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The Resource-Based View and Marketing: The Role of Market-Based Assets in Gaining Competitive Advantage

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The resource-based view and marketing: The role of market-based assets in gaining competitive advantage

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Abstract

This article posits a framework that shows how market-based assets and capabilities are leveraged via market-facing or core business processes to deliver superior customer value and competitive advantages. These value elements and competitive advantages can be leveraged to result in superior corporate performance and shareholder value and reinvested to nurture market-based assets and capabilities in the future. The article also illustrates how resource-based view (RBV) and marketing considerations in the context of generating and sustaining customer value can refine and extend each other's traditional frames of analysis. Finally, the article posits a set of research directions designed to enable scholars to further advance the integration of RBV and marketing from both theory-driven practice management as well as a problem-driven theory development perspectives.

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1. Introduction

Both marketing theorists (Hunt, 2000) and resource-based view (RBV) proponents (Barney, 1991) directly address the most fundamental challenge at the heart of organizational survival: what gives rise to competitive advantage and how can it be sustained? Although competitive advantage is defined in multiple, often non-compatible ways both within and across the marketing and RBV domains, a common emphasis upon leveraging resources to create and sustain value for the organization's stakeholders (and, in particular, customers) should not be surprising, given the considerable goodness of fit between marketing realities and the assumptions of RBV.

What is surprising, perhaps, is that with only a few notable exceptions (Bharadwaj, Varadarajan & Fahy, 1993; Capron & Hulland, 1999; Day, 2001; Hunt, 1997; Hunt & Morgan, 1995; Wernerfelt, 1984), marketing scholars have devoted remarkably little attention to applying RBV as a frame of reference in advancing marketing theory or in analyzing core challenges in marketing practice. Despite RBV's rapid rise to prominence over the last decade as a favored analysis perspective in the broad-based strategic management literature, marketing scholars'

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attempts to develop and apply core constructs in shaping marketing theory and practice including capabilities (Day, 1994), market orientation (Kohli & Jaworski, 1990), knowledge (Glazer, 1991), and market-based assets (Srivastava, Shervani & Fahey, 1998) have been almost entirely bereft of any reference to RBV. Moreover, recent efforts by leading marketing theorists (Day, 2001; Hunt, 2000) have not fully articulated processes by which internal and market-based resources are converted into competitive advantages and therefore have not provided broad-based integration of marketing and RBV.

Leading RBV proponents (Barney, 1991; Grant, 1991; Wernerfelt, 1984), while recognizing the role of marketing specific resources such as brands and customer and distribution relationships in gaining and sustaining competitive advantage, have also generally downplayed the fundamental *processes* by which resources are transformed through managerial guidance into something that is of value to customers—and thus have contributed little to the marketing literature. In short, the tenets, premises, and assertions of RBV to date have largely avoided direct contact with the concept, intent, and prerequisites of marketing. The purpose of this article is to remedy this disconnect.

The specific goals of this article are threefold. First, to develop a conceptual framework that facilitates integration of constructs central to RBV and marketing. Second, to illustrate how RBV and marketing considerations in the context of generating and sustaining customer value can refine and extend each other's traditional frames of analysis. Third, to posit a set of research directions that will enable scholars to further advance the integration of RBV and marketing. We believe that advancing both RBV and marketing requires not just theory-driven practice management but problem-driven theory development (Churchman, 1972; McAlister & Cooper, 2000).

2. Linking RBV and marketing: A framework for analysis

The RBV takes an "inside-out" or firm specific perspective on why organizations succeed or fail (Dicksen, 1996). Resources that are valuable, rare, inimitable and non-substitutable (Barney, 1991) make it possible for businesses to develop and maintain competitive advantages, to utilize these resources and competitive advantages for superior performance (Collis & Montgomery, 1995; Grant, 1991; Wernerfelt, 1984).

However, despite a burgeoning literature dedicated to advancing RBV conceptually and empirically, both its advocates (Barney, 2001) and critics (e.g., Priem & Butler, 2001a) point to a number of obvious "issues" that warrant further theoretical and empirical attention (see Table 1). Broadly, these issues are related to how resources are used to create customer value and in managing marketplace uncertainty and dynamics. Rather than address each of these issues in detail, we propose a framework of analysis (see Fig. 1) that allows us to highlight specific connections among these issues and their implication for linking RBV and marketing. We focus on the major components of Fig. 1 that show how marketing-specific resources are leveraged via market-facing processes to deliver superior customer value that results in competitive advantages and corporate performance. This value extraction in turn results in superior (including financial) resources that can nurture market-based assets and capabilities in the future.

Table 1: RBV issues: Some links to marketing

RBV issue	RBV literature/perspective	Elements of the issue	Marketing relevance
Where is value determined?	Value determination is exogenous to RBV (occurs external to the firm in the marketplace)	Value thus is subject to choices make by actors external to the firm and to multiple sources of external change	At its core, marketing addresses value creation for customers; Marketing, by definition, is externally focused
What is the source of value?	Value flows from resources with specific attributes: they are rate, inimitable, nonsubstitutable, etc	Direct causal links between a resource with the desired attributes and the value they give rise to for specific external stakeholders needs tractability and accessibility	Marketing attempts to determine what value is perceived, experienced and understood by customers
How is value created?	The process of transforming resources into value has not been a focal point in RBV	Resources are the source of value but the firm must do something with the resources to create outputs that in turn will be valued by external stakeholders	Marketing activities provide one distinct means by which value for customers gets created
When is value identified?	Tends to be post hoc in RBV empirical work: identified after it has been created (and then related to resource attributes)	Strategy requires some *a priori* projection of the value to be created for specific external stakeholders; If value is only identified *a positori*, then strategy as a proactive process is greatly circumscribed	Marketing professes to identify value ex anti; Marketing begins with an emphasis on determining customer needs
What is the source of resources?	The origins of resources (and how they evolve) has received relatively scant attention in the RBV literature	The creation of resources is fundamental to entrepreneurial aspects of strategy development and execution	Marketing generates multiple forms of resources (e.g. customers' perceptions) that can be leveraged in the process of customer value creation
What is the degree of resource specification?	Specification of resources tends to be broad-grained, rather than fine-grained	Understanding of the details of individual resources critical to advance research and prescriptive implications	Assets and capabilities specific to marketing can be/have been delineated and document in great detail
To what extent are Resource interaction effects pursued?	Often noted, but not a distinctive focus of theoretical or empirical work	The "services" provided by any resource gain leverage only when commingled with other resources	Marketing necessarily entails commingling of assets and capabilities (within marketing and with other functional areas)
Is RNV analysis static or dynamic?	Analysis represented as dynamic. But, often, theoretical implications are drawn based on competitive equilibrium—i.e., static predictions	Competitive dynamics suggest that customer value (competitive advantages) in always in a process of change	Search for differential competitive advantages (customer value) lead disequilibria provoking dynamic competition
Marketplace (demand and supply/resource) heterogeneity	Marketplace heterogeneities and uncertainties are recognized but have received limited attention in the RBV literature	Customer value for market niches can be generated by targeting different market segments and/or different competitors by leveraging different complementors	The concepts of segmentation, differentiation and positioning represent core elements of information-driven marketing theory and practice
Market (customer and competitor) information and uncertainty	Marketplace information and knowledge as central to developing competitive advantages. Yet, the RBV focus has been on internal assets and capabilities.	Information (and knowledge based management acumen) is essential for competing in short-cycle, heterogeneous (fragmented) markets. External information is needed to navigate markets and to run operations both efficiently and effectively	Market orientation advocates systematic acquisition, dissemination and use of information guide strategy development and implementation market orientation is itself a resource
Organization learning	Intangible resources such as culture, knowledge and competencies can lead to competitive advantages	It is not (tangible) resources per se that guarantee customer value creation. But, it is how these resources are leveraged via the learning embedded in capabilities/competencies.	The process of competing (developing new products, innovative channels and new ways of supporting custom provides an opportunity to learn that leads to knowledge discovery

