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Marketing, Business Processes, and Shareholder Value: An Organizationally Embedded View of Marketing Activities and the Discipline of Marketing

The authors develop a framework for understanding the integration of marketing with business processes and shareholder value. The framework redefines marketing phenomena as embedded in three core business processes that generate value for customers—product development management, supply chain management, and customer relationship management—which in turn creates shareholder value. Such a conceptualization of marketing has the potential to introduce dramatic shifts in the scope, content, and influence of marketing in the organization. The authors highlight the implications of an organizationally embedded view of marketing for the future of marketing theory and practice.

Marketers committed to enhancing both theory and practice must confront directly two widely noted but largely neglected challenges in the marketing literature: connecting marketing to cross-functional business processes (Webster 1992) and to its cash flow consequences (Anderson 1982). As Day (1997*, p. 89) so pointedly notes, the contribution and status of marketing within an organization will be determined partly by its answer to the following question:

What are the core processes, and what is the contribution of the marketing function to the direction and integration of these processes?

There is also a growing recognition that, if marketing is to help ensure business renewal and growth, winning and retaining customers also must result in superior cash flows, a critical prerequisite to augmenting shareholder value (Day and Fahey 1988). Others have argued that the influence of marketing, as both a discipline and a function, has been diminished because of the absence of conceptual linkages and a language that would enable it to engage in a meaningful dialogue with financial and top management (Anderson 1982; Barwise, Marsh, and Wensley 1989*; Srivastava, Shervani, and Fahey 1998).

*Authors were limited in the number of references used in text, therefore, those references marked with an * are available at www.ama.org/pubs/jm and at www.msi.org.

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The purpose of this article is to develop a conceptual framework that facilitates a broadening of our understanding of the role that marketing can play within business processes that create customer value and, in turn, shareholder value. The intent of the framework is to highlight how marketing must be infused as an input to business processes and how it results in outputs that create and sustain customer and shareholder value. More specifically, the goals of this article are threefold:

1. To articulate the role of marketing as the primary generator and integrator of market or customer inputs in core business processes;
2. To illustrate how marketing, through its influence on core business processes, can affect cash flows positively and reduce risk; and
3. To indicate broadly the implications of the relationship among marketing, business processes, and cash flows for the theory and practice of marketing.

The rest of this article is structured as follows: First, we examine the nature and scope of business processes and explicate the role of marketing in these business processes. Second, we provide a framework that links business processes to the drivers of shareholder value and highlights the informational and integrating role of marketing activities within inherently cross-functional processes. Third, we close with a discussion of the theoretical, practical, and pedagogical contributions of the article.

Business Processes: The Role of Marketing

Whether viewed as a discipline, function, or set of specific activities, marketing scholars long have held that the core objective of marketing is to attract and retain customers. To

do so requires that the organization provide superior value to customers compared with current and potential rivals. But to achieve this goal, the organization must design and execute many work practices, most commonly referred to as "business or operating processes" (Davenport 1993; Hammer 1996*), that go considerably beyond those practices traditionally viewed as falling within the domain or control of the marketing function. These processes demand an integration of a sequence of related work tasks to accomplish organizational goals. Execution of these processes requires assets such as personnel, knowledge, and a physical plant that commingle and "come alive" as organizational capabilities (Grant 1991*). A resource-based view (RBV) of the firm provides a conceptual framework to connect marketing and business processes and supports the recognition of customer and distributor networks, as well as market information, as assets and marketing expertise as a valuable capability.

If marketing is to instill a customer or, more broadly, a market perspective into organizations, it must directly influence the business processes that explicitly contribute to generating and sustaining customer value. But what might be relevant processes within which we might examine marketing contributions?

Three Core Business Processes

Four criteria guided our choice of core business processes. First, in view of the largely exploratory nature of this article, we sought to identify a small set of processes that addresses fundamental but common business tasks that are critical to achievement of the organization's goals. Second, because our explicit purpose is to demonstrate the relevance of marketing, each process should manifest a prima facie case that it contributes to customer value creation. Third, because we want to explicate the linkages between individual marketing activities and business processes, each process should be more macro- than microlevel. Fourth, because every process connects to other processes, the set of selected processes should manifest clear (macro and micro) interactions and interrelationships.

At a macrolevel, customer value creation necessitates the accomplishment of three central organizational tasks:

- The development of new customer solutions and/or the reinvigoration of existing solutions;
- Continual enhancement of the acquisition of inputs and their transformation into desired customer outputs; and
- The creation and leveraging of linkages and relationships to external marketplace entities, especially channels and end users.

To execute these tasks, an organization must design, foster, and leverage three core business processes. The first task is accomplished through a product development management (PDM) process that aims to create solutions that customers need and want. The second task is implemented through a supply chain management (SCM) process that incorporates acquisition of all physical (and increasingly informational) inputs, as well as the efficiency and effectiveness with which they are transformed into customer solutions. The third task is executed

through a customer relationship management (CRM) process that addresses all aspects of identifying customers, creating customer knowledge, building customer relationships, and shaping their perceptions of the organization and its products.

Defined as highly macrolevel processes, each core business process subsumes a large number of subprocesses (see Table 1). For example, the SCM process involves subprocesses as distinct as identifying and qualifying potential vendors; managing product assembly; acquiring, installing, and maintaining process technologies; and orchestrating outbound logistics, distribution, and customer service networks, as well managing costs, pricing, and order processing and fulfillment. Many of these subprocesses can be refined further into more microlevel processes. For example, order processing and fulfillment might be segmented into a sequence of more fine-grained subprocesses around specific work task clusters, including order taking, internal order transmission, order completion, order shipment, and payment completion (cf. Day 1994*).

