Delivering Real Value Through Cost Reductions



UPS Supply Chain Solutions™

Our Insight.A UPS Supply Chain Solutions White Paper

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Need we rehash the economy's recent performance (or lack thereof)? Who among us has not been unnerved by prolonged market degradation and an unpredictable future? In a unique time of world unity, even our global markets are responding by reducing costs. But does the necessity for cost reduction mean we must add to the more than one million layoffs announced between January and September of 2001?¹

Resist the propensity for knee-jerk reaction. If yours is like many organizations, simple measures like policy changes and travel restrictions have already been implemented. However, as revenues continue to stagnate or even decline, more strategic measures may become necessary. And, although reductions in workforce and arbitrary expenses may appear to be the best immediate solution, tactics that generate long-term value and entrench strategic positioning should be

considered as a move to preempt such radical measures.

A Rational Look at Cost Reduction

Results are not guaranteed:

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A one-time hit to selling, general and administrative (SG&A) expenses may result in a 7 percent decline in operating expense that lasts as few as three months. Is this what we are really pursuing? A one-time savings is likely not the result any company intends to achieve, yet many of us consider tactics that purport to yield such temporary results. Considering the fact that 54 percent of companies that downsize do not achieve desired results in reducing expenses and 68 percent do not achieve the desired increase in profits, results are far from guaranteed.² In addition, cutting workforce and operating costs and/or centralizing capabilities may have serious implications for market positioning and meeting strategic objectives.

Let us propose that potential cost reduction actions should meet the following three requirements:

- 1. Deliver reliable short-term results
- 2. Deliver sustainable long-term efficiencies
- 3. Support or at least avoid compromising strategic positioning

What would you say to a reduction in cost of goods sold that starts at 3 percent in month two and then increases to 10 percent into perpetuity and leads to more demand-centered production? These kinds of results are exactly why the supply chain should be at the forefront of every cost reduction strategy. Perhaps supply chain productivity should be the first line of defense when it comes to realizing sustainable cost reduction.

Atwood, J. et al. "Has Downsizing Gone Too Far?" Wall Street Journal, 1998 Feb 16.

¹ CBS Marketwatch. CBS Marketwatch website. Economy & Politics page. Shadow of recession. Retrieved October 16, 2001 from http://cbs.marketwatch.com/news/economy/layoffs.asp?siteid=mktw. Accessed 2001 Oct 16.

Supply Chain as the Means to an End: Sustainable Cost Reduction

Pick any cost model, and guess what will be at the core – supply chain productivity. As a case in point, consider the Dupont model in which every ratio is directly impacted by supply chain efficiency: profit margin, asset turns, debt to asset ratio. Gaining productivity in the supply chain through reduced working capital and COGS, as well as improved asset utilization, yields valuable market and financial



results. These areas hit the bottom line of both income statements and balance sheets, necessary steps in moving market capitalization.

Now, consider a popular cost-cutting measure: workforce reduction. In the Dupont model, the

only ratio impacted by such an action is profit margin. Even if margin is the deciding factor, which tactic yields stronger results – workforce reduction or supply chain productivity? Given that a product supply chain makes up a consistently higher portion of costs, supply chain efficiency yields greater returns in margin optimization. Furthermore, additional performance measures like asset utilization and liquidity are directly impacted by one's supply chain.

Supply Chain Blocking and Tackling

In the realm of cost reduction, value can be defined as short-term realization coupled with sustainable results. Five areas that represent key components in reducing supply chain costs in any organization include:

- Inventory reduction
- Product rationalization
- Customer segmentation
- Supplier base management
- Network optimization

These key components are basic supply chain blocking and tackling maneuvers but are rarely given the attention deserved. In fact, in recent years, they have often been overlooked as companies struggled to meet the demands of a growing economy. Efficiencies in these functions can drive an organization's market positioning and be leveraged to achieve strategic objectives. Even without the strategic perspective, these efficiencies can ensure the viability of an organization during tough times as well as during growth years, as experienced in the 1990s. The following sections highlight the concept, describe the value proposition and provide a case example for each of the above five recommendations.

Supply chain efficiency impacts the bottom line of both income statements and balance sheets in more ways than work reductions, which impacts only profit margin.

Inventory Reduction

The Value

Inventory reduction initiatives can directly lower COGS and working capital. Depending on the amount of inventory eliminated, these initiatives may also lead to asset reduction, which in turn can increase asset utilization. Successful initiatives identify excess inventory of 4 to 10 percent, excluding inventory allocated to provide increased service levels. Realistically, some organizations can expect even greater reductions.