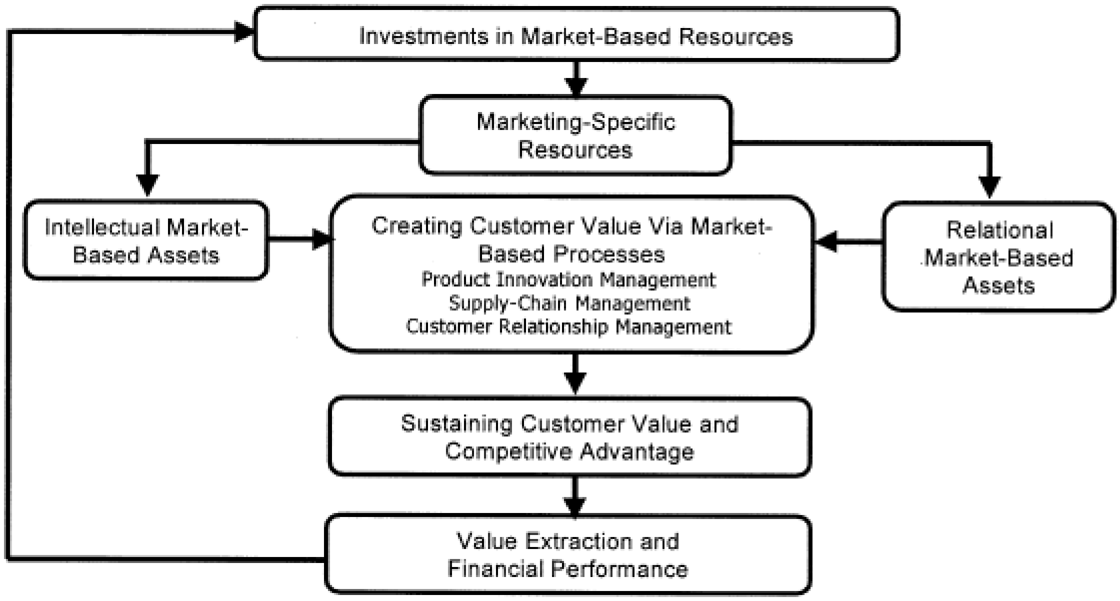

Fig. 1. Framework for analysis of market-based resources.

3. Marketing Specific Resources

RBV critics (Collis, 1994; Priem & Butler, 2001b), lament the tendency of RBV advocates to avoid specifying what constitutes a resource and RBV proponents recognize the difficulties posed for theory development when the concept of a resource remains ill-defined. Thus, one reason why marketing scholars have not adopted RBV more vigorously perhaps resides in the absence of any generally accepted delineation and classification of resources in general (Priem & Bulter, 2001a) and marketing specific assets and capabilities in particular (Day, 1994; Hunt, 2000). Thus, any application of RBV to marketing is aided considerably if we can identify resources that are both marketing specific (i.e., are generated and leveraged in large part through marketing activities) and potentially manifest at least some of the desired RBV attributes (i.e., appear to be difficult to imitate, are rare, etc.). Market-based assets, (see Srivastava, Shervani & Fahey, 1998) meet both criteria. However, to more specifically delineate and assess how value is created and sustained, we draw upon distinctions partially advocated by others (Day, 1994; Fahey, 1999; Hunt & Morgan 1995, Hunt, 2000) to further refine the notion and extend the relevance of market-based assets. Thus, we distinguish between assets, processes, and capabilities—the core constituent elements in any potential resource framework (Barney, 1997; Collis & Montgomery, 1995).

4. Market-Based Assets

Assets refer to organizational attributes that an organization can acquire, develop, nurture, and leverage for both internal (organizational) and external (marketplace) purposes (Barney, 1991; Hunt & Morgan, 1995; Mahoney & Pandian 1992, Srivastava, Shervani & Fahey, 1998). Market-based assets are principally of two related types: relational and intellectual (see Table 2).

Table 2: Market-based assets and capabilities (intangible and off-balance sheet)

Relational	Intellectual
External entwined assets relationships (channels, customers, networks & eco systems)	Internal entrenched assets knowledge (know-what and know-how embedded in individuals and processes)
Intangible assets associated with external organizations that are not owned or fully controlled by the firm. These include relationships with and perceptions held by external stakeholders: • Customers, • Channels, • Strategic partners, • Providers of complementary goods and services • Outsourcing agreements • Networks and eco-system relationships	Intangible assets residing within the firm's boundaries. Would include: • Many classes and types of knowledge about both the external and internal environment, • Know-how embedded in individuals' or units' skills (e.g. how to interact with customers to obtain higher quality market data) • Know-how to leverage intraorganizational relationships, (e.g., sales force ability to cross-sell products and services), • Process-based capabilities (e.g., new product introduction know-how or customer relationship management skills)

Relational market-based assets are relationships described in Table 2. The importance of such relationships to the practice of marketing is evidenced in the emergence of "relationship marketing" as a dominant focus of both marketing theorists and practitioners (Sheth & Parvatiyar, 1995). Because these relational assets are based on factors such as trust and reputation, the potential exists for any organization to develop intimate relations with customers to the point that they may be relatively rare and difficult for rivals to replicate. Relational resources tend to be intangible, hard to measure and therefore not nurtured. They are external to the firm, often merely "available" to a firm, and not "owned."