These processes are consistent with three of the four processes (new products, customer management, and value/supply chain management) suggested by Lehmann (1997*) in his projection of the future of core marketing courses. Lehmann's fourth, information use and research process, plays a critical role in the formulation and execution of the three business processes examined here. Other important processes, such as human resource, technology, and finance management, do not meet the criteria previously noted for choice of core business processes and, for our purposes, can be considered support processes to the three core business processes here. Finally, it is important to note that the three core business processes that we focus on are not independent. Exploiting their interdependencies is more likely to lead to marketplace success than a focus on just one. For example, if a company's market strategy calls for made-to-order SCM processes, modular product designs and product platforms should be part of their PDM process. In addition, it is important to recognize that some elements of core business processes can be outsourced. For example, Nike focuses on PDM and CRM processes and outsources most of its SCM process. However, outsourcing a process does not mean that management can avoid its responsibilities. Nike is still responsible for SCM outcomes and therefore maintains an active presence in managing product quality.

Infusing Marketing into Core Business Processes

If marketing as an intellectual and operating discipline is to be institutionalized in organizations, it must not only pervade the minds of managers within the organization, but also infuse and energize their actions. In short, it must influence the processes by which work gets done. Only in this way can marketing as a discipline and, more narrowly, individual marketing activities be linked directly to central operating tasks within an organization and, as a consequence, to both marketplace and financial returns.

Central to the core proposition of this article is that, if marketing is to realize its potential contribution to the organization's marketplace and financial performance, it

TABLE 1
Sample Subprocesses Within the Three Core Business Processes

Product Development Management Process	Supply Chain Management Process	Customer Relationship Management Process
Ascertaining new customer needs	Selecting and qualifying desired suppliers	Identifying potential new customers
Designing tentative new product solutions	Establishing and managing inbound logistics	Determining the needs of existing and potential new customers
Developing new solution prototypes	Designing and managing internal logistics	Learning about product usage and application
Identifying and managing internal functional/departmental relationships	Establishing and managing outbound logistics	Developing/executing advertising programs
Developing and sustaining networks of linkages with external organizations	Designing work flow in product/solution assembly	Developing/executing promotion programs
Coordinating product design activities to speed up business processes.	Running batch manufacturing	Developing/executing service programs
	Acquiring, installing, and maintaining process technology	Developing/executing sales programs
	Order processing, pricing, billing, rebates, and terms	Acquiring/leveraging information technology/system for customer contact
	Managing (multiple) channels	Managing customer site visit teams
	Managing customer services such as installation and maintenance to enable product use	Enhancing trust and customer loyalty
		Cross-selling and upselling of product service offerings

must connect to the three core business processes previously noted in at least two (highly interrelated and reinforcing) ways. First, it must do so as a discipline. Second, individual marketing tasks must be connected to specific subprocesses within each core business process and to coordinating, integrating, and streamlining the work inherent in subprocesses across the core business processes. We briefly outline each way.

Marketing as a discipline. Processes are meaningless when viewed in isolation of those people charged with implementing them. Typically, a team of individuals creates, manages, and drives each process, irrespective of the process's level. Thus, teams guiding each core process must be infused with marketing capability, that is, the means to bring a marketing perspective to every subprocess. Unfortunately, in the case of many firms, attaining this goal will necessitate a significant transition and transformation from a product-dominated to a market-driven view of each core business process.

Although PDM, SCM, and CRM processes can be viewed as prime drivers of both customer and shareholder value, their design depends on the macroenvironmental and competitive factors within which they exist. Changes in this environment affect the role of marketing and necessitate alterations in process design. Such change has become continuous and disruptive and has dramatic implications for marketing theory and practice. Although others have noted many of the same marketplace shifts (for example, see the compilation of essays in Lehmann and Jocz 1997), we emphasize five that we believe broadly characterize the com-

petitive context in which marketers will need to navigate as we move into the new millennium:

1. A product focus is giving way to the need to address customer functionality.
2. Product differentiation is evolving into solution customization.
3. Transaction-based exchanges are being replaced by relationship-based customer intimacy.
4. Stand-alone competition is frequently giving way to networked rivalry.
5. Economies of scope and increasing returns are being added to economies of scale.

Some key elements in the required change in business process perspectives given marketplace shifts are summarized in Table 2. The change to a market-driven PDM process entails shifting from an emphasis on designing the most technically superior product to creating a solution that enables customers to experience the maximum value and benefit from its use. It emphasizes the design and development of solutions that can be customized to create and satisfy individual customers' needs. Often, physical products are only a part, sometimes only a small part, of the overall solution. Rather than largely unrelated relationships with disparate internal and external entities, the organization develops and leads some networks and participates in others with the intent of spawning, nurturing, and devising solutions that otherwise would not be possible.

The change to a market-driven SCM process entails shifting from a focus on obtaining the functionally best inputs at the cheapest possible prices to designing, managing,

TABLE 2
Marketplace Shifts: Impact on Business Processes

Marketplace Shifts	Business Processes		
	Product Development Management Process	Supply Chain Management Process	Customer Relationship Management Process
From product focus	Design, develop, and engineer the functionally best possible product	Design and manage the supply chain to obtain and use the functionally best raw materials and supplies	Manage relationships with customers solely as a means to sell, deliver, and service the product
To customer functionality focus	Create the product that enables the customer to experience the maximum value and benefits from its use	Design, manage, and integrate own supply chain with that of both suppliers and customers	Manage relationships with customers as a means to learn about their needs and how best to satisfy them
From product differentiation	Design and develop products that can be mass-marketed to convey and deliver superior value compared with current and anticipated rivals	Procure, move, and use raw materials, components, and so forth, so that the product is more differentiated against current and potential rivals	Customers as the focus/recipients of products and related advertising, service, sales activities, and so forth to establish product value superiority
To solution customization	Design and develop solutions that can be customized to create and satisfy customers' needs	Manage and integrate all supply chain elements to facilitate the design, development, production, and delivery of solutions	Working with individual customers so that the total solution is tailored to their individual needs
From transactions	A set of one-off arm's-length interactions with other units within the organization and entities external to it	A set of independent contracts with external suppliers and disconnected arrangements with internal units	Identifying, targeting, selling, delivering, and servicing customers as independent transactions
To relationship-based intimacy	A set of ongoing, tightly bonded relationships internal and external to the organization	Developing relationships with external suppliers for next generation of supplies	Developing, fostering, and leveraging relationships with individuals and sets of customers
From stand-alone competition	Complete dependency on own knowledge, expertise, skills, capabilities, and so on	A tendency to emphasize ownership and control of each supply chain element	Managing all facets of all interactions with all customers
To networked rivalry	Leading and participating in multiple networks to spawn, nurture, and integrate the development of products that otherwise would be impossible	Leading and participating in multiple supply chain networks to create supplies that otherwise would not be possible, enhance supply chain efficiencies, and so on	Developing and managing a network of relationships with other entities (such as rivals, channels, end users, and market professionals) to identify, reach, and satisfy customers in ways that otherwise would be impossible
From economies of scale	An emphasis on resource use efficiencies in designing and developing products	An emphasis on efficiencies in vendor relationships, inventory control, logistics, production, and so on	An emphasis on efficiencies in all phases of marketing activities
To economies of scope and increasing return	Leveraging resources to create products that serve interrelated customer segments/markets and provide the basis for increasing returns	Leveraging all facets of the supply chain to facilitate greater product/customer scope and increasing returns	Leveraging all marketing resources to create the types of customer relationships that facilitate multiple forms of product and market linkage

