

The Executive's Guide to Supply Management Strategies

***Building Supply Chain
Thinking Into All
Business Processes***

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leading-edge idea that is partially understood and already implemented piecemeal in a number of companies. This book is about how to pull it all together and, more crucial, implement it—the single factor that will determine which businesses and business leaders will distinguish themselves from their competitors.

CHAPTER 2

Let's Stop "Admiring" the Supply Problem

Everyone we've met during the last several years claims to be involved with supply management in some shape or form. We've heard it called procurement reengineering, supplier relationship initiatives, strategic supply side management (as though the addition of the word *strategic* alone somehow elevates its importance), and supplier alliance teams. Need we continue?

If the creativity in naming this field had been directed toward solving, rather than "admiring," the problem, the task of problem analysis would have been completed long ago and effective supply management programs would now be the norm. But instead, legions of Fortune 500 personnel have now examined every facet of what's wrong with the way a business purchases—without finding a *comprehensive*, action-oriented solution. The rewards for admiring problems must obviously be greater than for solving them.

This is where you come in, because without executive leadership, people will "admire" until time runs out.

Now, let us be clear. If you and your business have all the time in the world, no profit pressures, and ample competitive advantage, you don't need to look to the supply

side of your business for new opportunity. However, if you are among those executives who are continually challenged to produce to new heights, this forgotten cost center may have some jewels that you have overlooked.

What Do You Know About This Overlooked Cost Center?

First off, do you know how much your company spends for all of its purchased materials and services? Why not admit it, you probably don't have a sweet clue, let alone know how it's spent or among how many suppliers. And you can be thankful it's too early in the book to ask the really hard question, "How do you know that you're getting your money's worth?" That we can't even venture a guess is symptomatic of the basic problem: Nobody cares!

Let's go back to managing what we know—marketing, sales, manufacturing, downsizing, cutting budgets, quality processes, team building . . . these alone can occupy us for the rest of our lives. So why examine purchasing at all?

Very simply, your business is spending, conservatively, 25 to 40 percent of every sales dollar on purchased materials and services. These are net cash dollars out of pocket. The total costs for these purchases, including hidden payroll costs, waste and misuse, processing costs, and inventories, bring the actual cash impact to almost twice the purchase cost alone.

How could any area of expenditure be so large and so forgotten? Very simply, it was buried by lack of interest and other priorities, and has stayed hidden, out of sight, since centralized procurement began more than fifty years ago.

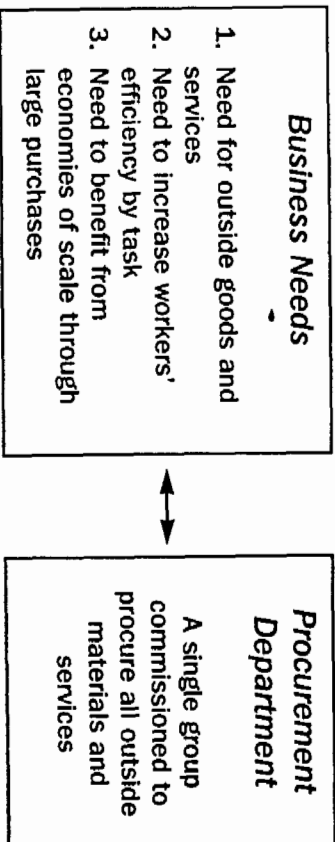
Early Centralized Structures for Purchasing

The need for acquiring supporting goods and services is almost coincidental with the formation of business. Only the earliest farmer could boast of total self-sufficiency, called vertical integration in today's world.

At first, businesses acquired the goods and services required to make or deliver their products in an ad hoc manner. However, by the 1930s, Adam Smith's division of labor theories had created a new way of organizing work by task in order to increase a worker's efficiency. Aggregating like work tasks into one organizational unit created economies of skill and supervision. These, in turn, created functional organization structures still in existence today.