Savings in carrying costs can typically be estimated at 12 to 16 percent of the COGS value of reduced inventory, which is considered a one-time savings in working capital. However, changes in planning, integration and safety stock ensure minimized inventory over the long haul. These savings can easily contribute to an organization's cash flow, profitability and flexibility.

The Process

The most effective means of reducing supply chain costs is through inventory reductions. Some companies argue that inventory should be maintained at higher levels to improve customer service. In reality, the right mix of current inventory, elimination of old and obsolete inventory, tight integration with demand planning and identification of appropriate safety stock targets can lead to even higher levels of service.

INVENTORY REDUCTION

- Sustainable lowering of inventory levels without compromising customer service.
- Inventory is evidence of process efficiency; to reduce inventory, processes driving inventory must be changed.
- A one-time reduction will not lead to lasting results.
 Only process efficiencies will yield persistent returns.
- Process changes can also lead to greater flexibility in responding to changes in demand.

Case in Point: Quaker Oats

To combat a slowdown in growth during the 1990s, the Quaker Oats Company focused on improving systems and processes contributing to an imbalance of demand and supply.³ Through improved demand forecasting, distribution requirements planning (DRP) and inventory planning enabled by advanced planning software, Quaker Oats was

able to increase average inventory turns from 15% to 35%. Inventory levels in customer warehouses were slashed by 60% and cube utilization jumped from 38% to 90%, eliminating more than 30% of pick ups at the company's warehouse. All of these benefits were the result of a focused effort to reduce both inventory and costs.

³ Logility, Inc. Collaborative Commerce/Success Stories/Quaker Oats page. http://www.logility.com/news/quaker.html. Accessed 2001 Oct 16.

PRODUCT RATIONALIZATION

- Eliminating or outsourcing high-cost products, features and options that have low revenue or customer value.
- The key is identifying product obsolescence and retiring products, features and options based on set parameters.
- To produce sustainable results, product rationalization must become a standard in the product life cycle.

Product Rationalization

The Value

The value in product rationalization comes from reducing costs while improving service and offerings. Although a vast number of companies devote great effort to planning and executing product introductions, few spend a proportionate amount of time managing obsolescence. Product rationalization requires elimination of obsolete product lines, features and options and leads to improvements in COGS, working capital and asset utilization. Companies can also expect to increase profits as the burden of producing and distributing slow-moving products is lifted. Valuable resources, including labor, manufacturing capacity and distribution capacity, are consequently able to improve product offerings and enhance service levels. The end result, in addition to cost savings, is often stronger products leading to higher market share and customer value.

The Process

The cost of managing, producing, storing and distributing goods is directly related to the number and variation of those goods. Typically, the old 80/20 rule applies: 80% of revenue is generated by 20% of goods, leaving 20% of revenue spread across the remaining 80% of goods. Throughout the cycle of introducing new products – phasing out old products, satisfying niche markets, and penetrating new markets – many organizations end up producing goods longer than necessary.

Identifying the most cost-effective products to discontinue is at the core of product rationalization. This process may identify outdated and/or nonvalued features, as well as areas for which outsourcing may prove the most cost-effective solution.

Case in Point: Tupperware Corporation

Tupperware Corporation took action to minimize inventory obsolescence through product rationalization in the United States.⁴ This led directly to an improved operating profit of \$5 million annually through a combination of increased sales and margins.

According to Rick Goings, Tupperware chairman and chief executive officer, the product rationalization initiative allows the sales force to more effectively focus on both the core product line and new product categories in the United States.

⁴ Tupperware Worldwide. Tupperware website, Press Releases page. 1998 Jan 12. Tupperware Earnings To Be In Line With Expectations Before Charge; Plans To Accelerate Share Repurchase. http://tupperware.com/company/investor/. Accessed 2001 Oct 16.

Customer Segmentation

The Value

Through customer segmentation, companies rank the value and profitability of multiple segments in order to harvest cost savings. This is accomplished when service levels are tailored to the value of each segment. Through segment-specific inventory management, working capital can be improved. Even SG&A can experience reduction by better focusing sales and support activities. Typically, companies that practice segmentation are able to better manage delivery to customers while defining reliable service levels to each segment.

