Value Creation in Markets
A Critical Area of Focus for Business-to-Business Markets

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The business market has been undergoing a paradigmatic change. The rise of the Internet, market fragmentation, and increasing global competition is changing the "value" that business marketers provide. This paradigmatic transformation requires changes in the way companies are organized to create and deliver value to their customers. Business marketers have to continuously increase their contribution to the value chain. If not, value migrates from a given business paradigm (e.g., minicomputers and DEC) to alternate business paradigms (e.g., flexibly manufactured PCs and Dell). This article focuses on ways in which business marketers are creating value in the Internet and digital age. Examples from business marketers are discussed and managerial implications are highlighted. © 2001 Elsevier Science Inc. All rights reserved.

INTRODUCTION

Scholars have suggested that business markets are going through an evolution similar to the Industrial Revolution. The fundamental methods of doing business are evolving rapidly toward the use of a ubiquitous information platform (Internet). As we move toward an information era, the business processes and paradigms of the industrial era will increasingly become obsolete. Growth in
the industrial era was based on information asymmetry; one side of the relationship had more information than the other. In the present era of information ubiquity, both buyers and sellers have increasing information about the other. Business customers’ power is growing as the explosion of technology and the globalization of markets effectively increase customers’ choices. This enhanced information availability will change the way in which businesses evaluate the “value” that they, their suppliers, and their customers generate. The article examines the impact of environmental changes on value creation in business firms by building on earlier research by the lead author and his colleagues [1].

At this stage in the article it may be interesting to trace “value generation” in business markets. From traditional small-lot production strategies, the first change in “value” was derived when mass marketing came into vogue after World War II. In the post-WW II era, firms began to have better access to mass production technology, better transportation and communication facilities, greater financial resources, and more sophisticated human resources management. Consumers and business customers were satisfied with standardized products at reasonable prices. Value was generated through the efficiencies of mass markets and mass marketing. The emphasis was on products rather than on markets, leading companies to adopt organizational forms and value measurement systems that centered on products [1].

As more firms entered the market, the resulting increase in product variety rendered mass-market techniques less effective [1]. This value shift occurred primarily in the 1950s when the marketing concept was first recognized. McKitterick [2], Borch [3] and Keith [4] articulated tenets of the marketing concept that were popularized by Kotler [5], and that were soon widely adopted. This turn took place as business customers realized that mass production and mass-marketing activities did not satisfy their unique (non-mass market) needs.

With an increasing emphasis on markets, segmentation was a logical destination for marketers. The earliest references to segmentation were from Smith [6], who suggested a rational and more precise adjustment of products and marketing efforts to user requirements through the use of segmentation. An explicit recognition of several demand schedules resulted, where only one such schedule had previously been recognized. In this era, value migrated from mass-market solutions to segment-based solutions. Buyers were willing to pay more for “business solutions” that were developed specifically for their needs. This shift in value generation led to a number of changes in marketing thought and practice.

In the organizational context, marketing thought leaders developed the concept of “market orientation” [7, 8]. They suggested that organizations should focus on the markets that they serve. In practice, firms organized around markets and segments (i.e., created segment-based organizations). For example, AT&T divided its marketing department into groups dedicated to household and business markets, with subsequent subdivisions within each market, while IBM organized itself into “vertical” industry-based groups [1].

At the start of the new millennium, we propose that the availability of the Internet will change the way business
Key to value-driven strategy is to move away from traditional functional job roles.

marketers generate value. The emphasis will be on one-to-one marketing with adaptive solutions for each customer. In the following section, the article discusses value migration from the perspective of industries and innovation. We then present our framework, highlighting the marketing activities that enhance value generation by business marketers. Within the context of the framework, we discuss business customers and the 4Ps.

VALUE MIGRATION

Value migration is an issue that has affected most industries at most times. For example, value migrated from the small-lot manufacturing of automobiles toward the mass-produced Ford automobiles in the early part of the century. Similarly, General Motors captured value and enhanced their market share in the automobile market by providing variety to customers.

Slywotzky [9] first highlighted the dramatic implications of “value migration” for established industries. Value migration identifies how firms such as Nicor have captured growth in revenue, profits, and market value from previously dominant firms such as US Steel. The shift in markets is not due to products, but is due to the innovative “business design” of these new firms that allows them to capture “value.” These firms use superior customer selection, differentiated offerings, go to market strategies, and configure resources to capture value in the market space [9].