and integrating the firm's own supply chain with that of both suppliers and customers. The value and benefits experienced by end customers is the driving obsession, not internal goals such as supplier delivery cycles, production schedules, and operating costs. It emphasizes the coordination and integration of supply chain tasks and activities to facilitate design, development, and delivery of solutions rather than just the procurement and transmission of materials, supplies, components, and finished products. As a critical means to do so, it partners with external entities to develop the next generations of materials, components, and supplies and often develops and avails of networks.

The change to a market-driven CRM process entails shifting from a *modus operandi* that views customer relationships as solely means to sell, deliver, and service a product to one that regards them as means to learn about customers' needs and wants and how best to create, satisfy, and sustain them. Customer transactions give way to intimate and sustained relationships. Customer intimacy and partnering are prerequisites not only to tailor solutions that enhance customer functionality, but also to the collective and cooperative determination of new customer functionalities. Networks of customer relationships involving channel members, end users, and other marketplace entities such as advertising agencies and consulting organizations facilitate the development of scope economies and increasing returns that otherwise would be impossible.

These marketplace shifts thus result in business process redesign and realignment. For example, a shift away from vertical integration to horizontal alliances reinforces the need to move from stand-alone competition to networked rivalry. The "best" products do not necessarily win. The best networked firms usually do. Thus, marketing strategy requires that a firm be in the right product system and then ensure mechanisms to get a fair share of the alliance (network) value created. Furthermore, horizontal alliances require a focus on greater collaboration, information sharing, and trust across supply/value chains.

Marketing tasks. Marketing as a discipline infuses a customer orientation into the subprocesses noted in Table 1 through the medium of individual marketing tasks. *Marketing tasks* can be defined broadly as the specific items of work that marketing professionals typically do; that is, what they are expected to accomplish in their day-to-day assignments. With specific focus on customers, some critical marketing tasks include identifying and categorizing customer segments; determining a customer's current and potential needs; visiting customers to learn about the uses and applications of individual products; developing and executing the individual components of sales, advertising, promotion, and service programs; assessing customers' price sensitivities; and determining customers' responses to rivals' current and potential offerings. Each CRM subprocess (Table 1) involves many marketing tasks.

Infusing a market- or customer-driven perspective and inputs into subprocesses can be accomplished in two related but distinct ways. First, CRM subprocesses often must be reinvigorated with a genuine customer or market orientation. This tendency long has been exemplified in the dis-

tinction between a marketing and a sales orientation (Kotler 1977*). Sometimes, execution of these subprocesses degenerates into mere work or task routines—that is, people become accustomed to doing their jobs in only one way—or into easy-to-accomplish task procedures—that is, people allocate among themselves the work involved in a specific task. To cite one example, in executing the subprocess learning about customers' product use and application, the experience of some firms indicates that members of customer site visit teams often merely "go through the motions" of asking predetermined questions, asking rudimentary follow-up questions, completing detailed questionnaires, and describing observations of customers' behaviors in a largely perfunctory manner.

Second, the marketing-specific tasks inherent in CRM subprocesses can be linked directly and indirectly to individual subprocesses in both the PDM and SCM processes. For example, many of the tasks noted in the preceding paragraph that pertain to the subprocess learning about customers' product use and application can generate data and information that should serve to inform design and execution of several subprocesses in the other two core business processes.

Marketing, Business Processes, and Shareholder Value

The previous section focused on the impact of marketplace shifts on the core business processes and how a market-driven orientation should influence each process. The role of marketing activities in these cross-functional business processes varies greatly (Deshpandé, Farley, and Webster 1993*; Kohli and Jaworski 1990*; Narver and Slater 1990*). Marketing is likely to emerge as a lead function in managing customer relationships. It plays an important role in the articulation (i.e., by defining the value proposition and positioning in the market), navigation (i.e., through market sensing and information dissemination), and orchestration (i.e., process management and coordination) of the CRM process (Day 1997*). However, the role of marketing activities in the PDM and SCM processes is likely to be in the domain of articulation and navigation. When these processes are dominated by technology- and engineering-driven cultures, marketing often is reduced to a subordinate selling role.

Investments Required to Develop Business Process Capabilities

Investment in research and development (R&D), engineering and development of new technology platforms, networks, and alliances can be viewed as enabling PDM processes that result in both tangible assets, such as superior products, and intangible ones, such as intellectual property. Similarly, infrastructure investments in SCM, such as electronic channels and plants and equipment, can be viewed as leading to largely tangible assets that support the supply chain infrastructure. However, intangible assets, such as relationships with suppliers and distributors, are also invaluable. And, CRM process investments that nurture brand de-

velopment and customer support and that enhance the size and quality of the customer-installed base result in market-based assets. These are typically intangible assets such as brands, customers, and distribution networks (Aaker 1991*; Lane and Jacobsen 1995*; Srivastava, Shervani, and Fahey 1998).

Because CRM investments lead to less tangible assets (e.g., brands, customers, distributors), they are typically harder to justify. But assets resulting from investment in business processes create sustainable competitive advantages and capabilities. Therefore, they represent resources that firms can tap in driving shareholder value. For example, differentiated brands are more responsive to advertising and promotions (Keller 1993*), and brand loyalty can be tapped to reduce marketing expenditures in times of cash flow crunch (Srivastava, Shervani, and Fahey 1998).