The Functional Department

From these beginnings, the earliest purchasing or procurement department, which performed the functional work of acquiring the goods and services needed to make a company's product, was conceived. This new centralized function was created to increase efficiencies in three areas of business needs:



The functional procurement department was centralized within a business and empowered one set of people to perform the tasks of purchasing, which were to:

- Produce purchase orders.
- Plan and receive materials.
- Select suppliers.
- Schedule material/service use.
- Negotiate terms.
- Pay bills.
- Develop contracts.
- Monitor inventory.

From the 1930s through the 1970s, this centralized function worked well. Businesses gained leverage in their purchasing and efficiencies from standardized practices in the transactional process of buying, receiving, and paying bills.

However, the 1970s marked the beginning of a whole new era of organizational concepts:

1. The advent of the individual
2. The power of teams

These two concepts directly challenged virtually every centralized functional organization in a business, including accounting, personnel, information services, and many more.

Now, increasing numbers of individuals and teams began to make specific demands on these centralized structures originally designed to process large volumes of standard transactions, resulting in processing errors, increased transaction time, increased handoffs as work moved from one functional group to another, and increased budget expense. These, in turn, created the need to add dedicated

people to supply functional support to individual businesses, resulting in added management infrastructure and staffing costs. In short, superimposing these *new* concepts on *old* structures made organizations unwieldy.

Proliferation of Suppliers and Transactions

As individuals began specifying more and more suppliers, purchasing departments were left with the primary responsibility of only processing orders. The new internal focus on satisfying the individual or team need has resulted in a wave of purchasing practices that do not conform to the original intent of a common centralized function. What remain are administrative tasks of purchasing paperwork. There is little opportunity to affect the purchase decision, the supplier selection, the buying process, or the evaluation of results or the opportunity to leverage the actual purchase based on the company's need to satisfy an external customer. In short, purchasing has become a non-value-adding administrative task in far too many businesses.

As a result, the majority of businesses now face the following problems:

- A proliferation of suppliers, certainly more than 1,000 and in some businesses 10,000 or more.
- An explosion in non-value-adding transactions, most of these for \$1,000 or less, in purchased materials or services, resulting in little time spent on the strategic purchases opportunities of the supply side.
- Material and service variability, with multiple suppliers delivering their version of the same specifications.

■ No opportunity to create leverage from a single purchase order because of minimum economies of scale from multiple suppliers. In addition, the small order rarely commands the attention of the supplier's senior management and virtually never enjoys the benefits of supplier's innovation in product or process improvements.

■ Purchasing has become a transactional business function with no one managing or leading the "business process" of acquiring materials and services. It's all purchase orders and payments with little time for supply strategy.

These problems have resulted in hidden costs that are "marbleized" throughout an organization and its P&L. The purchasing expenditures, generally consuming between 40 and 60 percent of total revenue, are divided into thousands of small transactions, driven by individual or team requirements, and executed at the transactional level with no value added to the business's customer and at the same time adding to indirect costs.

The results:

- *Noncompetitive costs* for these expenditures
- *High transaction costs*, on average \$152 to process a purchase order, the majority of which are for goods under \$1,000
- *Non-value-adding work*, for example, administrative work for purchasing, receiving, and accounts payable clerks, auditors, secretaries, attorneys, supervisors—all involved in sequential, duplicative tasks
- "Shadow" workforce time, employees, including management, spending sizable amounts of time making purchasing decisions (all too often about materials and services that have nothing to do with the core competency of the business), time that

could be otherwise devoted to improving the business's competitive advantage

What's wrong with this picture? Very simply, the process is broken, and the goal of maximizing the value of dollars spent is long forgotten.

Administrative vs. Managing Processes

In today's competitive marketplace, where every business is striving to reduce its cost of delivering more distinctive products and services to its customers, a business can no longer ignore the importance of the procurement function and its access to new market potential. The most obvious change to be made is to replace the traditional burdensome administrative process with a simple managing process that creates value with each purchase. The supply management process brings simple concepts and tools to revaluing a business's total purchasing behavior. The process is too simple to implement to justify trying to fix a traditional administrative system. In short, get out a clean sheet of paper and begin asking, "What are we trying to do here?"