Intellectual market-based assets are the types of knowledge a firm possesses about its competitive environment. Firms have a major strategic and informational problem (and opportunity) in the face of marketplace heterogeneities in demand (customer preferences) and product supply (Hunt, 2000). Such opportunism is aided by market orientation which advocates systematic acquisition, dissemination, and use of information to guide strategy development and implementation (Kohli & Jaworski, 1990). At a minimum, business strategy involves identifying and selecting market segments, developing appropriate offerings and assembling the resources required to produce and deliver the offerings. This in turn requires that organizations increasingly invest considerable time, energy and money to create deep and insightful customer knowledge (Fahey, 1999; Glazer, 1991).

5. Market-Based Processes

Even RBV's most vociferous proponents admit to the relative inattention in the RBV literature to unraveling the black-box by which resources are converted into something of value to external stakeholders (Barney, 2001). Conversion of assets, as stocks, into products or solutions for customers, occurs through the medium of processes, that is, collection of interrelated work routines and tasks (Davenport, 1993). Thus, market-based (or indeed any other type of) business assets must be absorbed, transformed and leveraged as part of some *organization process* if they are to convert inputs into products or solutions that customers desire—and thus, generate economic value for the organization (Lehmann, 1997; Srivastava, Shervani & Fahey, 1999).

Given our interest in linking RBV and marketing, following Day (1994, 1997), Srivastava, Shervani and Fahey (1999), and others, we distinguish between market-facing or core operating processes that focus upon the development and delivery of products or solutions— product development management, supply chain management and customer relationship management—and noncustomer centric processes such as the acquisition, development and deployment of human resources. Each of these market-facing business processes is cross functional; marketing plays different but important roles within each (Lehmann, 1997).

Relationships that reside at the heart of marketplace networks (Shapiro & Varian, 1998) are fundamental to the functioning of the core customer-connected processes (Wayland & Cole, 1997). And, knowledge of key marketplace entities such as customers, channels, competitors, and suppliers serve as critical input to the design and deployment of core customer-connected processes (Day, 1994; Glazer, 1991). Without understanding such interactive chains we cannot describe, much less explain, *how and why* assets give rise (directly and indirectly) to customer value. And, of course, *relational* and *intellectual* market-based assets reinforce each other in the execution of market-facing business processes.

6. Market-based capabilities

The outcomes and results of processes provide the necessary metrics to determine the presence and comparative worth of capabilities (Collis & Montgomery, 1995). Marketing specific capabilities thus capture and reflect how well a firm performs each key customer-connecting process (Day, 1994, 2001) and in designing and managing sub-processes within the customer relationship management process (Srivastava, Shervani & Fahey, 1999).

7. Customer value

The exogenous determination of value in RBV inexorably points to the need to address "the value of resources with theoretical tools that specify the market conditions under which different resources will and will not be valuable" (Barney, 2001, p. 43).

When viewed through the lens of the marketing concept (Kotler, 2000), the demand side of market conditions requires the transformation of any firm's resources into an offering that customers can view and experience and determine whether or not they wish to purchase it. In short, a firm can be said to have a customer-based advantage when (some segment of) customers prefer and choose its offering over that of one or more rivals.

Criticism of RBV for its lack of parameterization of value (Priem & Butler, 2001a) and for a general vagueness in its delineation of competitive advantage (Deligonul & Cavusgil, 1996) compels the stipulation of an unavoidable question: What might be key dimensions of customer value? And, preferably, the identification of dimensions that would enable both theoretical development and empirical testing in integrating RBV and marketing. Marketing scholars (Keller, 1993; Kotler, 2000) suggest four core dimensions of customer value:

7.1. Attributes

Customers typically assess both product features and functional attributes. For example, customers might assess an automobile's tangible product related features such as power, size, seating capacity or trunk-space. Functional attributes refer to how the offering might be used—how specific features make the product more useful. Tangible product attributes/ features and functional attributes are often called “search attributes” and can be evaluated by consumers before purchase without trial (Nelson, 1970) and may be copied by competitors (Srivastava & Shocker, 1991).

7.2. Benefits

Customers can incur experiential benefits. Experiential benefits include such *intangible* factors as perceived reliability, ease-of-use, and time required to learn about the how to use the product. Because customer experience (time) is limited, brands that have been positively experienced by customers enjoy a competitive advantage over ones that are yet untried.

7.3. Attitudes

Over time, based in part upon their assessment of attributes and benefits, customers develop attitudes toward or holistic perceptions of a particular firm or brand and its offerings. Symbolic benefits include brand image or exclusiveness associated with ownership of a particular product

7.4. Network effects

Increasingly customers derive value from being part of one or more organizational networks associated with a supplier and its offerings (Arthur, 1994). As individual firms increasingly become the node in an interconnected web of formal and informal relationships with external entities (Quinn, 1992), their capacity to generate, integrate and leverage knowledge and relationships extends considerably beyond the resources they own and control. Recent research shows that the value of a product to customers can be enhanced based on the size and growth of networks of customers, producers of complementary goods and services, and even competitors (Frels, Shervani & Srivastava, 2001). The “best” products do not necessarily win. The best-networked ones usually do. Consequently, networked market-based assets help a firm *create value over and above that of stand-alone products.* A shift away from vertical integration to horizontal alliances reinforces the need to move from stand-alone competition to networked rivalry. Further, horizontal alliances require a focus on greater collaboration, information sharing and trust across value chains.

Experiential and symbolic benefits, attitudes and network effects are less tangible and more difficult to assess compared to tangible search attributes and features. Because they often require customer experience and (at least mental) engagement, they are the basis of trust and brand reputation. Also, because experience (consumer time resource) is limited, brands become important signals of quality (Keller 1993) and a potential barrier to competition (Srivastava & Shocker, 1991). Marketing plays an important role in navigating the market to identify configuration of product attributes and benefits sought by customers (Lehman, 1997), communicating them to product development teams via quality function deployment processes (Hauser & Clausing, 1988) as well as in assembling the right sets of partners (market-based assets) to deliver additional value through networked complementary products or via compatibility via more extensive user networks (Frels, Shervani & Srivastava, 2001).

8. Generating customer value

Both RBV and marketing explicitly recognize that customer value originates and exists in the external marketplace. Thus, any effort to integrate RBV and marketing, with a focus on *generating* (as opposed to sustaining) customer value, must come to grips with two central, but interrelated, questions: (1) Where do marketplace opportunities—configurations of solutions for customer needs—come from? and (2) Where do the resources—the configuration of assets and capabilities required to generate and capture an opportunity—come from?