As well, the role of marketing in delivering value is increasingly under review [1]. Concerns of business-to-business firms regarding marketing productivity are reflected in Webster’s [10] research on CEOs’ views of the marketing function:

“[T]he major issue is one of marketing productivity. Marketing needs a better method of making cost/benefit analysis on marketing expenditures—to make good, intelligent choices on how to get the most out of our marketing dollars, including marketing support, not just research on new products, media, et cetera. The concern is that while costs are rising, marketing is not finding new ways to improve marketing efficiency” [10, p. 8].

Therefore, established business-to-business firms face an urgency to combat value migration and to capture value. In the following sections we propose a framework for value creation and discuss the reasons for the change in customer selectivity and strategy, as well as investigate how progressive business marketing firms are combating value migration.

THE FRAMEWORK

Research shows that the key to value-driven strategy is to move away from traditional functional job roles and toward a process model that links the functions in creating value for customers. We propose a framework that consists of two strategic processes: the management decision process and the value creation process. The value creation process has three major sub-processes: technology delivery process, product delivery process, and customer delivery process. Value-based strategies are logical outcomes of the value creation process (see Figure 1). Companies adopting value-based strategies without proper value creation process in place are destined for marketplace failure.

Management Decision Process

To combat value migration (and to create value), business marketers are becoming selective about customers and are attempting to serve a smaller group of customers. Firms have realized that by becoming customer oriented, they can provide value to a specific group of customers while optimizing allocation of resources. Companies like Procter & Gamble and Intel have built their businesses around their business customers (OEM and retailer institutions), as opposed to the end-consumer [11]. For example, Procter & Gamble has reduced the number of business customers (distributors) by 80% so that it can better serve the needs of its more important customers [1]. The primary reason for customer selectivity is that business
Becoming customer-oriented enables a company to focus its resources on the most profitable customers.

customers are more diverse, and marketers have better information about their customers. In business markets, customer diversity is increasing due to size, locations, and type of business in the U.S [1].

SIZE. Small businesses are the dominant category in the U.S. Of the 5.48 million businesses in the U.S. in 1996, only 91,000 had more than 100 employees, and only 15,600 had more than 500 employees (U.S. Census Bureau, 1997). In the last decade, business markets have been pulled in two opposing directions. On one hand, there has been a growth in very large businesses, in part through mega-mergers (e.g., AOL Time Warner, Bank of America, Daimler-Chrysler). On the other hand, small businesses with fewer than six employees have grown rapidly and are responsible for the majority of employment growth in the 1990s.

LOCATION. Location diversity is another important issue in business markets [1]. The growth in the global business of large firms has developed with a simultaneous growth in home businesses. While small businesses in the U.S. with fewer than fifty employees predominantly operate from a single location in the U.S., large businesses with more than 500 employees operate from an average of 54 locations each (U.S. Census Bureau, 1992).

TYPE. The third facet of diversity concerns the type of business. In the last decade, there has been a disproportionately large increase in non-manufacturing firms [1]. While manufacturing firms increased by 60,000 between 1992 and 1997 in the U.S., service firms increased by 272,596 (U.S. Census Bureau, 1997). Similarly, service firms created 6.8 million new jobs, compared to manufacturing firms that created 1.5 million jobs.
These differences in size, location, and type of companies have led to a high level of diversity in the needs and wants of business customers [1]. To a limited extent, business marketers are already addressing this diversity. For example, based on the buying behavior of business customers, a large firm may use electronic commerce, direct mail, inbound telemarketing, outbound telemarketing, product specialist sales force, national account management teams, and global account management teams. In fact, most businesses develop special programs (including products, services, and marketing activities) for their large business customers [12].

Another trend that is leading to customer selectivity is better information about customers [1]. Most competitive strategy frameworks are based on aggregate market behaviors. With better information and accounting systems, firms are beginning to disaggregate revenues and costs to the customer or account level. This analysis often reveals previously hidden subsidies across customers, products, and markets. Sheth and Sisodia [13] depict a typical profit curve for customers of a firm (Figure 2). When marketers use a mass-market or even a segment-based approach, a small group of customers typically account for a large share of revenues and an even greater share of profits. These customers effectively subsidize a large number of marginal and, in many cases, unprofitable customers. The costs to serve unprofitable customers are comparable to, and sometimes higher than, the costs of serving the most profitable customers. Becoming customer oriented enables a company to focus its resources on the most profitable customers. It also makes the company less vulnerable to focused competitors that may

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**FIGURE 2.** Profitability of customers (Source: Sheth and Sisodia [13]).
Delivering value through product development and delivery tasks, to make sure that products meet customer requirements and meet internal commitments on quality, cost, delivery, and speed-to-market.

seek to “cherry pick” its most profitable customers [13].