The Situation Analysis Result . . . for the Last Time, Ever

The simple truth that there is nothing worth saving in the traditional procurement process or structure is too painful for some to accept. So we are continually hearing of new procurement redesign efforts beginning with a new situation analysis—yet another reexamination of the current

process, as though it is really expected to identify the symptoms and diagnose the problem in a new way.

Figure 2-1 shows the inevitable outcomes. The only change necessary is to fill in the business name.

Figure 2-2 summarizes how various groups of people spend time as they engage the current procurement process.

Figures 2-1 and 2-2 summarize the more salient results we typically find in each business as it first begins to reexamine its procurement process. As these results are compiled, a compelling picture of the need for drastic change emerges:

- Noncompetitive costs, often 5-10 percent behind the industry leader
- Lengthy cycle times for purchases
- Long cycle times to implement improvements
- Shadow workforce (people other than procurement professionals) performing a wide variety of indirect purchasing functions and possessing varied skill levels, diminishing market leverage
- Lack of synergy in purchases among business locations
- Lack of synergy among locations to achieve benefits of best practices
- No opportunity for focused innovation
- Purchasing personnel with direct marketing knowledge are often excluded from important purchased services and goods arenas
- No opportunity to link key suppliers with key customers to pursue new product or service opportunities

Finally, the saddest result of all is that the only individual within an organization who knows anything at all about the actual purchased supply or purchased service is the buyer. Yet the buyer has almost no time to think about

Figure 2-1. Typical situation analysis results.

Annual Business Spending for Purchases of Materials and Services

Manufacturing business 50-60% of total revenues
Service business 15-25% of total revenues

Total Cost of Ownership

Tangible products (equipment, chemicals, office supplies)
Purchase cost = 35-50% of total cost
Intangible services (professional consulting, contract labor)
Purchase cost = 60-85% of total cost

Difference between purchase cost and total cost of ownership includes cash and noncash impacts, such as payroll time, inventory, processing costs, waste, and misuse.

Number of Suppliers

Organization size (by revenue)	< \$1 billion	1,000-5,000 suppliers
	\$1-5 billion	6,000-20,000 suppliers
	\$5-15 billion	20,000-40,000 suppliers

Average purchase will involve 7 to 10 suppliers
High supplier response: 30
Low supplier response: 01

Transactional Analysis

10% of all purchase orders account for 90% of all spending.
80% of all purchase orders are for \$2,000 or less.
Most approval policies require executive signatures for purchases over \$500.

Purchase/Payable Process Description

Transactional process utilizing purchase orders, invoices, check requests, and matching purchase orders/invoices and receiving documents to release supplier payment. This same process is used for virtually all purchases, regardless of importance to the business or the dollar size.

Figure 2-2. Typical management task analysis results.**Procurement Professionals**

- Time is spent almost exclusively in buying, processing, and handling delivery logistics.
- No time is spent managing use or implementing best practices.
- Minimal time is spent measuring performance and providing supplier feedback.
- Negligible time is spent redesigning the supply flow and usage, including streamlined ordering and supplier payment methods.

Operating Personnel/Internal Requisitioners

- Spend majority of time specifying choices and approving purchases.
- No time is spent in comprehensive market reviews or best-cost or best-practice benchmarking.
- Minimal time is spent in supplier cost analysis.
- No time is spent in creating a strategy to manage or optimize use.
- No time is spent in evaluating performance.

Executive Management

- No mechanisms exist to permit periodic reviews of purchase effectiveness by type of supply.
- No vehicles exist within current planning processes to target or measure procurement practices improvement.
- Virtually no time is spent, other than during annual budget preparation, seeking new supply strategies or sharing benchmark learning.

Technology

- Expenditure data not available.
- Inadequate to automate simplified transaction process.

the entire supply chain: the incoming material or service and its actual use. By never focusing on this supply chain, the business voluntarily forfeits any benefits the marketplace may offer in improved functionality or improve-

ments in cost. Sad to say, for purchased materials and services consume such large portions of business revenues.

It is high time to stop "admiring" this problem. The reasons for the problems are clear but irrelevant to the need for fast improvements in value for every dollar spent. However, the path forward requires executive leadership shifts in organizational processes, systems, and structures. Mere mortals can't handle this.

