Dynamic Commerce & Your Supply Chain: Gaining a Strategic Competitive Advantage

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Dynamic Commerce and Your Supply Chain

Gaining a Strategic Competitive Advantage

Deregulation, industry consolidation, competition, and doing more with less are all challenges the utility industry faces today. Those in the industry have witnessed the impact of a rapidly changing business environment. Competition threatens the existing customer base; mergers and acquisitions threaten resources and jobs; and volatile fuel and capital markets threaten the bottom line. Companies that ignore the industry changes, resist organizational restructuring to meet the challenges, and fail to adapt will find it increasingly difficult to survive in a progressively competitive market. Indeed, the greatest threat to the success of companies in the industry will be the willingness and capabilities of their own organizations to adapt to meet the challenges of a marketplace with new rules.

Utility companies are merging and/or acquiring other utility companies, seeking new revenue streams, implementing operational improvements, and engaging in other cost savings initiatives. Customer service, once an after-thought in the monopolistic utility industry, has now become a focus. An increased customer focus will result in more, rather than less, resource requirements in the areas of marketing and customer service. Unfortunately, technological advances in utility operations and operating improvements have reached the point of diminishing returns, at least until further breakthroughs develop. So, where should utilities look for improvements?

One frontier that utility companies have left virtually untapped for bottom line impact is the supply chain. While manufacturers, distributors, and retailers have been working on supply chain improvements and cost savings for years, the utility industry has historically treated the supply chain as an incidental part of the business. Therefore, the supply chain offers an abundance of low hanging fruit in most utility organizations.

Computer technology has made even greater supply chain improvements possible by providing greater information availability, increased savings opportunities, and the potential to increase internal customer service levels. Armed with more resources and better decision-making tools, supply chain managers can tackle many e-commerce initiatives that can make a significant and immediate positive impact on supply chain performance.

Internet technology has resulted in powerful and economical tools for supply chain professionals to use to improve supply chain performance. Dynamic Commerce Solutions are electronic methods for

accomplishing the traditional sourcing functions. Dynamic Commerce is revolutionizing the possibilities in supply chain management and will enable utility supply chain managers to transform their supply chains into a core competency resulting in a strategic competitive advantage.

The Supply Chain Evolution

Recently, the supply chain has been regarded strategically as a marketing discipline. Supply chain management involves the management of goods and services flows from their origin to their consumption. As a marketing weapon, the supply chain can be used to achieve many goals related to meeting customer needs. Quality, delivery, price and customer service related to products and services are necessarily linked by this definition. For the supply chain to be an effective marketing tool, all members of the chain will need to integrate their efforts to focus on the end customer and that customer's needs and wants. The objective should be quite simple, create value and/or minimize costs through supply chain strategies. If a company can succeed in creating greater value and/or achieving lower costs than its competitors, then the supply chain has become a strategic competitive advantage.

Some goals of supply chain strategies are;

- faster delivery
- better quality
- better customer service
- lower costs
- better value

While this concept has been embraced and marvelously executed by firms such as Wal-Mart, Home Depot, and Dell Computer, it is foreign to the utility supply chain. From this point forward, it would be prudent business practice for utility companies and their suppliers to integrate their efforts to satisfy the ultimate end consumer – the utility company's customer. That customer wants reliable, low cost energy. Utilities that elect to use the supply chain for a competitive advantage will have greater opportunity to meet their customers' needs for low cost reliable power. One study estimates that the average U.S. company can save 20% or more through supply chain management improvements (Lambert and Stock 2000). That would seem a very reasonable possibility for utilities given technological advances in information systems and the lack of historical focus on the supply chain.

E-Commerce as a Tactical Plan

Once the strategy is developed to target the supply chain for competitive advantage, tactical plans must be developed. A strategy is the plan or direction deemed to be appropriate to accomplish goals while tactics are plan enablers. The Internet has been a key enabler in many areas including the execution of supply chain management strategies. "The Internet's effect on the supply chain will rival the interstate highway's impact on the transportation industry" (Carter, Carter, Monczka, Slaight, and Swan 2000). Internet business activity is commonly referred to as e-commerce while Internet supply chain applications are often referred to as e-procurement.