For example, customer selectivity helped Custom Research Inc. [14] to rejuvenate their research business which otherwise was stagnant at best (see Table 1). Founded in 1974, Custom Research Inc. (CRI), provides marketing research, customer satisfaction measurement, and database analysis services to a select group of Fortune 500 companies. In the initial stages, CRI concentrated on acquiring clients. However, when profit and effort relationship was under question, they decided to classify their customers on the basis of margins and volume (see Table 1). Of their 157 clients, only 10 customers provided both high volumes and high margins. In contrast, 101 customers provided low margins and low volumes. The other 46 clients either provided high margins or high volumes. This analysis demonstrated that CRI was not efficiently utilizing resources. Too many resources were being spent on the undesirable 101 customers. CRI made the strategic decision to develop long-term one-to-one relationships with a limited number of clients. CRI was able to deploy more resources to these handpicked customers, and the clients responded by treating CRI as their partner in marketing decision making. CRI became preferred research partners for these selected customers, including companies like Pillsbury, Procter & Gamble, and Dow Brands. As a result, CRI’s bottom line also showed healthy improvement. CRI was the only professional service firm to receive the Malcolm Baldrige National Quality Award in 1996 (www.cresearch.com/mb).

### TABLE 1
Custom Research Inc.: Customer Profitability Analysis

<table>
<thead>
<tr>
<th>CRI’s customers</th>
<th>Customer A</th>
<th>Customer B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High volume low margin 11 customers</td>
<td>$203,320</td>
<td>$156,000</td>
</tr>
<tr>
<td>2. High volume high margin 10 customers</td>
<td>$174,856</td>
<td>$113,162</td>
</tr>
<tr>
<td>3. Low volume low margin 101 customers</td>
<td>$14,232</td>
<td>$3,120</td>
</tr>
<tr>
<td>4. Low volume high margin 35 customers</td>
<td>$14,232</td>
<td>$39,718</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer profitability analysis—CRI</th>
<th>Customer A</th>
<th>Customer B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$203,320</td>
<td>$156,000</td>
</tr>
<tr>
<td>Direct costs</td>
<td>$174,856</td>
<td>$113,162</td>
</tr>
<tr>
<td>Selling costs</td>
<td>$14,232</td>
<td>$3,120</td>
</tr>
<tr>
<td>Contribution margin</td>
<td>$14,232</td>
<td>$39,718</td>
</tr>
<tr>
<td>% of Revenues</td>
<td>7%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Greco [14].

Technology Delivery Process

The technology delivery process is concerned with delivering value through the process of technology transfer from research and development to the product development process. Designing a value-based technology delivery process first requires a definition of knowledge and know-how resources of the firm. Thereafter, the firm defines how the firm will attain knowledge and how the knowledge will translate into marketplace advantage for the firm [15]. In this context, Wheelwright and Clark [16] suggest that development goals, objectives, and an aggregate project plan allows managers to resolve policy issues and concerns that span multiple projects, and better coordinate and integrate the firm’s development efforts.
Customer delivery process generates value through effective supply-chain management.

Maximum value is realized when companies manage learning across all development efforts.

An additional aspect of technology delivery process is efficiency. An efficient technology delivery process maximizes output for the available resources. As with learning, value is enhanced when companies manage efficiency across all development efforts. One of the measures that Hewlett-Packard uses to monitor its overall development efficiency is “project team change-over waste.” It measures the cost of time and resources spent between the end of the last project and the point at which all team members are again fully engaged in value creation project [17]. In this context, value-added activities are the selection, sequencing, and managing of individual development projects to create and leverage interdependence, synergy, and learning across the set of development projects.

The example of Qiagen NV illustrates value creation through research and development. Qiagen NV has created value through intensive research and development focusing on enabling technologies and products for the separation, purification, and handling of nucleic acids. This focus has allowed them to develop a comprehensive portfolio of more than 280 different proprietary, consumable products for nucleic acid separation, purification, and handling and for nucleic acid amplification, as well as automated instrumentation and related services to meet various needs of the market. This research reputation allowed the company to brand components and this, in turn, increased the value of the products in the diagnostic business market. The value creation strategy centers on investing heavily in research and on managing resources efficiently across all development projects [18].

Product Delivery Process

Product delivery process is concerned with delivering value through product development and delivery tasks, to make sure that products meet customer requirements and meet internal commitments on quality, cost, delivery, and speed-to-market. To significantly improve product delivery process, a number of companies have made concurrent engineering and quality function deployment part of their product delivery process. Many companies include suppliers as an integral part of their product delivery process. For example, Hewlett-Packard has introduced a new term, BET, meaning break-even time—time from concept development—to measure the effectiveness of product delivery process [19].