IMPLEMENTATION GUIDE

How to know whether your business is still "admiring" the problem:

1. Are you actively engaged in defining/understanding a new management process to create purchased supply strategies?

For all materials and services?	Yes	No
For some materials and services?	Yes	No
2. Which measures have you selected to evaluate performance?

Pricing histories?	Yes	No
Cash flow tracking?	Yes	No
Cost by supply stream?	Yes	No
Total cost/supply stream/year?	Yes	No
3. Are your procurement professionals consolidating your supplier base?

Yes	No
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Has significant change been made during the last year . . .

- 50% reduction? Yes No
- 25% reduction? Yes No
- 5% reduction? Yes No

4. Have you streamlined your procurement process, including new policies, methods, and information technologies?

- Yes No

5. Are senior financial and procurement executives actively involved in procurement reengineering or supplier consolidation/supplier relationship programs?

- Yes No

6. Can you describe specific benefits or outcomes that have resulted in the last year?

- Yes No

Score 5 points for every "no" response. If you have 25 points or higher, your organization is definitely "admiring," not implementing.

We know from experience that correctly redesigning procurement processes will produce *tangible* cash benefits quickly. So if you cannot articulate hard results in improving profitability and management practices, your peers and subordinates are waiting for leadership to set the tone, remove barriers, and provide permission for change.

Select 1 or 2:

1. You now see a case for executive leadership in supply management but don't yet know enough to provide direction. → Continue to read. (We'll tell you how.)

2. You think you are already redesigning your supply management approach, with tangible results. → Read only the Implementation Guides to check your course of direction.

leverage ruled, benefits flowed to the large, and the principle became *might equals right*.

The good news was that this approach attracted a lot of senior management attention. José Ignacio López De Arriortúa, head of General Motors Purchasing in the early 1990s, was probably the most widely recognized proponent of leverage—aggregation of volume, relentless bidding competition, and price focus. These produced benefits to the General Motors bottom line, but the results were all too often short-lived.

The other good news was that companies began to trim their supply base, limiting the number of suppliers they had to deal with. Companies did have the opportunity to manage those suppliers more effectively and even started to “reengineer” some procurement processes. Some established umbrella contracts that allowed users to release against them, eliminating the cumbersome issuance of individual purchase orders. Systems solutions provided easier release and tracking mechanisms as well. Procurement cards were used for low-dollar-value purchases, again freeing buyer time to allow the buyer to do other, more value-added tasks. A common offshoot, however, was the misconception that this was now an opportunity to downsize procurement operations.

Problems With the Early Initiatives

Looking back, we see some flaws, some opportunities missed in these early efforts to fix procurement. As GM and others learned in the post-Lopez era, the benefits from leveraging and the fractured reengineering efforts were transitory. Supplier trust and responsiveness were damaged. Relationships were frayed, good ideas were lost, and

CHAPTER 3

A Brief History of Procurement Initiatives

—Just Not Enough

In what could be called a field dash toward procurement enlightenment, the 1980s brought us to a rediscovery of market *leverage*—the wholesale gathering of requirements and specifications, generally for production materials required by manufacturing businesses. Annual bidding events involving every company in the Free World spawned rooms of suppliers at bidders’ conferences. Requests for Proposal (RFPs) went to all in a winner-take-all competition for the business’s requirements, sometimes to be awarded instantly on a small commodity grouping, sometimes on larger groupings with subsequent best-and-final negotiations. The objective was price, and lower prices resulted. There were substantial cost savings, so the process was passed down the chain. Broader product and service categories and cross categories were exercised. Many companies turned these adventures into a draconian art form. And the prices kept dropping. Sometimes the winning suppliers dropped as well, but there were always more where those came from. Customer clout, volume, and

technical and creative capabilities were falling victim to a one-dimensional process.

Significant gaps were apparent. There was only a short-term cash focus. Attention was paid only to price or best acquisition costs, failing to include some of the hidden costs of the procurement activity itself.