The Internet is playing an increasingly important role in the industrial marketplace. Research has exposed very positive results. One study estimates that business-to-business (B2B) e-commerce sales

will reach $2.7 trillion by 2004, up from $406.2 billion in 2000 (Blackmon 2000). A Deloitte & Touche study estimates that B2B e-commerce will grow to be six times as large as business-to-consumer (B2C) e-commerce by 2003. Goldman Sachs estimates that B2B e-commerce could reduce processing costs by as much as 20% in some industries and that overall business costs could decline by more than 12.5% (Deeter-Schmelz, Bizzair, Grahm, and Howdyshell 2001). The Boston Consulting Group suggests that B2B e-commerce could lead to productivity improvements of 9 percent within the next five years (Cohn, Brady, and Welch 2000). It is widely accepted that strategic sourcing combined with e-commerce can save at least 3-4% on the bottom line for larger companies. The results of the studies above are evidence of the power of e-commerce and an indicator that it will gain wider acceptance.

Implementation of Internet technology is not without challenges. Some buying organizations are not convinced of the benefits the Internet can provide over existing telephone, fax, and EDI methods. The costs associated with a change in systems are a common concern. Of course, security is always a consideration where corporate information is involved. The greatest challenge might be convincing supply chain professionals that Internet technology will benefit them and that they should embrace new technology and new processes. While the technology is still relatively new, preliminary results and ongoing studies indicate that the potential exists for substantial cost savings and productivity improvements in both buying and selling firms that engage in B2B activity via the Internet (Deeter-Schmelz, Bizzair, Grahm, and Howdyshell 2001).

Dynamic Commerce

We have established that targeting the supply chain is a prudent strategic competitive decision for utility companies. We have also briefly touched on the impact of Internet technology as a platform for achieving savings. Dynamic Commerce is an Internet enabled method of sourcing. Two Dynamic Commerce tools are electronic RFx (e-RFx) and Internet based reverse and forward auctions.

The e-RFx involves executing traditional RFI, RFP, and RFQ processes via Internet technology. This method of sourcing enables buyers and suppliers to share RFx documents online in a more timely and more accurate manner than through traditional methods. Basically, a buying organization posts bid documents online in a secure and password protected site. Selected suppliers are provided access to the documents, they download and review them, and then they respond electronically on the site. This method reduces cycle time and results in lower processing costs and better information accuracy for buyers and suppliers.

Another Dynamic Commerce tool is the electronic auction. Electronic auctions are conducted via the Internet in a real-time environment. Buyers and sellers get real-time information concerning market conditions, market activity, pricing, and other factors. There is no better way to determine market information and market values for many goods and services at any one point in time than through an Internet based forward or reverse auction.

A reverse auction is an event whereby sellers compete for a buyer's business by submitting favorable pricing and value added terms. The buyer selects the most favorable bid based on evaluation criteria. A forward auction is an event whereby multiple buyers compete for a seller's goods or services. The buyers submit pricing and terms to the seller and the seller selects the most favorable bid based on evaluation criteria. Reverse auctions are used to source materials and services while forward auctions are used to sell them. Auctions allow a company to source high volume quickly. For example one

automotive company used an auction to source custom designed parts that normally can require a year-long sourcing cycle. The auction involved 20 suppliers bidding 4,000 parts in four hours. "The fact that you can iterate that quickly is pretty phenomenal," one e-commerce executive stated (Schwartz 2001).

Auctions have often been perceived as price only negotiations, however, this should not be the case. The technology exists to accommodate evaluation of bids based on the best value. Multi-variable auctions take into consideration factors other than price in evaluating a bid. Other criteria could include delivery, extra features, payment terms, value added services, and virtually any other element a buying organization might want to consider in an evaluation or that a seller wants to emphasize. Auctions should be less about price and more about total evaluated cost. The technology and proper sourcing strategy have the capabilities to deliver total evaluated cost awards. Suppliers need to remember that in an increasingly competitive industry, there will be downward price pressure with or without auctions.

Another criticism of auctions is that they are transaction oriented rather than relationship based. This should not be the case. Reverse auctions can be used to award multiple year contracts. Value added services can be part of the evaluation process. Rarely is there a case where a buying organization does not seek competition when sourcing items. Sole sourcing is not often a desirable strategy unless absolutely necessary. Therefore, utilities almost always source materials and services to multiple suppliers. Dynamic Commerce does not change sourcing in that regard.