The recognition of customers, distributors, and brands as market-based assets raises the question of whether marketing expenditures should be treated as operating expenses or capital investments (Srivastava, Shervani, and Fahey 1998). For management purposes, the treatment of marketing expenditures as capital investments could provide brands with a defensible claim when competing for resources with other capital expenditures, especially in industries in which off-balance-sheet assets are a large proportion of market value for firms (Hunt and Morgan 1995*; Lusch and Harvey 1994*).

Financial Valuation Methods for Assessing the Impact of Business Processes

There is considerable debate regarding how economic value is created by strategic initiatives and how it should be measured (Day and Fahey 1988; Pessemier and Root 1973*; Srivastava, Shervani, and Fahey 1998). Although valuation methods include multiple approaches, such as price/earnings multiples, market-to-book value ratio, economic value added (EVA), cash flow return on investment (CFROI) beyond cost of capital, market value added (MVA), and shareholder value (SHV), approaches based on cash flow (EVA, CFROI, SHV) have received greater support. In particular, EVA, combined with attendant value-based management approaches that link compensation and incentive systems to factors that help create EVA, has gained popularity in recent years.

Unfortunately, though EVA is relatively easy to measure from current performance information (it is equal to net operating profits after taxes [NOPAT] less the cost of capital employed in creating NOPAT), it has been criticized for its short-term focus and undervaluation of growth potential and intangible assets (Elliott 1997*; Luehrman 1997*). In contrast, SHV is created by a business process and is based on the net present value (NPV) of future projected cash flows during the period. This is a daunting and subjective task that requires difficult projections.

On balance, the dominant financial perspective is that market value created by strategic initiatives is best reflected by the NPV of all future cash flows expected to accrue to the firm (Martin 1998*). The importance of this perspective is underscored by the large proportion of the value of firms

that is based on perceived growth potential and associated risks. More often than not, value is based on growth expectations as opposed to a mere continuation of past performance. The challenge, therefore, is to demonstrate and measure the value created by resources devoted to marketing activities in terms of their impact on current outcomes and on perceptions of future financial performance.

Although measurement difficulties abound, the principles of SHV creation are simple. Because of the time value of money (discounting for risk), earlier cash flows are more highly valued, and certainly higher levels are preferred to lower ones. Reduced risk is valued as well. As we (1998) previously have discussed, the SHV-based planning approach proposed by Rappaport (1986) is based on four "value drivers":

1. Acceleration of cash flows; earlier cash flows are preferred because risk and time adjustments reduce the value of later cash flows;
2. Enhancement of cash flows by increasing revenues and reducing costs, working capital, and fixed investments;
3. Reduction in the risk associated with cash flows by decreasing both their volatility and vulnerability and, indirectly, the firm's cost of capital; and
4. Augmentation of the long-term value of the business (at the end of the planning horizon) through investments in processes that result in both tangible and intangible assets.

Typically, the last value driver is simply an outcome of a finite planning horizon. If we define a finite planning horizon over which to project cash flows, the long-term value at the end of the horizon should be discounted back to the present. But, if we adopt an infinitely long time horizon, the last of the four drivers is incorporated automatically into the valuation and is an outcome of the first three. Therefore, in this article, we focus on the first three to illustrate, rather than provide an exhaustive assessment of, how marketing activities infuse business processes and drive shareholder value. Examples of these relationships are summarized in Table 3.

We turn now to a discussion of how marketing mind-set and activities provide a link among the three core business processes and the three drivers of shareholder value. Although each business process potentially can influence every driver of shareholder value, for reasons of brevity, we discuss a subset of all the possible linkages. The goal is to illustrate rather than provide an exhaustive assessment of how marketing activities influence and link business processes to the drivers of shareholder value.

Accelerating Cash Flows

Cash flows are accelerated by developing products faster, moving them faster through the supply chain, and reducing the time for market acceptance. Inculcating the marketing discipline into the mind-set of those that lead and participate in each core business process and integrating specific marketing tasks into the work of each subprocess play central roles in deciding more quickly both to do the right things and to do them faster and better.

Getting the right market inputs, such as customer requirements, assistance in ensuring appropriate product use, and an assessment of competitors' potential product offer-

TABLE 3
Business Processes and Drivers of Shareholder Value

Shareholder Value Drivers	Business Processes		
	Product Development Management Process	Supply Chain Management Process	Customer Relationship Management Process
Accelerating cash flows	Speed up cycle time for technologies Speed up product development, reduce time to market	Speed up adoption by channels and original equipment manufacturers Speed up adoption of components and supplies Reduce order delivery cycle time Reduce time to volume	Reduce time for market acceptance (i.e., market penetration cycle time) Minimize customer solution development cycle time
Enhancing cash flows	Product differentiation to enable higher prices and margins Cannibalize existing products by higher price/margin innovations Simplified designs to reduce costs Customer inputs to eliminate unnecessary features and costs Sharing modular designs across products to reduce costs; reusing designs Acquiring/licensing technology Design for manufacturability and assembly to reduce costs and time	Supply chain process reengineering to minimize costs (e.g., by reducing problem incidence rates) Reduce working capital through just-in-time methodologies Reduce capital investments by outsourcing low value-adding elements of the supply chain Use market information and forecasts to reduce costs and inventories and enhance capacity use for higher-value products (e.g., dynamic pricing/yield management)	Support high margins with branded products and superior service Cross-selling parts, consumables, and complementary services Maximize customer value (and revenues) by assembling customer solutions (including competitive products and services) Acquire customers; grow installed base Refine the quality of customer base (to reduce receivables and inventory); customer management Lower product launch costs; lower sales and service costs
Reducing risk (vulnerability and volatility of cash flows)	Ramp rate of innovation to keep ahead of competition Technology and strategic alliances to establish market-driven standards Continuous focus on differentiation—designing hard to copy products; creating unique product/service bundles Market-driven product designs and configurations Planned product line migration (and product obsolescence) Maximize synergies across product portfolio (e.g., products with countercyclical demand patterns but common resource requirements)	Increase switching costs for distributors by providing service, incentive, and loyalty (“entanglement”) programs Minimize conflict with distributors; manage competition across and within delivery channels Design hard to copy order delivery processes Demand-driven flexible manufacturing and order delivery systems; integrate manufacturing and marketing using everyday low price, not high-low pricing approaches Outsource uncertain demand delivery; “insource” supplies (e.g., vendor managed inventory)	Customer retention and loyalty versus acquisition and attraction programs; loyalty programs Increase customer switching costs by bundling products and services Excellence in delivery of intangibles, experiential attributes, and services Leverage market-based assets (value networks) Customer education/training programs Leasing programs Price concessions for long-term delivery contracts Cross-selling parts, consumables, and complementary services