Customer segmentation can also be effectively used as a growth strategy. Once armed with behavioral information, organizations can adjust their product strategy to better service high-potential segments while improving market share and profitability.

The Process

Segmenting customers based on volume, profitability, strategic importance or even the cost of maintaining them allows an organization to develop and better manage service levels and costs. Once segments are defined, an appropriate strategy for managing customers in each segment should be developed. Contrary to popular belief, high-volume customers, although business critical, don't always justify high service levels when the profitability is low. Assuming that service should be volume based can often lead to higher costs without a significant return.

CUSTOMER SEGMENTATION

- Grouping customers on value in addition to traditional attributes and then tailoring service levels.
- Equality is not a value when value is measured as the return on costs incurred.
- Static customers in a static world only require static segmentation, but who has static customers – much less a static world?

Case in Point: Marriott International

Marriott International, a global hotel corporation, has established a well-recognized frequent guest program in an effort to gain and retain a high percentage of business travelers. These individuals typically represent higher volume and profit than infrequent travelers. Frequent guests are eligible for higher levels of service, such as guaranteed

priority room reservations and club-level privileges, all at a higher cost to Marriott. However, because this customer segment produces higher profitability than other segments, the higher costs of serving it are justified. Value is measured as the return on costs incurred.

Marriott International. Marriott International website, Marriott Rewards/Elite Membership page. http://www.marriottrewards.com/Elite/default.asp . Accessed 2001 Oct 16.

SUPPLY BASE MANAGEMENT

- Aligning the supply base with supply chain strategy to reduce total costs and increase performance.
- The long-term value is in the joint commitment to results and total cost reduction.
- Measurement processes and supplier development programs are the keys to driving year-over-year cost reductions.

The job of controlling costs requires continuous effort. Periodic supply chain reviews with a focus on people, process and technology can keep an organization primed for change.

Supply Base Management

The Value

Organizations that have implemented supply base management programs often reap a 5 to 10 percent reduction in the spend base addressed. Depending on how aggressively a buy is managed at the time of program implementation, savings of 15 to 20 percent are not unrealistic. By putting measurements and processes in place, organizations can realize a 3 to 5 percent reduction on a year-over-year basis. These savings in turn can lead to a decrease in COGS, working capital and, potentially, SG&A. Improvements in operational performance yield additional savings as well as enhanced asset utilization. These programs yield powerful results and can be equally effective for both direct and indirect spending.

The Process

Consider that every after-tax dollar saved in the purchasing process applies directly to the bottom line. Contrast this with the amount of revenue lift required to achieve this same impact on the bottom line. Although most of the organizations that have gone through this process have approached it in unique ways, those that have been most successful often employ these common tactics:

- Executive sponsorship to influence the many areas impacted by the supply chain as well as to develop strategic relationships within the supply base
- Purchasing/commodity strategies to specify opportunities for performance improvement and to highlight opportunities to leverage supplier capabilities
- Input/involvement from cross-functional teams to drive solutions that address total costs and collective satisfaction in all customer requirements
- Supplier evaluations that move beyond price to focus on total cost and supplier alignment with strategic objectives
- A shift away from executing a project towards executing a process to drive year-over-year savings

Depending on organization complexity, spend complexity and information availability, these initiatives can typically be rolled out in three- to six-month cycles, but ultimately program success will be measured in years.

Case in Point: John Deere

John Deere won the *Purchasing* magazine 2001 Medal of Professional Excellence. Over the last four years, the company has reduced its supplier base from 14,000 active suppliers to approximately 2,000, leading to cumulative savings measured in the billions. In MRO alone, they were able to consolidate 1,675 suppliers to 20 and cut costs by 13 percent.⁶

John Deere is not alone in achieving this level of success. IBM, Chrysler and Harley-Davidson attribute their economic recovery and growth during the 1990s to the success of their supply base management programs in the joint commitment to results and total cost reduction.

⁶ Nelson, David. Moody, Patricia. Stegner, Jonathon. The Purchasing Machine: How the Top Ten Companies Use Best Practices to Manage Their Supply Chains. March 2001.

Network Optimization

The Value

Research conducted by AMR indicates that ROI from network optimization can run as high as 300 percent.⁷ Furthermore, adjustments in an organization's distribution network can lead to improvements in asset utilization, COGS and working capital. Quick adjustments in the network are relatively easy to implement and can provide immediate cost relief while other strategic modifications can secure long-term benefits.

