which are 100 percent variable. Alternatively, by reducing cost by 5 percent, company A would increase profitability by 20 percent, while company B would only increase profits by 3.33 percent (Exhibit 6).

It is clear that for company A, which has relatively higher costs (i.e., when cost is over 50 percent of revenue) cost reduction is the best option to increase value. For
company B, with lower variable costs (i.e., when cost is less than 50 percent of revenue), sales increase would yield significantly higher marginal benefits. It is therefore clear that cost reduction is not the best option for all companies. Cost reduction yields diminishing returns with lower costs. Therefore, based on the cost analysis, Firm A should concentrate on productivity improvement, while Firm B should focus on increasing volume. Further analysis of the table above would allow us to conclude that for companies with costs less than 50 percent of sales, revenue acceleration would yield higher marginal returns, and for those with costs greater than 50 percent, cost reduction would create more value.

A FOCUSED company would understand the dynamic relationship between the revenues and costs and base their operational decisions on these interactions. The decisions made by the managers of all its departments would be congruent and would be based on careful analysis of the inter-relationships between the different levers. FOCUSED companies would exhibit the following characteristics:

1. Cost management as an operational decision making tool
2. Understanding of when to use cost and revenue levers
3. Prevalence of data and analytics driven management
4. Presence of knowledge management systems

5. Established process to use cost management in operational decision making
6. Cost accountants included in the operational decision making process
7. A good understanding of activity-based cost and revenue management

Level 4 (INTEGRATED)
An INTEGRATED company is one that approaches cost management from a three-dimensional perspective that goes beyond the traditional levers of cost and revenues. It adopts a customer and market driven approach to cost management rather than internal metrics. Therefore, it has the potential to use cost management as a strategic and competitive weapon in the marketplace. This helps the INTEGRATED company achieve a dynamic feedback loop, which helps it create a virtuous cycle of sustained value creation (Exhibit 7).

In order to integrate market forces in making cost and capacity related decisions, an INTEGRATED company has to have an integrated supply and demand value chain. This allows it to be flexible to changes occurring in the market. An INTEGRATED firm quickly responds to changes in market conditions by repositioning its marketing and sales actions and restructuring its internal operations to meet the changes.

Seven-Eleven Japan (SEJ) is a good example of a company that exhibits these Level 4 characteristics. SEJ is a chain of retail
outlets that primarily sells processed foods, fast food, and fresh food products. On the revenue side, SEI offers 3,000 stock keeping units (SKUs) in store. Therefore, SEI requires an efficient supply chain on the cost management side, to manage its high SKU content. SEI achieves this with virtually no storage space in its retail stores. The average size of an SEI store is approximately 1,000 sq. ft, which is about one-third the size of a typical U.S. store. Also, all product deliveries are made through SEI’s distribution centers. SEI has implemented a cross docking and combined delivery system to minimize the number of deliveries per day. At the same time, on the market feedback side, SEI has a comprehensive computer system that enables it to micro-match supply and demand by time of day, day of week, and by season. This helps the company adapt to changing customer needs at a rapid pace. By combining cost management, revenue management, and market feedback levers, SEI has succeeded in achieving a virtuous cycle of value creation.

Another defining characteristic of an INTEGRATED company is that it is forward looking and adopts a long-term approach toward cost management. When making customer-related investments, it evaluates cost management decisions from the perspective of the lifetime value of a customer. In order to be able to do this, an INTEGRATED company needs to have a good Customer Relationship Management (CRM) system that will enable it to make decisions on which customers to invest in and the amount to be invested. A common example of a Level 4 action based on lifetime value is cell phone service providers giving away “freebies” (usually in the form of free cell phone instruments) in order to increase customer retention. Many customers perceive this to be a random decision taken by the customer service representative. In reality, it is a rather deliberate decision taken on the basis of a complex analysis by the company. The cell phone service provider would collect customer attribute related data through the CRM system. This data is then
used to predict the customer's lifetime value. When a customer complaint comes in, the cell phone service provider would evaluate whether a customer investment is needed in order to satisfy the customer. If the answer is yes, the decision is made to make the investment based on the lifetime value of the customer.

An INTEGRATED company is also good at utilizing opportunities that arise due to the cost structure of the industry to make operational decisions that will increase the value created. Industries with a high fixed cost component can make use of the leverage offered by fixed cost in order to increase the value created. The practice of publishing companies to initially release a hardcover edition, followed by a cheaper paperback edition, is an example of this Level 4 practice.

For example, a publishing company, say Company X, has a capacity of 30,000 units and a variable cost of $10.00 per copy of the book. The market price for the hardcover edition of this book is $100 and the demand for the hardcover edition is 15,000 units. At this price, Company X would break even at 11,111 units and make a profit of $350,000 by satisfying the demand. However, since the variable cost of printing an additional copy of the book is minimal, Company X can release a paperback edition at a much lower price and therefore utilize the excess capacity. By taking this step, the publishing company can increase its value created to $950,000, which is 2.7 times the value created by just the hardcover edition. The relationship between cost and profits in such an industry is illustrated in Exhibit 8. In today's world, where publishing companies are combating the growing menace of infringement of intellectual property, especially in low cost countries, the cost management example above can be used as a potent weapon. By producing a cheaper edition, the publishing company can effectively fight piracy by selling the books at close to the price of the pirated copies.