ings, to the teams involved in each PDM subprocess can help eliminate or reduce false starts and delays in conceptualization, specification, and prototyping of customer solutions. Let us briefly consider two PDM subprocesses. Developing a solution concept, such as a new form of

integrated hardware and software system architecture or a new way of washing and drying clothes in the home, increasingly involves many forms of inputs from and interactions with different categories of customers. One systems integrator organizes a series of intensive exploratory sessions

with a small set of its most demanding customers to generate potential system architectures that may be radically different from prevailing designs. Such intense customer involvement is intended to avoid the animosity and subsequent time-consuming redesigns that often occur when potential solution concepts first are developed by product development personnel and then presented to customers (Eisenhardt and Brown 1998*; House and Price 1991*). A failure to manage time to market results in false starts, delays, and missed opportunities. These are sometimes extremely costly in terms of both time and money.

Reducing cycle times in each SCM subprocess contributes significantly to customers getting the right products in the desired form and getting them faster. Reducing time to market, time required to commercialize products, and time to volume are driving mantras in most organizations. Yet an absence of market inputs and perspective all too often retards the speed of commercialization and thus the receipt of cash flows. To get products to market faster, firms increasingly select suppliers that are willing to develop components and specialized inputs jointly and offer the suppliers inducements to speed up component development. When viewed as transmitting data and information rather than moving physical goods, even some SCM subprocesses, which may not have evident or obvious connections to customers' needs, requirements, and interests, such as inbound logistics, internal logistics, and assembling components, contribute to speeding commercialization and sustaining market penetration. Electronic data interchange and Internet-based communications networks now instantaneously connect market data, such as sales data and location of product sales by store outlet and geographic region, to suppliers' production schedules, logistics firms' delivery timetables, and internal materials handling routines through a virtual integration of the supply chain (Magretta 1998*). At the other end of SCM, understanding channel motivations enables firms to create the right programs to educate distributors and the right incentives to streamline and speed up outbound distribution and, thereby, adoption by channel partners.

Most companies understand the importance of time to market because of the time value of money and competitive uncertainties along product life cycles. Yet many such companies fail to realize that inadequate attention to barriers to market acceptance can delay product adoption and diffusion and, thus, cash flows. Such CRM subprocesses as advertising and promotion build more rapid product awareness, entice early product trials, and promote repeat purchases. In addition, customers adopt and refer to branded products more quickly (Zandan 1992*), market seeding facilitates diffusion of innovations (Jain, Mahajan, and Muller 1995*), and network externalities linked to the size of the customer-installed base foster market acceptance (Arthur 1989*). Each of these results supports cash flow acceleration based on CRM.

Unfortunately, companies often balk at spending amounts for channel and market development that are an order of magnitude lower than product development costs. Cooper (1993*, p. 26) finds that, in the case of industrial new product development, 78% of total effort as measured by person-days went to technological and production activ-

ities, compared with only 16% for marketing activities. As Robertson (1993*) highlights, this can be an expensive mistake because many products have failed to realize their potential because of inadequate attention to speeding up the market acceptance cycle for products. Such speeding up of market acceptance is more likely to occur if companies measure (e.g., half-life or time required to reach 50% market penetration; percentage of the available market that tries a new product within a targeted time period) and reward reduction in the product commercialization cycle time. A better balance of resource allocation between time to market and penetration can lead to faster time to money (House and Price 1991*).

Enhancing Cash Flows

Although the conceptual approaches to enhancing cash flows vary across business processes, the reason for doing so remains consistent: Augment revenues by increasing sales volume and/or prices and enlarge margins (in part) by reducing costs. The PDM subprocesses contribute uniquely to enhancing cash flows when they collectively create solution platforms that facilitate further product design, customization of solutions, and adaptation of product use by customers. Solution platforms include similar product design specifications and shared components and supplies, as well as shared production processes. These enable firms to eliminate significant costs and manufacture products in high volumes that can be tailored to meet the needs of distinct customer groups and, in many cases, of individual customers (Robertson and Ulrich 1998*).

In short, solution platforms often enable firms to deliver product variety that otherwise either is unattainable or could be accomplished only with a disproportionate upsurge in costs. Consider Kodak's response to Fuji's 1987 introduction of the QuickSnap 35 millimeter camera in the U.S. market. Kodak did not have a comparable model of its own, designed a rival product, and then introduced three more models. All four models shared a common platform, which enabled Kodak to develop and produce its products faster, resulting in considerably greater product variety than Fuji and clear market domination by 1994 (Clark and Wheelwright 1996*).

The PDM subprocesses also may contribute to controlling or even reducing costs. Product design simplifications often significantly reduce costs. Astute use of alliance networks to access unique types of research and technical knowledge serves to lower the costs associated with developing tentative solution designs and product prototypes.

Market inputs also can enhance cash flows through their influence on SCM subprocesses. Projections of customers' product needs aid in determining input requirements, establishing sufficient inbound logistics capability, determining and acquiring appropriate product process technologies, and choosing the most effective distribution channels. Companies such as Benetton, Amazon.com, and Dell have been successful in using market information to identify higher-demand colors, titles, and product configurations, respectively. By promoting these "best-sellers," they drive the market to enhance revenues and reduce costs simultaneously. Better market information can be used to reduce pro-

curement costs and inventory levels. In addition, market information enables companies to postpone actions until they are needed. This allows for just-in-time commitment of resources and higher efficiency.