With auctions, suppliers and buyers should maintain their relationships as usual. Suppliers that view auctions as an opportunity, rather than a threat, will be able to maintain existing relationships and build new ones much easier than those who do not participate. Even when suppliers participate in an auction and do not win the business, they have established relationships with a buying organization and personnel within that firm. These relationships are valuable for future business opportunities. The auction provides the supplier with valuable information and experience. Therefore, an auction should not be viewed as a single event, but rather as one component of a relationship.

Part of the appeal to Dynamic Commerce is its flexibility. Hybrid sourcing solutions are possible through combining features of the various offerings. Electronic RFx and auction applications can be customized to address a wide variety of sourcing requirements.

Hybrid solutions have been referred to as structured negotiations. According to the Aberdeen Group, a structured negotiation involves establishing a platform to determine the lowest total cost through a multi-parameter, multi-threaded, and multi-stage negotiation process. The technology must be scalable and flexible for structured negotiations and should demonstrate high levels of security and reliability. The flexibility to provide customized amplifications for a variety of sourcing needs and the capability to integrate with buyers and sellers' systems are also very important (Aberdeen Group 2000).

While Dynamic Commerce is a very new discipline, preliminary results show it to be very effective. Research by the Aberdeen Group indicates that reverse auctions produce an average of 5% to 20% reduction in prices for the buying organizations that use them. Research also estimates that structured negotiations can reduce the total sourcing cycle by as much as 30% (Aberdeen Group 2000).

Buyers and Sellers win through Dynamic Commerce

To be successful, Dynamic Commerce must provide benefits to both buyers and sellers. As a B2B Sourcing enabler, Dynamic Commerce delivers advantages to both utility industry buyers and suppliers. Both parties have access to more up-to-date information, the ability to exchange information quicker, and the capability to manage more than one relationship at a time. Web systems are less expensive to implement and maintain than other systems. Operational efficiencies, cost savings, and increased customer service levels should be achieved (Benassi 2001).

Buyers' Advantages

Within the utility industry, procurement is often a long and very complicated process. Frequently, a utility company will have relationships with hundreds of vendors. Employees spend an abundance of time comparing and evaluating products and services, seeking approvals, and processing orders. Even with an established supplier base, rogue purchases occur (Benassi 2001). An Aberdeen Group research study of procurement practices across multiple industries stated that even some of the largest companies had not developed an effective strategic sourcing plan for managing the identification, evaluation, negotiation, and configuration of all products. Additionally, the study revealed that most organizations continued to rely on a mix of calls, faxes, and conventional mail to communicate and negotiate with suppliers. Negotiation using traditional channels is time intensive and costly. Traditional channels also require procurement professionals to convert a variety of supplier information in various formats into one integrated database that can be used for multiple supplier evaluations. The result of this business practice is that the average cycle time is 3.3 months for indirect materials and services and 4.2 months for production related goods and services (Aberdeen Group 2000). This lengthy cycle can hinder a utility organization from providing acceptable internal and external customer service levels. Long cycle times can seriously impact costs, operations, and plant reliability when sourcing for planned and unplanned outages.

Long cycle times have caused many organizations to limit the application of strategic sourcing to a select number of products and services. Many organizations prefer the traditional methods of sourcing they have come to know and trust. As a result of this self-imposed limitation, it is likely that these organizations will not receive favorable trading terms, price, quality, or cost performance for the majority of their expenditures. An NAPM study has documented that companies typically pay up to 30% higher prices for products that are sourced in environments with little competition (Aberdeen Group 2000).

Plant engineering and maintenance groups, keenly aware of utility purchasing department cycle times, tend to influence materials management groups to engage in just-in-case, rather than just-in-time inventories. That philosophy results in inflated inventories that cause taxes, insurance, and other carrying costs to rise. Further, valuable cash sits in warehouse and plant storage areas rather than being used for more productive purposes.

Strategic sourcing and e-procurement provide several advantages to those who elect to embrace them.

Table A

Benefits to Sourcing via e-Commerce
Reduces Direct Procurement Costs 5%-20%
Shortens Procurement Cycles 20%-30%
Reduces Administrative Costs 2%-5%
Enables Supplier Base Optimization
Increases Internal and External Customer Service Levels
Reduces Inventory Levels

Source: Commerce One Strategic Sourcing White Paper

In addition to the above advantages, e-procurement can greatly improve accuracy and reduce redundant work that results from traditional processing errors. In a study conducted in the medical supply industry, hospitals experienced as much as a 52% reduction in workload caused by processing errors (Becker 2001).