Firms are attempting to create value by customizing their products and services to meet the needs of individual customers (e.g., Dell and its premiere pages for business customers). By customizing their offerings, business marketers better satisfy the needs of their customers, while developing a stronger relationship. The impetus for product and service adaptation is improved technology for mass customization.

Breakthroughs in production technology are allowing firms to reduce costs, increase quality, and provide increased customization and variability in production in two areas [1]. In the first area, the design of new products has improved as a result of technologies such as photorealistic visualization, 3-D physical modeling technologies including stereolithography and virtual reality that allow manufacturers to visualize the final product before the start of assembly; GroupWare (conferencing systems that allow design functions to be discussed by different departments such as manufacturing and sales); CAD-CAM and design-for-manufacturability-and-assembly databases that allow better and more customized products; and component performance history databases that allow for better quality. Second, flexible manufacturing systems and just-in-time production allow marketers to mass-customize products that provide better quality at lower prices.

Worthington Steel is an example of adding value for customers through investment in manufacturing processes. The company has invested more than $1 billion
Businesses, by careful resource allocation to selective customer segments, can create value through their technology delivery, product delivery, and customer delivery process.

dollars in new adaptive manufacturing facilities in order to serve customers with the highest quality adaptive products and with the best prices. This value-oriented strategy has taken the company from $1 billion net sales to $2 billion in a span of four years [20].

3M applies innovation to create value by developing breakthrough products for specific customers. In the traditional model of innovation, companies develop new products based on the information they collect from the users. This model assumes that the role of users is that of providing information, and that the role of product development teams is that of using such information to develop new products (see Figure 3a). 3M took a fundamentally different approach to innovation to create value for lead customers. Its product development teams assume that leading-edge users have adopted innovative solutions to their problems. The task, then, is simply to track these savvy customers and adopt their ideas to the business’ needs. 3M’s cross-functional teams develop close relationships with these leading-edge customers (Figure 3b) to develop breakthrough products [21].

Customer Delivery Process

The customer delivery process generates value through effective supply-chain management, covering sales, fulfillment, and service of products. Increasingly, business marketers are realizing that their capability to satisfy customers will be significantly constrained by the capability of their trading partners to share information on the Internet. Recent research by Lancioni, Smith and Oliva [22] in a survey of 181 executives found that Internet applications are increasingly being adopted in a number of supply-chain areas, such as transportation (56.2%), order processing (50.7%), purchasing/procurement (45.2%), customer service (42.5%), vendor relations (45.2%), and inventory management (30.1%).

Suppliers seeking to gain “preferred partner” status with customers need to develop common information platforms. This will lead to organizations being transformed from vertically integrated supply chains to interconnected systems of suppliers and customers. For information-intensive (or digital) and service industries, the Internet will become the primary marketing and delivery mechanism. Unlike the information-intensive industries, product-based industries must use physical distribution services to deliver products, but their ability to exploit the Internet will determine their success.

The marketing element most under attack for lack of value generation is distribution [1]. The functions of the distribution system are associated with information and the physical movement of goods. The Internet has become one of the major facilitation technologies that allow marketers to provide customized information and to complete transactions at a fraction of the cost of other media. The Internet incorporates specific characteristics that aid value creation. First and foremost, it has the capability to address individual customers and, also, to be responsive to those customers [23]. Second, it has the ability to store vast amounts of information, to be interactive and to complete transactions [24]. Finally, the Internet allows customers to seek unique solutions to their specific needs.

The distribution issue that will also lead to a reduction of value generation is the rise of infomediaries. To capture value, business distribution may be oriented more toward distributing information rather than toward physical distribution. PlasticsNet.com is a classic example of an infome-
The channel contains many layers of distributors. To reduce costs, PlasticsNet.com facilitates exchanges between buyers and sellers. The company has signed on/up more than 200 suppliers who pay a $5,000 to $8,000 annual fee to have their storefronts and catalogs posted on the net. PlasticsNet.com takes 5% to 10% of transaction revenues, eliminating multi-layers of brokers and distributors. The value of PlasticsNet.com comes from: (1) its ability to provide information in a timely fashion and at the same time reduce the transaction cost for buyers and sellers; (2) extensive inventory of technical data sheets on plastics products and equipment; (3) an on-line job bank; and (4) an education database which contains information on varied technical topics. Figure 4 illustrates the basic business model of PlasticsNet.com [25].