In managing costs, marketing also plays an important informational and navigational role. For example, market information (e.g., customer orders) and forecasts are used to drive down finished goods and component inventories at Dell, for which inventory levels recently have averaged eight days, or 40 inventory turns per year. Periodic forecasts by American Airlines's vaunted Sabre System enable it to release lower-priced seats contingent on demand forecasts for higher-price tickets. This dynamic pricing approach enables American to derive higher economic value from fixed capacity.

Many might argue that a fundamental purpose of CRM is to augment sales revenues. Each CRM subprocess contributes to identifying customers needs; adapting solutions as these needs change; and promoting, selling, and servicing delivered or installed solutions. Research indicates that branded products lead to "imperfect" markets, and the monopolistic power they afford supports higher prices and margins (Boulding, Lee, and Staelin 1994*). Intimate customer relationships provide a point of leverage to realize economies of scope (Treacy and Wiersema 1995*). For example, the customer base can be leveraged to enhance revenues by cross-selling complementary products and services or upselling to higher-quality substitutes. The cash flow-enhancing potential of customer relationships has led to the recognition that customers are market-based assets (Srivastava, Shervani, and Fahey 1998). Finally, in recent years, the potential of CRM to contain and reduce costs has received explicit attention. It has been shown that better customer management results in lower sales and service costs and higher buyer retention and, therefore, lower customer replacement expenditures (Reichheld 1996).

Reducing the Vulnerability and Volatility of Cash Flows

Projected cash flows can be vulnerable to competitive action and subject to volatility because of demand fluctuations. Therefore, marketing as a discipline and the execution of individual marketing tasks can contribute to the reduction of the vulnerability and volatility of cash flows, especially when the root causes of such risks are outside the organization.

Marketing as a discipline infuses market inputs, such as changing customer needs, potential technological breakthroughs, and competitors' likely product introductions, into each PDM subprocess with the intent of keeping the firm's stream of new products ahead of current and emerging rivals' offerings. Intel, Merck, Motorola, IBM, and many other firms endeavor to reduce product vulnerability by committing extensive resources to subsequent generations of product(s) while the next generation is under development. Moreover, though a reputation for excellence in product development can be a driver for performance and differentiation (e.g., Intel can demand loyalty), success of product platforms may depend heavily on the successful execution of marketing tasks that support value networks (e.g., the In-

tel Inside campaign). In addition, firms can take advantage of multiple product lines by creating unique product/service bundles (e.g., Microsoft's Office Suite) that others cannot duplicate. Or, they might manage migration of customers across product lines during their family life cycle. Thus, sustainable competitive advantages can be developed by defining and renewing value propositions and marketing strategies that guide product development. Such advantages mitigate risk.

Managing product innovation, and thus additions and deletions to product portfolios, greatly aids in managing volatility of cash flows. Maintaining products in markets that are countercyclical reduces cash flow volatility because negative correlation between cash flows from individual products leads to lower variance and, therefore, lower risk. Moreover, market inputs that portend change in the growth rates of market segments guide the commitments of resources to development of products for emerging growth segments. Such informed commitments reduce risk in the future.

Cash flow vulnerability may be reduced by the SCM process through process innovation. For example, Gillette reduces risk by designing hard-to-copy manufacturing processes, including the machine tools used for production. Risk also may be reduced by management of distribution relationships. Manufacturers can increase switching costs for distributors with "entanglement programs," such as incentives to distributor sales personnel, or with services.

The SCM process also may be managed to minimize volatility in cash flows. Demand-driven flexible manufacturing and order delivery systems reduce cash flow uncertainty. For example, Procter & Gamble is emphasizing everyday low price instead of high-low price promotions because the latter cause peaks and valleys in demand patterns that wreak havoc in manufacturing operations and increase the volatility of cash flows. Other firms seek to reduce potential susceptibility to volatility in demand by building capacity to cover projections of steady demand and outsourcing production to cover uncertain demand.

Strategists long have understood the importance of barriers to entry, such as investments in R&D and manufacturing systems. However, the emerging literature suggests that the barrier to entry that is hardest to overcome might be customer loyalty. Successful implementation of CRM subprocesses can contribute to greater customer switching costs and loyalty (Reichheld 1996), thus lowering cash flow vulnerability. To cite some examples, higher customer retention is fostered by loyalty programs (e.g., American Airlines AAdvantage) and by increasing switching costs through bundling products/services and leasing programs (e.g., auto leasing programs result in substantially higher repurchase rates).

Some firms now routinely coordinate and leverage promotion, advertising, selling, and service subprocesses to cross-sell consumables (e.g., toner and ink for printers in the case of Hewlett-Packard) and services as one means to reduce volatility in cash flows. Other firms leverage their relationships with particular customers by granting price concessions in exchange for longer-term purchase contracts, thus enhancing the likelihood of stable cash flow for a spec-

ified period. Typically, both the vulnerability and volatility of cash flows are undervalued when a short-term transaction perspective displaces a longer-term relationship mentality. One irony is that customer retention strategies and the role of marketing are likely to gain greater recognition as their implications for the vulnerability and volatility of cash flow gain wider appreciation and the long-term value of customer purchases is compounded over time (Srivastava, Shervani, and Fahey 1997).

Discussion

The ability of marketers to influence marketplace performance will be increasingly dependent on the extent to which core business processes are infused with a marketing perspective and shaped by marketing-generated data. The need to adopt a cross-functional perspective was underscored by a workshop sponsored by the Marketing Science Institute that focused on management of corporate fault zones (Montgomery and Webster 1997). Papers presented in this workshop emphasized that marketing success or failure no longer can be denominated only in traditional product market performance metrics such as sales and market share. Marketing investments and commitments must be assessed for their impact on efficiency and effectiveness of business processes, financial outcomes, and creation of shareholder value. In the discussion that follows, we focus on the implications of this framework for marketing theory, practice, and teaching.