Some companies paid attention to inventory costs, but they often failed to account for more than the cost of money: Obsolescence, loss, handling, and the like were often overlooked, although transportation might sometimes be adequately considered. The real cost considerations for the way we actually use products and services were rarely considered, especially if the costs were for indirect or professional labor. There was simply no focus on how best to use products or services in order to gain the most value, or to eliminate wasted steps or mistakes. Often there were better solutions, which the right supply market analysis could have uncovered or which could have been developed if the pertinent information had been exchanged at the right levels of the supplier and using organizations or if the right links with supply R&D or manufacturing groups had been in place. Quality variables were very often overlooked or not adequately accounted for in the cost of quality analyses. The very real costs in time and effort expended from the very first realization of a need until that need is satisfied and value is received were not adequately mapped, identified, or accounted for as a total cost consideration in the procurement and use of goods and services.

In typical procurements that focus on the buying process and leverage alone, the value of reduced cycle time was underrealized or not realized at all. The time-to-market cycle (the time from product or service inception until market introduction) is of tremendous strategic im-

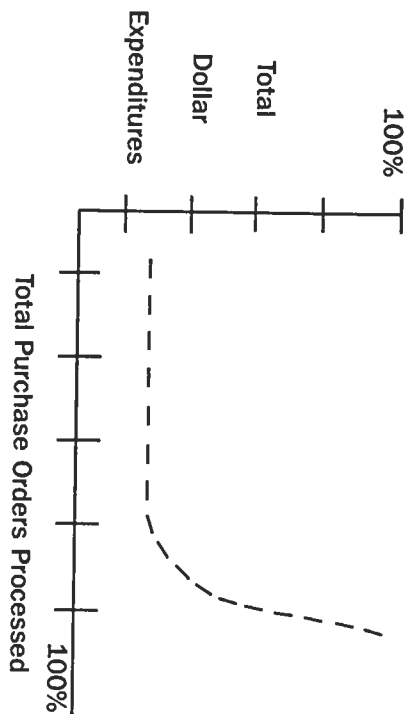
portance, yet was often not considered part of procurement strategy. Also, the positive impact on cash flow provided by having a simple process to guide the transition from need to fulfillment was often overlooked in the procurement process and in the overall business development process.

All too slowly many companies began to realize that a satisfactory process to focus and actually manage their purchased production materials, supplies, and services (including those expenditures not traditionally thought of as purchasing opportunities or necessarily bought by purchasing professionals) simply did not exist. And so, even with these initial leveraging and procurement transaction reengineering efforts, companies had not consciously developed, much less put in place, streamlined, consistent, further-reaching processes that would provide focus and lead to the creation of new value.

Reducing the number of suppliers from thousands to hundreds generates economies of scale by leveraging purchase volume among fewer suppliers. Certainly, immediate dollar savings accrue from these lower prices. However, if a company can reduce suppliers *and* redesign the buying and paying process, many costly transactions can be eliminated or replaced with more efficient electronic solutions, including fax-ordering and credit card purchases. Effective process redesign frees up procurement time to focus on more value-adding work, such as market analyses, cost-modeling, and benchmarking best-usage practice.

Figure 3-1 indicates that 90 percent of a typical purchasing organization's time is spent on purchase orders that account for only 10 percent of total dollar expenditures. The majority of procurement and payables time is consumed by processing these low-value purchase transactions. In most companies today:

Figure 3-1. Annual purchase order analysis.



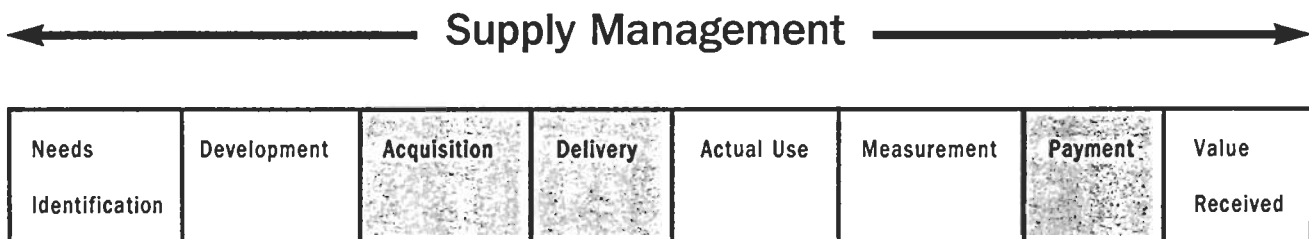
- Few processes exist to manage the larger dollar purchases.
- No process exists to manage the small and fragmented purchases.