Why Should Utility Organizations Adopt e-Procurement?

The benefits stated above should be very convincing for utilities facing a changing business environment. In an increasingly competitive environment, utilities might no longer have the cost plus guarantee to rely upon for rates. Market forces will dictate rates. Therefore, competition for customers will be intense. Utilities will look for new revenue streams and for ways to cut costs in order to strengthen bottom line performance. If a company operates on a 10% margin on sales, $1 million in supply chain savings would equate to $10 million in new revenues. Therefore, supply chain savings can have a very important impact on the bottom line. This is especially true in the capital-intensive utility industry.

Supply chain employees within utility companies also benefit tremendously from e-procurement. Technology is able to handle many of the administrative and transaction oriented functions putting more time in an employee's day to handle tasks with greater value added potential. Personnel can spend more time on analytical and strategic sourcing functions as well as manage supplier relationships more easily. Productivity gains result in better financial performance for the organization. In an era where every utility supply chain organization is asked to do more with less and head count increases are forbidden fruit, e-procurement should be a welcome tool.

The Supplier Perspective

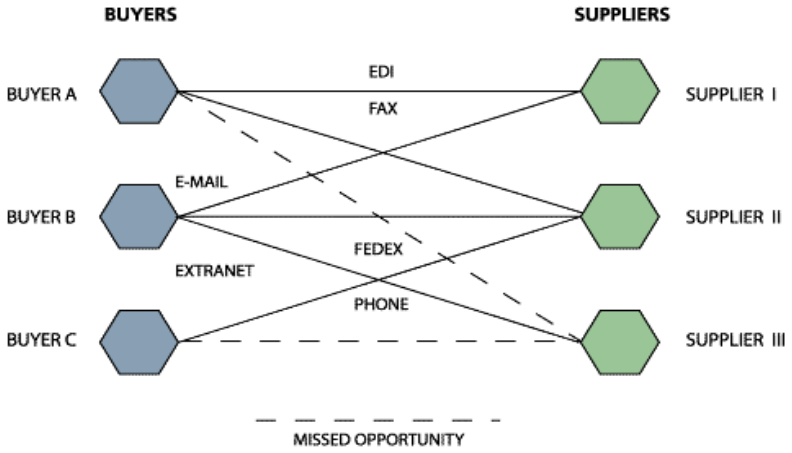
Utility suppliers benefit from e-procurement just as buying organizations do. Sales and marketing efforts to gain and retain customers are expensive. Frequently, utility companies place spur of the moment orders with unrealistic delivery expectations for materials and services. Increasingly, utilities are requesting value-added services from suppliers such as vendor stocking, consignment stock, guaranteed response time, and making other demands that require more resources. Suppliers are expected to have compatible information systems to seamlessly integrate with buyers' systems. As competition increases in the utility industry, more will be demanded from suppliers. Suppliers are

being required to increase customer service levels at the same time there is downward pressure on their profit margins as a result of the progressively competitive utility environment.

Suppliers can experience many benefits from e-procurement. One supplier stated that each connection between a customer's information system and the supplier company's system costs $10,000. By using a market exchange and Internet technology, connections directly to suppliers can be eliminated resulting in a $10,000 per customer savings (Enporion 2002). Rather than each supplier connecting to every one of its customers, that supplier can make one connection to an e-marketplace to reach all of its customers.

Figures one and two pictured below compare the traditional and electronic marketplaces and illustrate the obvious connection advantages enabled by electronic marketplaces.

Figure 1. A Traditional Marketplace



Traditional Procurement Marketplace Characteristics

- Expensive, Unreliable, Inefficient Point-to-Point Connections
- Missed Opportunities to do Business
- More Expensive for Buyers and Sellers
- Long Cycle Times
- Lack of Information
- Data Integrity Issues

Characteristics of an e-Procurement Marketplace

- Creates Efficiencies for Buyers and Sellers
- Contributes to Operational Excellence Throughout the Supply Chain
- Increases Customer Service Levels
- Allows for Cost Savings
- Creates Value
- Increases Information Availability
- Improves Data Integrity
- Increases Time Available for Higher Level Tasks

Figure 2. The e-Marketplace

Suppliers experience the advantage of gaining additional business with minimum additional sales effort through customer aggregation via the e-market place. Whether a supplier gains additional business through the e-marketplace, conducts the same business volume more economically, or experiences both, the company benefits from e-procurement.