Implications for Marketing Theory

Although marketing scholars long have issued innumerable admonitions to stipulate, test, and accumulate marketing theory, a recent plaintive cry manifest in the literature has called consistently for new theories that embrace new concepts and variables that address how and why marketing succeeds or fails (Lehmann 1997*; Webster 1997*). Extending existing theoretical frameworks may no longer be sufficient to reflect marketplace shifts and guide marketing practice in the fundamentally new competitive context and conditions that will characterize the new millennium.

The framework presented here offers a potentially fruitful approach to developing marketing theory that expressly responds to emerging change in both organizational and competitive contexts, with the intent of explaining success and failure (Anderson 1982; Day 1992*). Although extensive conceptual and empirical work lies ahead, the framework presented here suggests that marketing scholars must address the following more explicitly:

- The specification of intraorganizational conditions, specifically core business processes, as a component of marketing theories;
- The postulation of cause-and-effect linkages between marketing and the design and execution of core business processes;
- The postulation and testing of cause-and-effect linkages between core business processes and both marketplace and shareholder value variables; and
- The value-added contribution of marketing to the enterprise, in which value is denominated in terms of meeting organizational prerequisites, marketplace performance, and shareholder value.

From theory to practice. Marketing tasks do not exist in a vacuum. They are subprocesses within broader business processes. Marketing theory therefore must incorporate these processes explicitly as an input to marketing strategy choices and decisions that affects both marketplace and financial performance. Attention to core business processes extends the domain and complexity of marketing theory to include organizational factors as determinants of marketing success and failure. Adding a cross-functional dimension to marketing practice raises the hurdle for marketers. Their success would require functional (marketing) excellence and depth, as well as cross-functional process competence to ensure the implementation of marketing ideas. Unless other functions appreciate the value of what marketers have to offer, little progress can be expected in terms of businesses embracing marketing concepts.

The framework also suggests that marketing theories no longer can address only marketing outcomes as the criteria of success. They must connect marketplace performance measures, such as brand loyalty, with financial dimensions, such as reducing the vulnerability and volatility of cash flows. Rich theoretical insights thus might be derived when marketplace-financial performance links are postulated. For example, might companies with greater customer switching costs and retention rates face lower risks and, therefore, lower costs of capital and higher price-earnings multiples?

Theories of exploration and exploitation. At a somewhat more fine-grained level, the framework facilitates developing and refining distinctions between market-focused theories of exploration and exploitation (cf. March 1991). Exploration theories focus on creating new business opportunities. At their core, market-focused theories of exploration address the development and testing of opportunities that will take the organization's marketing strategy in new directions. They focus on creating truly new products or solutions and changing the nature of competition by changing the business processes that deliver them. Their outcome might constitute a new theory of the business (Drucker 1994*), fundamentally new customer functionalities (Hamel and Prahalad 1994*), or specific insights about how to shape the future rather than be shaped by it (Fahey and Randall 1998). Explorative activities on the part of businesses typically require insights regarding customers and competitors, assumptions about future success criteria, and investments that are risky but that may result in major pay-offs. Such investments in infrastructures that facilitate PDM, SCM, and CRM processes typically provide strategic options to participate in new product platforms, channels, and market segments. Thus, an options theory approach to assessing the value of projected cash flows may be more appropriate than traditional methods (Luehrman 1998).

Exploitation theories, in contrast, address the execution and leveraging of existing marketing strategies. The emphasis is on how core business processes contribute to implementing a given strategy more efficiently and how the strategy can be adjusted to create and avail of related opportunities more effectively. Thus, exploration addresses building competitive advantages, whereas exploitation focuses on leveraging these assets and capabilities in enhancing product market performance. A conceptualization of

marketing as a subprocess, embedded in the core business processes and explicitly linked to cash flow consequences, can facilitate the development of theory pertaining to the role of marketing in organizational efficiency and effectiveness. To the best of our knowledge, such a theory has not been attempted. Our framework is a step in that direction.

Implications for Empirical Research

The theoretical implications previously noted suggest several interrelated empirical research directions. Our particular interest here is to identify research issues and directions that largely have been ignored in the marketing literature but that the framework developed here suggests will become increasingly central to marketing's emerging empirical research agenda. Propositions of interest can be linked to the role marketing plays in business processes, as well as a vision of the future. In this sense, assertions made in Table 2 provide rich opportunities for research.

For example, as we move from stand-alone competition to networked rivalry, it appears we must learn to move from a complete dependence on our own capabilities to managing a network of relationships. But, how a firm does so is debatable and therefore worthy of investigation.

- What will be the best approaches to managing teamwork and integration across functions and business partners in developing new products?
- What are best practices for participation in and virtual integration of supply chain/value networks? Why?
- How should a firm manage a network of relationships across channel partners, customers, partners, and competitors? Why?
- What are the best ways to measure superior performance in network management (versus performance of stand-alone products and services)?

Although some of these issues, such as teamwork in new product development, are under academic investigation, others, such as virtual integration across suppliers and channel members, are understood better by marketing practitioners employed by industry leaders (e.g., Dell). Similar issues can be raised with respect to assertions related to marketing's role in business processes for each of the other marketplace shifts in Table 2. Other questions worthy of empirical investigation stem from the influence of marketplace shifts on core business processes, how core business processes and marketing subprocesses relate to product market performance and shareholder value, and how a focus on shareholder value in turn influences the design and management of core business processes and marketing subprocesses.

- What is the influence of core business processes on product market performance?
- What is the influence of core business processes on shareholder value? In what ways do the three core processes individually and collectively affect the three drivers of shareholder value?
- What is the influence of product market performance on shareholder value? How do individual marketplace results such as increase in brand loyalty affect measures of shareholder value such as market-to-book ratios and price earnings multiples?
- What is the impact of shareholder value on product market performance? For example, how does brand equity influence brand performance?

- What is the influence of shareholder value on core business processes? How might shareholder value goals affect outsourcing, coordination, and integration of business processes?

Implications for Marketing Practice

A central implication of the framework presented here is the need for many practitioners to alter their mental model of marketing radically. An understanding of the role of marketing within core business processes may require a paradigm shift in the way many marketing managers understand the scope and content of marketing, how it is executed, how its results should be assessed, and, more important, how they can communicate with and influence managers in the top echelon.