Many eager procurement and business leaders began to recognize the need to reduce the number of suppliers and consolidate the supplier base and to simplify transactions. They stopped short, however, of pursuing the full benefit that comes from developing strategies that maximize the value of the entire sourced material or service supply stream, shown in Figure 3-2.

Procurement traditionally deals primarily only with the shaded blocks of this supply stream—the acquisition process and delivery to the user, with limited involvement in development and involvement with payment only when problems arise.

Supply management, by contrast, serves to manage all facets of the supply stream, including optimizing the actual use. This entire supply chain is the new domain of the sup-

Figure 3-2. The complete supply stream.



ply manager and a platform for optimizing total costs and performance.

By the early 1990s, a few procurement leaders had begun performing major surgery on their procurement processes. In doing so, they created an opportunity to begin a new process by asking, "What are we trying to do here? How can we be sure we are dealing with the right suppliers, and how can we maximize the value from our purchase expenditures?" These questions led to a variety of "strategic" sourcing initiatives.

As a result, many procurement departments are now consolidating their supplier base and implementing national supplier agreements, as well as introducing new reengineering initiatives. Yet they are still failing to create the strategies necessary to maximize value and minimize their total cost of ownership (the sum of all costs associated with every facet of the supply stream, discussed in more detail in Chapter 4).

As important as supplier base consolidation and procurement reengineering are, when taken alone they leave large gaps in the benefits that can and must be derived for businesses to be viable in today's environment. Supplier consolidation is used largely to facilitate price leverage, and reengineering efforts are generally moves toward simplified release mechanisms for suppliers, such as EDI releases and use of procurement cards. These are usually focused on the beginning part of the supply stream—the needs identification to delivery phases (see Figure 3-2), including the pricing and order issuance steps.

Any number of examples could illustrate some of the gaps in these incomplete processes, but the real-life situation that follows illustrates nearly all in one telling.

Titanium Dioxide Case Study

In 1992, a leading producer of fine paper products was reexamining its roster of suppliers and the value being received for its major purchases. Titanium dioxide was an important ingredient in the company's paper-making process and critical to creating the whiteness and brightness necessary to meet its printer customers' specifications. This manufacturer was a leader with a large share of the market. Not surprisingly, it purchased a lot of titanium dioxide, well over 30 million pounds each year.

Titanium dioxide exists in two chemical forms:

1. *Anatase titanium dioxide*—used by virtually all paper manufacturers to add whiteness to paper
2. *Rutile titanium dioxide*—having a mirror image molecular structure; it is less expensive but not as effective in meeting whiteness specifications and somewhat harder to process

The manufacturer was purchasing approximately 80 to 90 percent of its annual requirements from one U.S. supplier, which had provided its anatase titanium dioxide for a number of years.

The paper producer began its reevaluation process by meeting with the supplier to make sure that it was receiving the lowest possible price per pound. The supplier relationship was supported with a buying contract that included a "most favored customer" clause, ensuring that the paper producer would always receive the best pricing offered to any other customer. They were assured that their \$.87-per-pound price was the best. . . . After all, they were a large, valued customer.

The supply leader responsible for titanium dioxide formed a team including technical and operating represen-

tatives. Together, they decided to begin some market studies to learn about other suppliers, changes in technology, and changes in processing techniques and also to better understand what pricing other paper producers obtained for titanium dioxide.

Several facts came to light about the same time.

- At least two other major paper producers were reportedly paying \$.85 per pound for the same chemical. One of these producers was also a customer of the same supplier. This price difference would have given this competitor a \$1.5–2 million profit advantage at comparable volumes.