Using the Internet, e-procurement methods such as Dynamic Commerce enable suppliers to shorten sales cycles and reduce direct sales and administrative costs. This efficiency enables a supplier's sales staff to operate more effectively. Existing staff can handle greater volume, increase customer service levels, and/or spend more time on customer relationships.

By aggregating sales dollars and assisting in standardization efforts, suppliers can help to reduce their own inventories through better forecasting. Quicker sales cycles should result in faster inventory turns. Standardization and shared stock-out risks by member utilities also help a supplier to provide better on-time delivery and incur fewer stock-out situations. A higher service level may result with fewer resources deployed.

In addition to savings on the supplier side of e-procurement, suppliers have the same opportunities as buyers to source via e-procurement.

Table B Benefits to Suppliers as Buyers

Benefits of e-Commerce – Buyer Perspective
Reduces Direct Procurement Costs 5%-20%
Shortens Procurement Cycles 20%-30%
Reduces Administrative Costs 2%-5%
Enables Supplier Base Optimization
Increases Internal and External Customer Service Levels
Reduces Inventory Levels

Source: Commerce One Strategic Sourcing White Paper

As mentioned earlier, increased accuracy is also an advantage of electronic commerce.

Table C Supplier Specific Benefits

Benefits of e-Commerce – Sales Perspective
Reduces Information Systems Connection Costs by $10,000 per Customer
Reduces Direct Sales Costs
Shortens Sales Cycles
Reduces Administrative Costs
Increases Customer Service Level
Reduces Inventory Levels

By sourcing and selling through e-procurement, a supplier can achieve substantial process savings, while transforming the supply chain into a strategic competitive weapon.

E-procurement has provided many benefits to suppliers in the chemical and pharmaceutical industries and it continues to grow. Table D lists identified benefits and industry averages for the chemical and pharmaceutical industries. The utility industry offers the same types of savings opportunities for suppliers participating in e-procurement as do the chemical and pharmaceutical industries.

Table D Sellers Benefits and Averages

Benefits	**Est. Savings**
Expansion of Customer Base because of Internet Capabilities	6%
Percentage of Internet Orders that are Perfect (accurate, on time, and right quantity)	85%
Percentage of Revenue via Internet	6%
Percentage of Orders received online	5%
Percentage of Revenue Growth in last Fiscal Year from Internet	35%
Internet Revenue Growth Expected Current Year	5%
Cost Reduction in Customer Management	5%
Cost Reduction in Order Fulfillments and delivery	5%

Source: InternetWeek Survey 2001

Why Should Suppliers Participate in e-Procurement?

The economics of e-commerce within supply chain management is a solid reason for suppliers to adopt the technology and become willing participants in e-procurement strategies. One key reason for suppliers to participate is because their customers are going to demand it. Douglas Lambert and James Stock, logistics experts and professors in marketing, describe the marketing concept as "an integrated effort to meet customer needs for profit" (Lambert and Stock 1993). If suppliers are going to meet the needs of utilities that are facing more competitive times, they will need to participate in e-procurement. To do so effectively, suppliers will need to be as competitive as possible in their own industries. An integrated effort throughout the supply chain to will be necessary for survival.

Companies like General Electric realize the changing environment is impacting the way they must do business. General Electric planned to use the Internet to sell more than $16 billion in goods and services in 2001 or more than double the $7 billion the company sold that way in 2000. General Electric has a goal to reach 30% of its revenues online. The company has also increased its use of Internet auctions. In 2001, General Electric will buy more than $16 billion of materials online through more than 2000 private auctions it conducts monthly. This volume accounts for 35% of the $40 billion the company spends on goods and services (Moozakis 2001).

Assuming the laggard role could be costly for suppliers that elect to resist e-commerce participation. It costs many more dollars to attract new customers or regain lost ones than it does to retain existing customers (Kotler 1994). Suppliers that elect not to participate in e-commerce today could find themselves in an unenviable position of being outsiders in the near future.