An INTEGRATED company also uses cost behavior and cost-volume-profit analysis to make management decisions. Cost behavior is defined as the relationship between cost and business activity. The two main types of cost behavior are fixed and variable. Fixed costs are constant with volume, while variable costs vary linearly with quantity. While many companies are familiar with these cost types, an INTEGRATED company would go a step fur-
EXHIBIT 9 Cost Behaviors in an Integrated Company

- Variable Cost—varies in direct proportion to activity
  Example: direct material costs
- Step-Variable Cost—increases in small steps
  Example: direct labor costs
- Fixed Cost—does not change as activity changes
  Example: property, plant, and equipment
- Step-Fixed Cost—fixed over wide ranges but "steps" to a new "fixed" level outside the range
  Example: management labor costs
- Semi-variable Cost—has both a fixed and variable component
  Example: delivery costs (track is fixed, driver and fuel are variable)
- Curvilinear Cost—has a curved (non-linear) cost curve
  Example: use costs over the "relevant range"
- Direct Cost—directly traceable to end output units
- Indirect Cost—indirectly allocated or attributed through activity-based costing

*Both direct and indirect costs are applicable to the previous 6 kinds of cost

ther by utilizing subtle changes in the behavior of these cost types to its advantage. For example, variable costs sometimes behave as nearly variable, and vary in small steps. Direct labor costs are an example of such "step-variable" costs. On the other hand, fixed costs can also behave as "step-fixed" costs. For example, a company's fixed cost component increases to a new level when it builds a new plant to increase capacity. The different cost behaviors that an INTEGRATED company uses in making its managerial decisions are shown in Exhibit 9.

The main characteristics of a typical Level 4 company are:
1. Considers cost, revenue, and market conditions while making cost management decisions
2. Has an established process to conduct market research and integrate market data into cost and revenue management decisions
3. Has a sophisticated supply chain system that integrates cost, revenue, and customer data
4. Has a flexible structure to react to changes in customer needs and market conditions
5. Is forward looking and adopts a long-term approach to cost management—cost management decisions based on lifetime value rather than immediate value
6. Has a sophisticated CRM system
7. Utilizes the opportunities offered by the cost structure of the industry to create value

Level 5 (SUPREME)
Level 5 is the highest level in the cost management maturity model. A company that reaches Level 5 would consider the interactions that go beyond its operations and market while making cost management decisions. A SUPREME firm will analyze the value created by cost management in the entire ecosystem rather than just within the firm. It has operating mechanisms in place to measure and analyze the value created or depleted by interactions of its cost management decisions with its ecosystem. This ecosystem includes channel partners, suppliers, competitors, complementary product firms, customers, government, media, and any other entity that may potentially impact the value created. Managerial account-
EXHIBIT 10 Extending Existing Supply Chains to Adjacent Markets

Dell is an example of a firm that exploited such a spatial adjacency. Until recently, Dell dominated the desktop computer business by generating excess returns in an industry in which its competitors were struggling. A significant portion of this advantage was derived by the way Dell ran its global supply chain. If Dell had invested in its global supply chain system by only considering the returns obtained by its desktop computer business, its decision would have been questionable. However, Dell considered the synergies that it could tap into by utilizing this investment to extract returns in the broader market. In due time, Dell expanded its market from desktop computers into notebook computers, printers, computer-related electronics and accessories, and computer service and support. Therefore, by considering the potential value created in the broader market, Dell was able to utilize its superior supply chain to exploit value created by dealing with a broader array of products and services.

Dell's venture from the narrow desktop computer market to the broader computer accessories and solutions provider market is shown in Exhibit 10. Recently, Dell decided to further broaden its scope of activities by entering the consumer electronics business. By identifying that its investment and capabilities in supply chain management in the computer business can be extended to an adjacent market, Dell is further extracting returns from its strategic investment (Exhibit 10).

By considering value creation in the entire ecosystem and spatial adjacencies, a SUPREME firm transforms into one that makes cost and revenue management decisions based not just on value proposition, but also value migration. Such an approach can be defined as the "value hub" approach. Polaroid is an example of a firm that would have benefited by such a holistic analysis of the value hub. By not foreseeing the migration of value from analog to digital technology, Polaroid lost out on a wonderful opportunity to create and sustain value, despite being the leader in the industry.

Another important characteristic of a SUPREME firm is that it thinks systematically about risk and conducts a risk analy-
EXHIBIT 11: Ecosystem and Risk Analysis for Cost Management

[Diagram showing ecosystem and risk analysis for cost management]
that can be retained by recalling the product is greater than the cost of recalling the product, [8] would go ahead with the decision to recall Tylenol. This framework for cost management using risk and ecosystem analysis is illustrated in Exhibit 11.

The defining attributes of a SUPREME company are:
1. Considers the ecosystem of partners, suppliers, competitors, complementary product firms, customers, government, media in making cost management decisions
2. Conducts risk analysis in cost management decisions
3. Exploits commonalities and spatial adjacencies to maximize the value created by investments
4. Creates a culture where non-market forces are given importance while making managerial decisions
5. Maker decisions on investments in R&D, innovation, and technologies based on an analysis of the entire value hub
6. Considers not only value proposition but has a radar screen for value migration and makes investment decisions accordingly.

The Kellogg School of Management in alliance with the Consortium of Advanced Management International (CAM-I) is planning to design a process that will help companies transcend the cost management maturity model. This alliance would also institutionalize a certification process similar to the Six Sigma certification process that would certify companies based on their level in the cost management maturity model. By creating a cost culture based on this institutionalized process a company can transcend from a BASIC organization, which considers cost management to be an accounting function, to a SUPREME firm, which makes management decisions based on value created in the entire "value hub."[8]