- The paper producer learned that its annual purchase volume of more than 30 million pounds qualified it as the world's single largest purchaser.

- There were at least five other leading suppliers who were willing to supply titanium dioxide—with the same chemical structure and at the same specifications—for \$.81 per pound. (This price reduction alone would create a manufacturing savings of almost \$6 million per year.)

Needless to say, these new facts hit the proverbial fan and all previous bets were now off. The paper producer also received a crash course in understanding how little value it was receiving from its current supplier, albeit "protected" by its most favored customer clause and contract.

No matter how the current supplier scurried to make up the pricing difference created by this customer's "shopping" its annual volume needs, the trust was broken and a full-scale market search initiated. This was clearly an example of having over-consolidated suppliers, and failing to protect market leverage.

In the meantime, the paper producer did shift its volume from the one supplier to three new suppliers and received \$.81-per-pound pricing from all. With these new cost savings

in hand, the supply team began a thorough review of all suppliers worldwide. The review focused on technology and costs and sought the best new long-term partners, those offering the most competitive advantage.

The supply team had not undertaken a comprehensive review of this type in over ten years, so team members were quite surprised to encounter a supplier that claimed to have developed a new manufacturing process for the mirror image version of anatase titanium dioxide—rutile titanium dioxide. The benefits of this new product promised comparable effectiveness in whitening, no process problems, plus offered the added benefit of using 15 percent less in volume. At comparable pricing, this type of volume reduction would provide additional cost savings of \$5–6 million per year.

But what new supplier could really pull this off? . . . Du Pont, a supplier that traditionally invests in R&D with the objective of creating tangible, proprietary benefits in functionality or cost. And unlike its smaller competitors, Du Pont has the resources to support a customer that is learning and using its products. In this way Du Pont was able to convince the paper producer to conduct a "trial" of the new material on one of its machines. If the trial went well, the companies were to discuss further expansion to all production locations.

Du Pont is typical of highly successful competitors that leave little to chance. It provided all the technical and logistics resources to stage the line trial:

- It arranged for delivery at \$.81 per pound.
- It developed the measuring techniques for on-line usage.
- It suggested that payment be made only for the amount used, thus eliminating inventory costs.
- It monitored usage and delivery.
- It reported volumes requiring payment, eliminating purchase orders, releases, and individual checks, and

switched to electronic funds transfer as the new payment method.

- It provided technical and operating resources to effect new usage procedures and to familiarize operators with the new material.

At the end of the trial, the 15 percent usage reduction target was well exceeded.

What began as a simple "value check" resulted in understanding that this raw material was sourced from a worldwide market of capable suppliers, all clamoring to reward large customers.

Immediate price benefits for consolidating with the right suppliers were supplemented by longer-term, greater benefits in technology and costs.

In addition to significantly altering its cost position, the paper producer benefited from the changes made to the delivery stream itself. Gone were the schedulers of railcars, the internal production planners forecasting volume, the countless paper releases for each production shift, and the invoices and receipts. The focus shifted to effectiveness at point of use and how to utilize the capable supplier resources to continue to create improvements at point of use.

This new focus is what supply management is all about.

IMPLEMENTATION GUIDE

1. In discussions with your organization's procurement professionals, initially question whether they are consolidating the supply base.

- Ask if they know the reason (it should go well beyond price).
- Do they know all the relevant elements of total cost?
- Do they plan continuous year-over-year budgeted improvements?
- Do you understand these so that you can be effective in eliminating any barriers to your staff's progress?

2. Ask about cycle time—from design to manufacturing, from definition of need to actual fulfillment, from purchase order to payables, and so on—whatever is important to your customers or is of benefit to your business.

- Do they know these times?
- Do they understand how they're important?
- Are there measurements in place?

3. Ask about the actual buying processes.

- Have these processes been redesigned to eliminate non-value-adding steps?
- Are they simple?
- Are they consistent?
- Are they effective?

4. Ask about how the acquired goods or services are actually used.

- Is there a process map?
- Does your team understand customer requirements, internal and external?