Compared with the attention lavished on identifying and assessing desired resource attributes, both of these questions have received rather sparse consideration in the RBV literature (Godgrey & Gregersen, 1997), even by its sharpest critics (Priem & Butler, 2001). Yet both questions unavoidably plague any attempt to develop a theory of customer value generation that is intended, in part, to guide resource acquisition, development, and deployment

9. Marketplace opportunities: The contribution of marketing

Marketplace opportunities ultimately manifest in the form of new products or solutions embodying new combinations of attributes, benefits, attitudes, and network effects. To imagine *and* realize an opportunity always requires an act of entrepreneurship and dis-equilibria- provoking innovation in creating Schumpeterian or entrepreneurial rent (Hunt, 2000). Not surprisingly, therefore, “breakthrough” or “radical” solutions or new product concepts (Bower & Christensen, 1995) require a high degree of risk-taking by managers to deliver fundamentally new elements of customer value premised upon unique insight into inherently uncertain and complex market conditions (Schumpeter, 1934; Rumelt, 1987). Marketing’s avowed intent and role centers on seeing the current, emerging, and potential world differently (Drucker, 1983) so that customers’ needs can be identified, elaborated and translated into product specifications (Hauser & Clausing, 1988; Von Hippel et al., 1999), often before customers themselves are conscious of these needs (Day, 1990).

However, fundamental to RBV is that the constraints inherent in the organization’s *current* portfolio of assets and capabilities limit the choice of products or solutions it can offer or the markets it can enter (Penrose, 1959), and the levels of profits it can realize (Wernerfelt, 1984). Thus, if an organization is to craft a strategy that creates a new marketplace space (Hamel & Prahalad, 1995), thereby manifesting genuine entrepreneurial content (Rumelt, 1987), as the discipline most naturally focused upon such breakthrough opportunities, marketing must break out of the mental models (Senge, 1990) underlying and reflecting in the organization’s prevailing resource configuration. Three organizational challenges at the heart of entrepreneurial strategy fall squarely in the bailiwick of marketing: (1) Scanning and projecting current, emerging and potential environmental change; (2) Perceiving the outlines of potential opportunity lurking but rarely manifestly evident in such change; and (3) Translating (perceived) opportunity into (potential) solutions that generate value for some set of customers. Meeting these marketing challenges provides a number of platforms to link RBV and marketing.

10. Projecting, perceiving, and translating customer value: Imagining futures

If RBV is to overcome the persistent criticism that its proponents all too often seem to identity a posteriori the existence of valuable resources (Priem & Butler, 2001a), then it must face the challenge of reversing the sequence implied by Williamson (1999) when he noted: “Show me a success story and I will uncover a distinctive capability.” The firm must first articulate a potential success story—an unrealized marketplace opportunity before it can consider desired asset and capability configurations. To develop and articulate a sequence that begins with customer value and then moves to determining resource requirements necessitates the intervention of marketing skills and expertise in tackling the three challenges noted above.

The origins of marketplace opportunities, and thus customer value, can always be traced to one source: change in and around the competitive context facing the firm (Drucker, 1986). Technology disruptions, economic fluctuations, demographic shifts, political and regulatory twists, social and cultural disturbances, and normal industry dynamics give rise to alternative potential future states of competitive environments that represent dramatic discontinuity from today. And, these evolutions take place over time: understanding of the emergent world is thus a continual work-in-progress.

Individually, and in combination, the acts of scanning, perceiving, and translating, place heavy demands upon imaginative thinking and creative visioning (Hamel & Prahalad, 1994) about how such forces of change may interact over future time periods to generate new opportunity. Crafting future alternative competitive end-states, through for example the use of scenarios (Schwartz, 1990), involves delineating products or solutions, and the specific attributes, functionalities, attitudes, and network effects associated with them, that reside at their core of each opportunity.

As a methodological requirement, in the interests of creative insight into alternative configurations of potential customer value unburdened by the biases and interests of its internal constituencies, such marketing-driven “learning from the future” (Fahey & Randall, 1999) demands a total disconnection from the organization’s current resource portfolio and its configuration. Hence, the analysis path runs from *potential* customer value configurations to desired resource needs.

The emerging knowledge-based theory of the firm largely captures and explains the organizational and thinking *processes* that underlie the knowledge development and deployment central to imagining and projecting customer value. Depicting and learning from alternative futures requires processes of “knowing,” ways to interact with, project, interpret, make sense of, and suggest action implications (Cook & Brown, 1999). They aim to develop rich descriptions of how emerging and potential breakthrough ideas emerge (Nonaki & Tackeuchi, 1995) and thus how new business opportunities evolve over time. The emphasis here is upon knowledge pluralism or heterogeneity: multiple distinct views or perspectives about how the competitive context could evolve and the array of opportunities they could generate.

Such knowing processes directly challenge hierarchical, mechanical, unidirectional conceptions of the firm. With an emphasis upon the firm as “a dynamic, evolving, quasi-autonomous system of knowledge production and application” (Spender, 1996, p. 59), the knowledge-based perspective thus can be viewed not as an extension or subset of the RBV but as a framework that yields insights into processes necessary to value creation that simply cannot be extracted from RBV in its current renditions.

11. Market-based capabilities

The processes of knowing, alluded to above, strongly suggest that, in the context of an organization grappling with its emergent and potential futures, knowledge considerations (as a phenomenon, as a process) cannot be separated from action (Cohen, 1998; Nonaka & Takeuchi, 1995). Knowledge is both an outcome of situated action as well as an input to it (Weick & Roberts, 1993). It is a continually evolving entity, resulting from ever changing knowing processes. What is required therefore is an epistemology of practice, as opposed to an epistemology of possession (Cook & Brown, 1999). Moreover, an epistemology of practice that addresses and privileges exploration, the search for new opportunities, as opposed to exploitation—winning and realizing existing opportunities (March, 1991).

An epistemology of practice echoes Spender's (1996, p. 55) exhortation to view "the firm as a system of knowing activity rather than a system of applied abstract knowledge." The emphasis upon knowing as a process intimately committed to and infused with both explicit and tacit learning about current, emerging and potential marketplace change implies at least three critical implications for the developing and leveraging "exploration" oriented market-based capabilities.

First, scanning/projecting, perceiving, and transforming, focused upon capturing insights from persistent and turbulent marketplace change, may leave the firm with little choice but to dramatically redesign and develop core customer-focused operating processes (Srivastava, Shervani & Fahey, 1999). For example, Web-enabled order-delivery processes place customers at the central node as opposed to the final stage(Keen & McDonald, 2000). The need to create networks of diverse entities with required knowledge, skills, and technologies has caused many firms to reconfigure their new product development processes both to capture new insights in emerging and potential marketplace conditions and to speed up the creation and development of solution prototypes (Nohria & Eccles, 1992).