An initial implication is that unless marketing managers understand these central marketplace shifts, the forces driving them, and their implications for marketing action, they will be unable to craft and execute successful strategies. In short, in view of the discontinuities evident in marketplace shifts (again, say from stand-alone competition to networked rivalry), it seems safe to suggest that traditional marketing perspectives almost certainly contain within them the seeds of marketplace failure.

A pervasive implication is that if marketing is to be the energizing source of creating and exciting customers, it must infuse and integrate the activities that fall within the organization's core organization processes. Managers therefore must understand the domain, role, and contribution of each core process, the connections among them, and their broad consequences for marketplace and financial success. More specifically, marketing managers must understand how individual activities within each core process—for example, product design within PDM and concurrent engineering within SCM—can create customer success, such as ease of product use and ability to adapt the product to multiple uses.

In the interest of developing winning strategies, marketing managers also must carefully analyze and identify how marketing can contribute to the design, development, execution, and integration of organizational processes. They therefore must assess which marketing-generated data can serve as inputs to specific activities within each core process, to integration within each process, and to coordination among them. Marketing managers should be positioned ideally to develop projections of change within and across marketplace shifts and to posit how these changes would affect product variety within the PDM process, economies of scale within the SCM process, and increasing returns in the CRM process. Put bluntly, it is our contention that the articulation of these types of connections is a sine qua non of marketing success in the emerging marketing era.

A new and unavoidable challenge for marketing managers is the need to assess the cash flow consequences of their decisions, commitments, and investments. Two implications immediately arise: Managers must learn both cash flow analysis methodology and the underlying thought process. Regrettably, the latter often is underappreciated. However, as is evident in this section, it is essential to the framework presented here. Thus, cash flow measures must become a central component of managers' mental models of

strategy evaluation. Dependence on product market measures is no longer sufficient.

Assessment of cash flow consequences also has feedback implications in strategy development and execution. Managers must use cash flow analysis as an input in determining core process configuration and execution and in the development and choice of strategy alternatives. For example, the ability to project the cash flow consequences of alternative marketing programs enables managers to question the desirability and viability of individual strategies. Thus, it encourages them to consider how strategies might be amended to achieve results in the product marketplace that would lead to superior financial returns relative to internal and external performance criteria.

Performance metrics can be benchmarked against both internal (say, against other divisions or product groups or performance levels achieved in the past) and external (against best practices or performance levels achieved by competitors or "best in class" companies in other industries) standards. Of particular interest is an emerging focus on doing things faster and using fewer resources. Several leading companies now focus on "velocity metrics" that track the rate of change in measures they deem as central to their source of sustainable advantages and marketplace performance. Rather than focus on the absolute level of measures, such as market share, return on assets, or cycle time for order delivery processes, they track continuous improvement (either change or rate in change) on these dimensions. This is based on the belief that stock market analysts track and reward momentum, or rate of positive changes in performance

measures (Meredith 1998*). In addition, the framework can be used to provide new normative benchmarks that are linked to logic and process knowledge. For example, if a made-to-order delivery process takes one day, then the components inventory requirement of (say) three days should be adequate.

Marketplace trends present additional measurement challenges. What are appropriate performance metrics, given market conditions and competitive environments? How does the relative importance of these metrics change over the product life cycle, as management priorities change, as new competition emerges, as technology-enabled process management gets underway, as the pendulum shifts from vertical integration to virtual (horizontal) integration and back to vertical? Should the balanced scorecard be used to control business processes, or should the scorecard purposely be unbalanced to ensure a focus on practices designed to create an uneven playing field and change the nature of the competitive game? If marketers can address these questions successfully, they will be able to (1) influence marketing activities in every business process of the organization and (2) ably articulate, in the language and methodologies of finance and top management, the contributions of marketing (Buzzell and Sisodia 1997*). In affording direct linkages to core processes and cash flows, the framework presented here enables marketing scholars to develop and test new marketing theories and exhorts practitioners to reconsider established marketing practices. We would argue that doing so must become the hallmark of the marketing profession as we enter the new millennium.

REFERENCES

- Anderson, Paul (1982), "Marketing Planning and the Theory of the Firm," *Journal of Marketing*, 46 (Spring), 15-26.
- Davenport, Thomas H. (1993), *Process Innovation: Reengineering Work Through Information Technology*. Boston, MA: Harvard Business School Press.
- Day, George S. and Liam Fahey (1988), "Valuing Market Strategies," *Journal of Marketing*, 52 (July), 45-57.
- Fahey, Liam and Robert M. Randall, eds. (1998), *Learning from the Future: Competitive Foresight Scenarios*. New York: John Wiley & Sons.
- Lehmann, Donald R. and Katherine E. Jocz, eds. (1997), *Reflections on the Futures of Marketing*. Cambridge, MA: Marketing Science Institute.
- Luehrman, Timothy A. (1998), "Strategy as a Portfolio of Real Options," *Harvard Business Review*, 76 (September/October), 89-101.
- March, James G. (1991), "Exploration and Exploitation in Organizational Learning," *Organization Science*, 2 (February), 71-87.
- Montgomery, David B. and Frederick E. Webster (1997), "Marketing's Interfunctional Interfaces: The MSI Workshop on Management of Corporate Fault Zones," *Journal of Market-Focused Management*, 2 (September), 7-26.
- Rappaport, Alfred (1986), *Creating Shareholder Value*. New York: The Free Press.
- Reichheld, Frederick F. (1996), *The Loyalty Effect*. Boston, MA: Harvard Business School Press.
- Srivastava, Rajendra K., Tasadduq A. Shervani, and Liam Fahey (1997), "Driving Shareholder Value: The Role of Marketing in Reducing Vulnerability and Volatility of Cash Flows," *Journal of Market-Focused Management*, 2 (1), 49-64.
- _____, _____, and _____ (1998), "Market-Based Assets and Shareholder Value: A Framework for Analysis," *Journal of Marketing*, 62 (January), 2-18.
- Webster, Frederick E. (1992), "The Changing Role of Marketing in the Corporation," *Journal of Marketing*, 56 (October), 1-17.