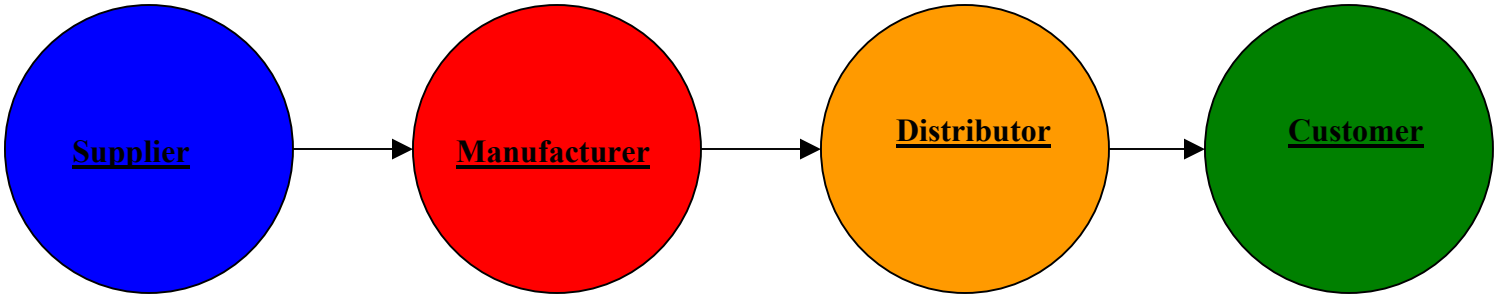
Early participants in e-procurement will advance through the learning curve rapidly and develop the reputation of a progressive and cooperative business partner. These progressive vendors will build new relationships with buying organizations. They will also achieve benefits that will make them much more competitive than organizations that fail to realize the advantages of e-procurement. World-class suppliers will use the changing environment to make themselves better, rather than resist change and be left behind.

Importance of Integration

In virtually all industries, and particularly in the utility industry, it is increasingly important for all companies in the supply chain to cooperate in reducing costs and increasing service levels. The information age has resulted in a more informed consumer and greater competition. Companies and supply chain levels that add value will survive and others will not. As bottom line performance becomes a greater focus in the newly competitive utility industry, it will become imperative for every member of the supply chain to add value or reduce costs. The reason is simple. The energy customer who is the ultimate end user in the utility supply chain demands it. That customer needs low cost, reliable energy. Those in the supply chain that fail to contribute to that market need will cease to exist in the supply chain at some future point.

Figure 3.

Example - Traditional Supply Chain

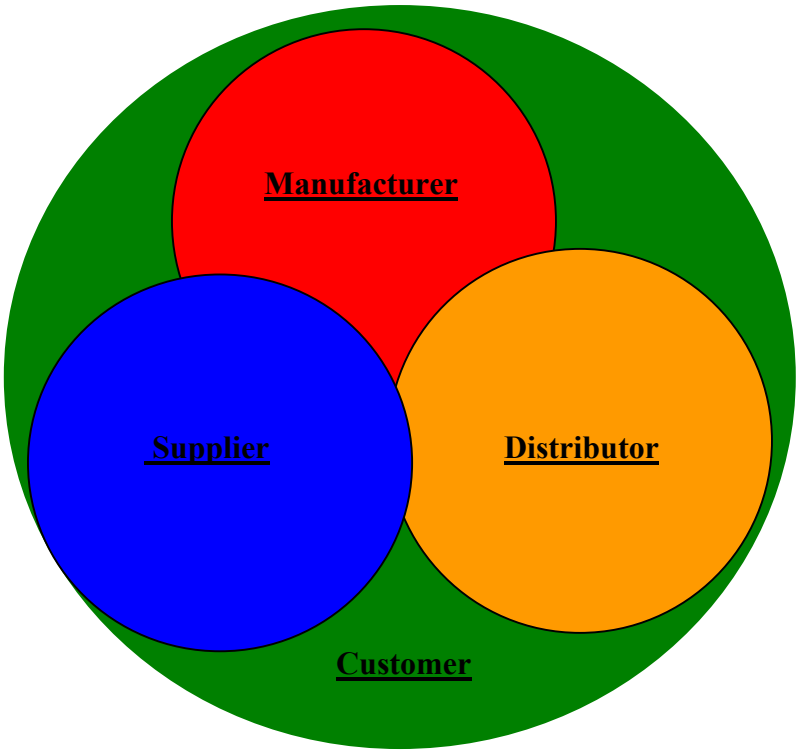


The traditional supply chain involves very little interaction and cooperation between levels other than immediate upward or downward links. It lacks the integrated effort necessary to achieve maximum service levels and efficiencies. Reverse flows are highly inefficient and very expensive. There is no collective customer focus. Every function is basically task oriented. Figure 3 provides a sketch of the traditional view of the supply chain whereas Figure 4 provides a more modern integrated view.