Second, critical new sub-processes become necessary as a means to extend the customer data and information reach of existing core operating processes. Again, the scope and role of electronic technologies are instructive. The growth of customer information on the Internet has created new forms of market research and has enabled real-time market experiments to test product and prices. One result has been faster responses to market changes and detection of new product ideas.

Third, these newly designed operating processes require competence in managing new forms of collaboration both within the organization and with external entities. The need to create flows of new knowledge within and across organizational boundaries about, for example, changing customer situations, emerging technology connections, or even changes in rivals' solutions often involve accessing new sources of external information, developing partnerships with specialist organizations (such as advertising agencies, consulting firms, etc.) or entering into formal or emerging networks (Shapiro & Varian, 1998). This suggests that market management capabilities or competences require integration of combinations of tangible basic resources and intangible processes and relationships. This in turn requires skills and knowledge of specific employees that fit coherently together in a synergistic manner. Because of the nature of these competences, they are precisely the kinds of immobile resources for which a comparative advantage might have a long life span (Hunt, 2000).

12. Market-based assets: Managing the necessary disjuncture

If the firm is to fully "break out" of the mental, cultural and organizational constraints embedded in its current resource portfolio to create breakthrough marketplace opportunities, the market-based capabilities discussed above must generate *over time* new market-based intellectual and relational assets. Recently advocated methodologies to "sense" and anticipate changing environmental conditions (Haeckel, 1999) and the opportunities inherent in disruptive technologies (Bower & Christensen, 1995) attest to the importance of developing new knowledge through scanning and perceiving as a precondition of identifying breakthrough opportunities.

As scanning, perceiving, and transforming take marketing and other personnel into new competitive contexts, and thereby address intellectual and relational domains new to the firm, they come directly into conflict with the firm's dominant logic (Prahalad & Bettis, 1986), underlying knowledge structures (Von Krogh, Ichijo & Nonaka, 2000) and ways of seeing the world. The endurance of the shared causal schemas or cognitive maps (Huff, 1990) at the heart of a firm's dominant logic again attest to the need to intentionally create significant and visible intellectual assets that may be at odds with the organization's long accepted knowledge structure: in particular, its implicit or tacit beliefs, assumptions, and projections about the future direction and state of its familiar markets. Such knowledge pluralism or heterogeneity repudiates the positivistic notion of abstract unified knowledge that dominates not only the RBV literature but also the marketing and strategy literatures as too naive, simplistic and static to handle the exigencies of an unfolding future.

The knowledge flows inherent in knowing processes, or stated differently, in developing and testing knowledge structures, implies the importance of the never-ending development and leveraging of relational assets—relationships with customers, channels, suppliers, and others. Scanning, perceiving and transforming become easier and more insightful when current or potential customers are active participants in the two-way flow of data and information, when they are actively collaborating in discerning their own latent needs (Sheth & Sobel, 2000). Additionally, sharing information and knowledge across the entire value network can benefit all participants.

13. Linking market-based assets and processes to financial performance

Ultimately, the value of resources must be reflected in superior financial performance. Srivastava, Shervani and Fahey (1998) propose a framework illustrating how market based assets (stock measures), nurtured via the customer value created through investments in CRM processes, can be leveraged to drive marketplace performance (flow measures) and, consequently, shareholder value. These relationships are formed on the basis of value delivered to customers via product attributes, experiential benefits, attitudes and reputation and network effects and can be leveraged to drive marketplace performance through higher prices (Farquhar, 1989), greater market shares (Boulding, Lee & Staelin, 1994), more responsive advertising and promotions (Keller, 1993), greater buyer loyalty (Reichheld, 1996) and distribution clout in the marketplace (Kamakura & Russell 1994), deflection competitive initiatives (Srivastava & Shocker 1991), earlier market penetration (Robertson, 1993), and product line extensions (Keller & Aaker 1992). Customer retention is a barrier to entry and in turn reduces risk, and thereby increasing shareholder value (Srivastava et al., 1998).

Analyses linking market-based assets to shareholder value, while rare, are beginning to emerge. Examples include Simon and Sullivan (1993), Srivastava, McInish, Wood and Capraro (1997), Capron and Hulland (1999), and Deephouse (2000) who demonstrate that brand equity contributes positively to firm value. But, further research is needed to link investments in other types of market-based assets such as network relationships to financial performance. It may be argued that the value of dot.com startups can in part be attributed to the size and growth rate of interconnected networks. Take the case of Travelocity. The larger the size and growth rate in installed based of subscribers or users, the greater the value of Travelocity as both a media and transaction channel to the vendor network (airlines, hotels chains, car rental agencies, travel package providers, global financial services, facilitators and the like) and vice versa. An organization such as Travelocity must make strategic investments in developing and sustaining this multiplicity of networks, and grow its capabilities for both transaction and service management (via web-site and call center management, respectively).

14. Sustaining customer value: Linking marketing and RBV

Critics of RBV, in our view, have rightly argued that RBV represents more a theory of advantage sustainability than advantage creation (Priem & Butler, 2001b). Yet, it always must be asked: what advantage is being sustained?

An emphasis upon linking marketing compels a focus upon customer-based advantage, that is, the value customers perceive and experience through interaction with the firm and its offerings that entice them to continue doing business with the firm. Preserving and protecting customer value, an avowed core purpose of marketing, implies the ability to continually augment the value (the attributes, benefits, attitudes, and network effects) and to nurture and renew the market-based assets and capabilities that underlie such value creation. Otherwise, rivals are shooting at a sitting target.

Not surprisingly, RBV emphasizes attributes of resources in assessing sustainability of value (Grant, 1991). Such analysis cannot only augment traditional marketing analysis of competitive conditions but also provide insights that may help explain its findings. A marketing perspective that takes enhancing and sustaining customer value as its focal point leads to an augmented understanding of key RBV resource attributes: rarity, imitability, durability, and substitution.

15. Rarity

RBV asserts that the more rare a value-generating resource, the more likely it will be the source of a *sustained* competitive advantage (Barney, 1991; Peteraf, 1993). RBV analysis focuses upon how many firms possess the resource—that is, whether the number is less than that required for generating perfect competition dynamics (Barney, 2001).