NETWORK OPTIMIZATION

- Using scenario-based models and decision support tools to determine optimal operating locations, transportation routes and delivery schedules.
- You can know for sure that you have the right number of facilities in the right locations.
- Concepts driving network optimization create an objective, fact-based decision-making framework that can be leveraged for many strategic decisions.

The Process

Optimizing a supply chain network to take advantage of economies of scale, proximity to demand, regional regulations, labor availability and proficiencies, and transportation requirements will ultimately minimize supply chain costs. Quick, short-term savings can be achieved through product distribution strategies, eliminating redundant service coverage and consolidating manufacturing capabilities. Short-term optimization addresses issues regarding:

- Distributing the right products from the right facilities
- Optimizing product distribution flow
- Eliminating potential redundancies in service coverage
- Determining whether orders should be accepted immediately or later (yield management)

Optimizing the network further requires an analysis of manufacturing and distribution throughout the supply chain and can answer longer-term questions pertaining to:

- Location of strategic suppliers
- Cost efficiency of manufacturing facilities located overseas
- Determining the need for one or more distribution facilities

The ultimate objective is to position and establish facilities in the most costeffective manner without disrupting established corporate strategy, goals and brand image.

Case in Point: General Mills and Miller Brewing Company

According to Bruce Barquist, General Mills' director of finance, the company has saved millions of dollars by readjusting manufacturing and distribution networks. General Mills used advanced technology to perform manufacturing network optimization, including evaluation of the optimal size, number and location of manufacturing facilities. As a result, General Mills discovered that they could operate more efficiently by reducing their number of manufacturing plants from eight to four. On a more tactical level, General Mills began applying network optimization to determine when and in what quantities specific plants should produce certain products.

As another example, Miller Brewing Company uses network optimization to improve production planning and scheduling. The company's complex environment consists of eight breweries housing 12 to 13 packaging lines each, 2,200 brand and packaging combinations based on 80 brands and more than 1,800 distributor locations. Because each facility is assigned production of specific brands and distributors through network optimization, Miller's overall annual production planning cycle has been reduced from an excess of one month to less than a week.

⁷ Barrett, Alexander. Information Week Online. 2000 June 5. Optimize the Enterprise. http://www.informationweek.com/789/optimize.htm. Accessed 2001 Oct 16.

⁸ CAPS Logistics, Inc. CAPS website, Cases/General Mills page. http://www.caps.com/cases/sccgenmills.asp. Accessed 2001 Oct 16.

Next Steps

Clearly, a number of opportunities to reduce cost exists within the supply chain. In evaluating these opportunities, a couple of questions warrant additional attention:

- What series of initiatives is right for a particular organization?
- Will an organization be able to plan and execute in time to make a difference?

Remember that we have established three criteria for cost-cutting initiatives: short-term realization, sustainable results and alignment with strategic positioning. Market positioning and strategic objectives must be evaluated along with cost reduction goals, which most likely have already been defined.

Essential to identifying the best initiatives is recognizing where help is needed. Internally, operations managers may respond that inventory reduction measures have been implemented, and/or that all dead wood has been removed from product lines. However, the questions beg to be asked: How will a company know which areas of its supply chain have been optimized to the fullest potential? How will an enterprise determine which opportunities will return the greatest value? An independent or joint diagnostic with key internal players can help identify and evaluate objective, achievable courses of action.

Executing Sustainability

The moral of the story is this: The job of controlling costs is never done. A continuous, focused effort is required to run an organization at optimal cost levels.

Start by including supply chain costs in existing performance metrics. Use a metric dashboard that is compiled monthly and reviewed quarterly by executive management. Monitor inventory levels closely and evaluate deviations from target inventory on a monthly basis. Understand why inventory might have missed target levels and return it to plan immediately.

Periodic supply chain reviews with a focus on people, process and technology can keep an organization primed for change. In addition to providing a medium for discussions about growth and responding to recessionary trends, such diagnostics facilitate ownership in positioning the organization for change. And in a business climate where change is the only constant, a steady hold on a company's operations might be the best way to survive the storm.

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By aligning a client's business strategies with its operating processes, UPS Supply Chain Solutions can create high-performance supply chains that from inception to implementation generate real, hard-number values and quick benefit realization. This distinguishing capability, our experience in solving real-world challenges, and the resources of UPS enable us to set strategies, design and build solutions as well as implement, operate, manage and synchronize your world of commerce.