The integrated supply chain illustrated in Figure 4 is characterized by a focused effort among supply chain members to meet the needs of the end consumer. There is cooperation and interaction throughout the supply chain to maximize the value provided to the end consumer by the supply chain as a whole. The lack of isolated "links" or silos is obvious in this new design. Every member of the supply chain is integrated with all others as well as with the customer. There is a free flow of information between the functions.

Figure 4.

The Integrated Supply Chain



Conclusion

The utility industry, like many others, is becoming progressively more competitive. To compete, companies must provide the greatest value to their target markets. The supply chain has been identified as an area where companies can save money and add value. Internet technology has increased the opportunities to leverage the supply chain as a strategic competitive advantage, and Dynamic Commerce is a key way to use Internet technology to accomplish strategic sourcing. The time is now for buyers and suppliers to use technology to enhance their competitive positions in their industries and to secure their futures.

Cultural change could be the greatest challenge to many companies in the industry. In spite of the obvious advantages of e-commerce, there are suppliers and buyers that are choosing not to participate. These non-participants could become "The Weakest Links" in the supply chain resulting in the chain being less efficient as a whole. Laggards will ultimately be replaced or the chain will become shorter when an entire level is eliminated. Competition will force non-value added members out of the group. An integrated effort by all members of the utility supply chain is needed in order to meet the needs of everyone's ultimate consumer. That universal customer is the energy consumer who demands low cost, reliable energy.

Work Cited

Aberdeen Group, Inc. e-Sourcing Best Practices: One Size Does Not Fit All: An Executive White Paper. Boston: Aberdeen Group, Inc., 2000.

Becker, Cinda. "Some Online Savings Seen." Modern Healthcare 2 Jul. 2001: 32.

Benassi, Frank E. "Managing Purchases with e-Procurement Business-to-Business e-Commerce is Shortening the Time it Takes to Order Supplies and Materials from Hours or Days Down to a Few Seconds. For Utilities, One-Stop Shopping --and Lower Prices --Can Be Just a Mouse Click Away." Mar-Apr. 2001: 77.

Blackmon, D.A. "Where the Money Is," Wall Street Journal 17 Apr. 2000, R30-R32.

Carter, P.L., J.R. Carter, R.M. Monczka, T.H. Slaight, and A. J. Swan. "The Future of Purchasing and Supply: A Ten Year Forecast." The Journal of Supply Chain Management, (36:1), Winter 2000: 14-26.

Cohn, L., D. Brady, and D. Welch. "B2B: The Hottest Net Bet Yet?" BusinessWeek 17 Jan. 2000: 36-37.

Commerce One. Strategic Sourcing White Paper. Pleasanton: Commerce One, 2001.

Deeter-Schmelz, Dawn R., Aric Bizzair, Rebecca Grahm, and Catherine Howdyshell. "Business-to-Business Online Purchasing: Suppliers' Impact on Buyers Adoption and Usage Intent." Journal of Supply Chain Management Winter (2001): 4-11.

Enporion Information System, January 2002.

Kotler, Philip. Marketing Management. 8th ed. Englewood Cliffs: Prentice Hall, 1994. 20, 46-52.

Lambert, Douglas M. and James Stock. Strategic Logistics Management. 3rd ed. Boston: Irwin, 1993. 7-9.

Moozakis, Chuck. "G.E. Scales Back -- Turns Focus Inward Amid Struggle to Connect Suppliers." InternetWeek 14 May. 2001: 1.

Moozakis, Chuck. "John Hancock Expects Savings from Strategic Sourcing App." InternetWeek 19 Feb. 2001: 23.

Schwartz, Ephraim. "Putting the Squeeze on Suppliers." InfoWorld 19 Nov. 2001: 38.

"Yank the Supply Chain." Fortune Winter 2001: 152-156.

Yasin, Rutrell. "E-Procurement Is Drug for Bristol-Meyers Squibb—Relationship with Ariba Means Millions in Savings for Pharmaceutical Grant." InternetWeek 11 Jun. 2001: 39-40.