However, when competitive advantage is denominated as customer-based advantage, that is, in terms of (superior) customer value, issues pertaining to rarity or distinctiveness of customer value *also* need to be raised and considered. Because rare resources do not automatically lead to (any form of) competitive advantage and because value is exogenous to RBV, rarity must be addressed both from the perspective of resources *and* of the value generated, that is, from the perspective of the marketplace (customers). Marketing generates and assesses at least three interrelated customer value questions that, by definition, fall outside the scope and focus of RBV. Yet each of these questions contributes directly to assessing the extent, distribution, and sustainability of the alleged customer value, and by implication give rise to critical issues in considering resource rarity: (1) What value is perceived and experienced by which customers? (2) What are the offerings against which customer assess the purported value? and (3) How distinct is the value perceived and experienced by different segments of customers?

Marketing can enlighten and augment the RBV approach to rarity in a number of ways. Here again we emphasize the role and importance of market-based assets and capabilities. First, infrequently, if ever, will customer value be traceable back to a *single* market-based asset or capability that is totally rare, that is, unique to an individual firm. For example, highly distinct customer benefits such as vastly superior product functionality typically stem from a variety of relational assets (e.g., linkages to raw material and technology suppliers), intellectual assets (e.g., knowledge of customers' preferences), and marketing capabilities (e.g., the ability to develop new product configurations that generate new taste possibilities). Thus, because customer value almost always stems from a combination of market-based assets and capabilities, extraordinary care must be exercised in designating the relevant rare "resource."

Second, given any set of market-based assets and capabilities, a variety of simultaneously distinct customer value profiles are possible. As illustrated above, different customer segments differentially perceive and experience value along the dimensions of attributes, benefits, attitudes, and network effects. Thus, a (comparatively) rare set of market-based assets and capabilities can be transformed into multiple forms of customer-based advantage.

Third, a marketing perspective shifts the key resource considerations beyond the classic and relevant RBV questions: what number of firms, currently possess the “valuable” asset or capability, and to what extent (Grant, 1991)? Rather, the critical question becomes one of whether and how the relevant assets and capabilities can be leveraged. For example, if only a few firms possess a particular form of a specific marketing capability, such as the ability to develop new products or solutions incorporating multiple technologies, then the fundamental questions becomes: Which firm(s) can leverage the know-how faster to get to market faster and develop first-mover advantage? Resource rarity thus evolves into a consideration of relative asset and process superiority and whether and how that superiority is leveraged.

Fourth, as with each other resource attribute, resource rarity must be assessed in relation to emerging and potential change in the competitive context (Reed & De Fillippi, 1990). As many firms to their great surprise and chagrin have discovered, a relatively rare and superior asset or operating process that generates extensive customer value today, may not do so in the changed competitive circumstances of tomorrow. And this may occur even where the asset or operating process is largely inimitable. The rapid and discontinuous product or solution evolution characteristic of many competitive spaces, often because of the effects of disruptive technologies, renders the relatively rare and customer value generating assets of dominant firms ineffectual.

16. Imitability

RBV quite rightly places heavy emphasis upon inimitability of the value generating resources as a prerequisite to sustaining whatever competitive advantages they generate (Rumelt, 1995). As Connor (1991, p. 121–122) notes “a firm’s ability to attain and keep profitable market positions depends on its ability to gain and defend advantageous positions in underlying resources important to production and distribution.”

Marketing offers a complementary market-focused approach to inimitability analysis. The marketing concept, by definition, addresses (customer) value imitation. In conceiving, designing and delivering solutions, marketers address imitation along the value modes as *perceived, experienced, and understood by customers*: attributes, benefits, attitudes, and network effects. As noted earlier, the more intangible elements of value (e.g., experiential benefits) are harder to imitate. In addition, tacit elements of process knowledge make it harder for competitors to imitate incumbents. For example, the process of developing new products is itself based on tacit knowledge. The more a company invests time, energy and talent into the new product development process, the greater is its reservoir of tacit knowledge regarding how to use market intelligence and partner relationships in guiding new product development (NPD) and continuous improvement. Thus, just as learning curves attest to reduced productions costs, accumulated experience in the context of NPD processes can lower product development costs and faster innovation cycle times (Eisenhardt & Brown, 1998, Bower & Christensen, 1995). Additionally, knowledge of customers’ changing tastes and buying criteria allows a firm to adapt its manufacturing and engineering processes to customize products with the functionality and features demanded by customers (Pine, 1993).

Marketing can enlighten a firm’s understanding of, as well as enhance, the inimitability of its value-generating assets and capabilities in two related ways: by assessing the capacity of rivals to imitate its customer value, and by augmenting and extending the inimitability of its key value-generating resources. Let us consider each.

16.1. Rivals' imitation capacity

In the extreme case of *complete ignorance,* marketers in a rival entity might reluctantly conclude or assume that they do *not* know how the focal firm creates customer value, because of, for example, causal ambiguity, social complexity, and path dependence. Thus, they must ask: how might their firm (or any other rival) develop and deliver comparable or superior customer value? Rivals thus must begin from an unavoidable marketplace point of departure by asking the following set of questions: (1) What would constitute a competitive or superior customer value proposition? (2) How might it be tested in the marketplace? and, (3) What would it take to develop and deliver the superior customer value?

Because customer value always reflects a combination of attributes, benefits, attitudes and network effects, rivals can directly specify what a similar or potentially more attractive product configuration or solution might look like. For example, software providers can quickly delineate the attributes and benefits a solution would need to possess to imitate or outperform a rival's new product entry. Working backwards, they can then determine what market-based assets (knowledge, relationships) and processes (ability to develop and test lines of code, ability to do testing in situ with customers) would be required. Following this line of explication challenges the focal firm to identify and test how a rival might develop assets and capabilities to imitate its customer value—and thus to directly assess whether and how its key value-generating resources might be imitated.

In the more typical case of *partial ignorance,* a rival possesses some understanding of the firm's market-based assets and capabilities and how they contribute to customer value. Beyond the customer value imitation approach just discussed, the issue of resource imitation becomes more one of replication. The challenge to the rival can be reduced to two questions: (1) How can the value generating resources be replicated? and, (2) Does it make marketplace and economic sense to try to do so?

16.2. Enhancing resource inimitability

Marketing can also contribute to identifying and enhancing the inimitability of value generating resources. As marketers identify and elaborate how market-based assets and capabilities contribute to customer value, they can assess the inimitability of individual assets and capabilities, and perhaps, more importantly, combinations of assets and capabilities. By their very nature, experiential benefits are both intangible and hard to imitate. For example, customers who experience a product failure are found to be even more loyal compared to those who have not experienced any breakdown if their problem was resolved promptly and fairly (Zeithaml, Berry & Parsuraman, 1988).