E-commerce will warrant new approaches on the part of marketers toward making value proposition by way of the business consumers. While the old rules of marketing such as customer focus and insight into customer needs
Business-to-business marketers also need to further focus and compete on the product’s in-use value and the redemption value.

will maintain validity, new dimensions will have to be considered. For example, Cisco spends approximately $20 million to $30 million a year to make its Web site useful and convenient for customers. The site handles about 70% of the company’s technical support and 50% of initial marketing contacts [26].

Information technology is forcing companies to restructure distribution value chains to better serve business markets. In some cases, this requires “disintermediation”—creating e-commerce channels to sell directly to the consumers, eliminating middlemen and their margins. Value-chain management means minimizing the connecting links between the origination and the customer, while at the same time maximizing the contribution of each player involved in those connections.

VALUE CREATION STRATEGIES

In our process-oriented framework, we have suggested that businesses, by careful resource allocation to selective customer segments, can create value through their technology delivery, product delivery, and customer delivery processes. This value creation process enables companies to develop appropriate value-based strategies aimed at select customers. For successful implementation, it is important to have the value creation process in place. As discussed below, some of the popular value-based strategies require implementation of value creation process. It is important for management to understand the inter-connected nature of technology delivery process, product delivery process, and customer delivery process.

Value-Based Pricing

One method that business marketers are using to create and communicate value is pricing products and services to meet the value placed by prospective customers. The fundamental consideration is the recognition that prospective customers vary in the value they place on a product and that this value may change over time. For ex-

![Diagram of Business Model](image-url)
ample, in the early 1990s, companies placed considerable importance on quality and ISO 9000 certification. Companies that adapted to the new realities of competition enjoyed price premium. However, the price premium advantage was eroded as quality became a necessary condition to compete in global markets. Quality is no longer a sufficient condition to command price premium [1].

A vast majority of companies have been competing on either acquisition value of their products and services (quality relative to price) and/or the transaction value of their offers (i.e., deal value) [27]. Business-to-business marketers also need to further focus and compete on the product’s in-use value (the utility associated with the actual usage) and the redemption value (value of the product at the time of trade-in or end-of-life).

Value migrated from quality to cycle time reduction, cost savings, and customer service. An example of value-based pricing is the electricity market. Electric utilities have reduced their generation capacity and rely on electricity spot markets for peak demands. Because peak demands are infrequent, electric utilities are relatively insensitive to price for peak demand periods and are more concerned with supply. In this peak electricity demand market, Enron has built inexpensive power generation plants that produce electricity at higher costs in Northern Mississippi and Western Tennessee. Therefore, by using the option-pricing model, Enron has developed a value creation device for the peak demand periods [28]. Cisco’s Web site, called Cisco Connection, allows customers to place orders by providing customer access to extraordinary amount of information, nearly 40 gigabytes of data. Customers’ orders travel through an ERP (enterprise resource planning) system to various points in supply chain through an extranet for manufacturing and shipping. Once the order is placed, Cisco provides information such as the status of the order and pricing. Creating value through order fulfillment process enabled Cisco to maintain price premium. Additionally, the innovative order fulfillment process has resulted in huge savings for Cisco, adding to the company’s already healthy bottom line [26].

**Value-Based Communications**

The value created by business marketers must be effectively communicated. For their larger and more sophisticated customers, marketers are using multi-functional sales forces that satisfy the “partnering” needs of their larger customers. Therefore, the experts in the buying firm can communicate directly with the experts of the selling firm. For smaller customers, they may use inbound telemarketing in order to communicate efficiently.

Firms are providing value by becoming customer experts. For example, firms such as DuPont and Xerox are developing vertical market experts that sell products from different business units to the same customer through a single sales representative. According to Du-Pont, the average cost of face-to-face calls is $1,700. By streamlining the sales organization, the company provides better service at lower costs.

Additionally, the Internet is being used to provide information that was previously distributed and communicated by sales people. An increasing number of firms are using various Web-based communication tools to assist in communicating the benefits of their products and services to their business-to-business customers. Some firms are using and presenting sales presentations online, and some are creating sites that contain information to assist vendors in sales of various products and services. These methods reduce the cost of sales interactions and increase the value that firms provide. For example, Cisco has developed a Web tool that allows sales people and customers to design networks. This reduces customer expenditure while increasing the value that Cisco provides. This Web site has become an important vehicle for customer communication—especially for customer retention and extension.

**CONCLUSION**

This article discusses how value can rapidly migrate from industries and how firms are combating value migration through customer selectivity, technology, adaptive products, and distribution. The created value must be priced appropriately and communicated effectively. Organizations that learn to use technology-driven process to enhance customer value will survive in the emerging era. Research shows that the key to value driven strategy is to move away from traditional functional job roles and toward a process model that links the functions in creating value for select customers.

**REFERENCES**