Moreover, a focus of marketing, in the interests of augmenting customer value, must be to continually enhance and upgrade specific assets and capabilities as well as their interaction. This can be achieved via a variety of means such as cross-selling and bundling. The greater the number of ties between vendors and customers and the more intangible the value elements, the harder it is for competitors to imitate the offering. That is, while a competitor can 'reverse engineer' product features and match other tangible elements (e.g., price) it is harder to replicate the intangibles (brand, length of relationship, trust).

17. Durability

The dynamics of imitation implied above inexorably raises issues concerned with the durability of both customer value and the underlying value-generating resources. Marketing contributes to durability analysis by focusing attention on a critical customer-based advantage question: How might distinct customer value (associated with some underlying marketbased assets and capabilities) dissipate or disappear over time? Marketing alerts us to a number of facets of customer value, each of which offers insights into both generating and sustaining (customer-based) advantage durability. First, a dominant premise underlying the concept and practice of marketing is that any configuration of customer value must be continually augmented. Thus, unless the auto firm continually adds new attributes and benefits, reshapes attitudes, and embellishes network effects, it becomes a “sitting duck” for rivals. In short, the firm’s own inaction, rather than the imitation efforts of rivals, sows the seeds of advantage demise.

Second, a long accepted tenet of marketing proclaims that genuine customer-based advantage emanates from the integration of the modes of customer value (attributes, benefits, etc.) and not from any one mode alone. Customer value durability thus is more likely when the customer perceives and experiences value that is sourced in and reinforced by each of the value modes.

Third, marketers seek not just short-run inimitable customer value but longer-term customer- based advantage. This might suggest advantages based on superior performance on multiple market-facing processes should lead to more enduring value. Advantages of simplicity to enhance execution and implementation of internal processes must be traded against the benefits of complexity and integration of market-facing processes.

Marketing, however, can also contribute to understanding resource durability. We can pose the central question: How can marketing enable understanding of how and why specific market-based assets and capabilities deprecate, decay, or decline? This questions assumes especial importance in view of the surprisingly little attention devoted by RBV theorists to the process of decay of intangible assets and capabilities (and of course the consequent implications for creating and sustaining customer value).

Marketing draws our attention to a number of crucial issues. First, marketers’ commitment to investment in market-based assets and capabilities highlights a critical characteristic of market-based resources: if left unattended, they most assuredly do not continue to “grow.” In short, a fundamental outcome of more tightly linking marketing and RBV may well be considerably greater concern with the processes of resource decay and deprecation.

Second, marketing is in a unique position to monitor and assess how and why marketplace knowledge and relationships might deprecate over time or decline precipitously. For example, through its normal market research activities, marketing is able to detect why the firm’s relationship with major customers is running into difficulties (e.g., because of late deliveries). Marketing can also detect why customer knowledge may be deteriorating (e.g., because of changes in the sales force or decreased emphasis upon “customer intimacy”)

18. Substitutability

RBV has always recognized the vulnerability of advantage stemming, even when it stems from rare, inimitable and durable resources, to strategically equivalent resource combinations— in short, resource substitution (Barney, 1991; Amit & Schoemaker, 1993). Sustaining customer-based advantage in the face of potential customer value substitution begs at least two questions that have received surprisingly little attention in the RBV literature: (1) Where do strategically equivalent resource configurations come from? (2) How might they evolve to generate comparable or superior customer value? Again, marketing can contribute insight into both questions with distinct implications for RBV application.

Marketing directly addresses the critical marketplace unit of analysis issue associated with RBV analysis (Barney, 2001): What is the relevant “industry” or marketplace domain with respect to customer value substitution (and thus for resource substitution)? Marketing explicitly shifts and elaborates the marketplace frame of analysis. Marketers have long recognized that traditional product denominated market or industry boundaries are no longer appropriate for analyzing marketplace opportunities, detecting new forms of competition, or identifying current and potential rivals in delivering solution-equivalent value to customers. Thus, the discussion so far of sustaining customer value and its resource implications alters dramatically when the issue of solution (and thus customer value) substitution is introduced. Shifting the marketplace frame of analysis from relatively look-alike to fundamentally different products or solutions may result in resource rarity no longer conveying advantage, resource imitation barriers proving largely fruitless, and, presumed durability of resources and of customer value suddenly being short-circuited.

A lens aimed at an ill-defined and ever-changing marketplace suggests a distinct and compelling role for marketing in determining the presence or emergence of functional substitute solutions through the identification of new or emerging customer value propositions that would indicate strategically equivalent resource configurations. Because rivalry among functional substitutes typically quickly becomes a zero-sum game, marketers must seek indicators of emerging functional substitute solutions, the firms likely to develop and market these them, the timing and sequence of market entry, and their potential market penetration. Unless they commit to such analysis, marketers may inadvertently expend extensive resources pursuing fast fading opportunity around their current product portfolio while ignoring opportunities emerging elsewhere.

More generally, marketing as the institutionalization of environmental scanning and projection, can make a strong case for moving solution substitution closer to center stage in RBV analysis of sustaining advantage: in large part because the likelihood of solution substitution effects continues to escalate. Disruptive technologies, the widespread use of the internet, radical breakthroughs in new science domains such as genomics giving rise to fundamentally new solutions, and increasing entrepreneurial activity manifest in the record settling levels of new firm creation and new product introductions by established firms, all suggest the increasing importance and prevalence of solution substitution.

Marketing can also aid in determining the likelihood of the presence or emergence of resource combinations in other firms that could result in functional substitute solutions. Marketers can apply RBV concepts and questions to identify current or potential substitute resource configurations that would give rise either to broadly similar customer value (that is largely similar solutions) or to distinctly different forms of customer value (that is, solution substitutes). RBV thinking compels marketers to ask how any rival might develop substitutes for the key assets and operating processes underpinning current or projected solutions. Asking such questions may dramatically affects marketers’ assessment of the sustainability of current or projected customer value.

19. Towards a research agenda

An overarching purpose of the brief discussion above of a number of aspects of the two-way interface between RBV and marketing has been to highlight the importance of the need for far more fine-grained analysis of the resource-competitive advantage connection. The market-based resource framework presented in this paper is intended to stimulate and focus RBV scholars’ attention to the need to examine the evolutionary interplay of market-based assets and capabilities, market-facing business processes, customer and shareholder value. In this section, we especially emphasize a number potential issues and questions that would extend RBV research.

Irrespective of complexity of frameworks linking resources and competitive advantage (Hunt, 2000) or how these key constructs are defined, distinctive economic returns only accrue when an organization identifies and shapes new marketplace opportunities and exploits them faster and more efficiently than rivals. The fundamental research implication of the RBV-marketing linkage is that RBV research must always endeavor to identify precisely *what* customer value in the form of specific attributes, benefits, attitudes and network effects is intended, generated and sustained—a challenge often neglected if not ignored in most RBV research. By the same token, marketing research must not only determine elements of customer value but also how change in market-based assets and capabilities contribute to value creation or deprecation.

A crucial research imperative stemming from the above admonitions is that both RBV and marketing researchers must commit to carefully and systematically identifying and documenting *how* particular market-based assets and capabilities contribute to generating and sustaining specific forms customer value. Doing so requires process-driven and case-rich methodologies (Eisenhardt, 1989). For example, capturing how tacit customer knowledge or network relationships give rise to and sustain distinctive customer benefits and attitudes requires researchers to describe how the content of the tacit knowledge and the context of the network relationships, how they influence marketing decisions that affect the dimensions of customer value such as product design, or modes of service delivery.

Relatedly, RBV research must move beyond identification of current value-generating resources that always entails a heavy a posteriori element (Williamson, 1999) to accept the challenge of a *future* orientated perspective. RBV's potential to contribute significantly to marketing (and more broadly strategy) theory hinges in part on its ability to identify and explain why some firms and not others are more *likely* to win in emerging marketplaces (Hunt, 2000) or are more likely to *create* distinctly new marketplace opportunities. By trying to directly link the heterogeneity in market conditions (resulting in distinct customer value niches) with heterogeneity in firms' resource portfolios, both RBV and marketing theorists have little choice but to specify *how* resources contribute to generating and sustaining value for multiple customer segments.

Because resources do not by themselves transform into customer value, an emphasis upon a resource attributes-breakthrough opportunity linkage compels both RBV and marketing theorists to grapple with the issues and challenges of entrepreneurship–a necessity explicitly recognized by Barney (2001). Crucial questions that might drive both RBV and marketing research are the following: (1) Which market-based assets and market-facing processes might be a source of new breakthrough customer solutions, and (2) How might current market-based assets and capabilities impede rather than facilitate the pursuit of new breakthrough or radical customer solutions? A focus upon these types of questions that directly address the transformation of market-based resources into customer value may help move RBV toward the prediction requirements demanded by Priem and Butler (2001a).

Both RBV and marketing theorists and researchers must address how market-based assets and customer-facing capabilities emerge, evolve and deprecate. They can no longer avoid grappling with questions such as: How does deep and widely dispersed tacit customer knowledge evolve and diffuse in an organization? How does a network with highly cooperative and synergistic nodes emerge over time? Why might particular market-focused capabilities degenerate into rigidities? How do market-facing processes enable the development and deployment of market-based assets that directly lead to enhancement of value for customers along the four customer value dimensions? Which processes are more closely linked to the more intangible and, therefore, sustainable value elements such as experiential benefits or to network effects? Positive results on such research may move RBV research toward explaining why specific customer-based advantage emerges—as demanded by RBV critics (Priem & Butler, 2001a).

Central to each of the research directions suggested here is the need for both RBV and marketing researchers to directly relate marketplace change with change in resource rarity, inimitability, durability and substitutability. In particular, a customer perspective inherent in the identification and analysis of emerging and potential substitute products or the broad marketplace context inherent in the development and emergence of disruptive technologies (Bower & Christensen, 1995) leads researchers to identify external or marketplace sources of emerging and potential change in RBV's traditional resource attributes. Such research may also extend to focus and scope of work falling under the rubric of "dynamics capabilities" (Dicksen, 1996; Teece, Pisano & Shuen, 1997).

Clearly, once researchers begin to trace and project the evolution of market-based assets and capabilities and to monitor and project the co-evolution of resource and market change, they have begun to respond to increasing calls for incorporating the temporal component (Priem & Butler, 2001a) in RBV work. With few exceptions (Miller & Shamsie, 1996), serious longitudinal work that addresses both the changing context of customers (i.e., changing market dynamics) and the evolution and deployment of resources remains yet to done. The interplay and interrelationship between market-based assets, market-facing processes, and marketing capabilities provides a focus for continual empirical refinement of the dynamics of resource evolution *and* market evolution.

Once serious consideration is devoted to the resource-customer value interplay, the role of marketers as decision makers in determining how much wherewithal should be expended in imagining and projecting potential opportunities, identifying which opportunities should be fully developed, choosing which opportunities to pursue, and assessing which resources to deploy and leverage comes to the fore. Engagement in and commitment to these opportunity decision domains may run counter to the "mental model" (Senge, 1990) or "dominant paradigm" (Prahalad & Bettis, 1986) constraints on new opportunity search inherent in the firm's current resource portfolio. Consequently, as decision makers fully committed to exploring resource-opportunity interactions, marketers must engage in "resource learning" (Spender, 1992). Without such learning, marketers' ability to know which market-based resources might be necessary to pursue potential marketplace opportunities, and how and why they might make commitments that lead to resource enhancement or to retard degradation, is severely constrained.

Moreover, the role of marketers as decision makers pursuing entrepreneurial rents implicitly recognizes the need for investment in market-based resources, with the clear implication that market-based assets and capabilities can be leveraged for both marketplace performance (e.g., higher market share), and financial returns (e.g., higher margins, faster cash flows), through their ability to generate and sustain customer value. The recognition of customers, distributors and brands as relational market-based assets, and marketing knowledge, customer-driven culture and market orientation (Kohli & Jaworski, 1990) as market-based intellectual assets raises two critically related research issues: how do marketers and others make *investment decisions* with regard to these assets, and whether these assets should be treated as operating expense or capital investments (Srivastava, Shervani & Fahey). Ultimately, investments in market-based assets must be justified in terms of long-term economic gains or shareholder value. This priority is underscored by the fact that ROI on marketing investments and ROI on advertising investments are the top research priorities for the Marketing Science Institute and the American Association of Advertising Agencies, respectively.

Indeed, it seems self-evident that both RBV and marketing scholars as they strive to describe and explain how and why market-based resources contribute to generating and sustaining customer value need to embrace and employ theories from outside the historic confines of their respective domains and research traditions. For example, theoretical frameworks derived from sociology, psychology, and philosophy that aim to describe and explain how organizations generate, diffuse, and leverage knowledge (Deshpande, 1999) may provide useful avenues to exploring how and why knowledge as it is applied to developing and delivering distinctive customer value resists easy imitation, replication, and substitution. Theories of network initiation, emergence and development (Nohria & Eccles, 1992) may be essential to capturing how firms employ networks to generate and replenish market-based knowledge and relationships that otherwise might be impossible. Indeed, network theory seems critical to enabling both RBV and marketing to shift the central unit of analysis form a single firm to an intersecting set of quasi-independent entities.

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References

Amit, R., & Schoemaker, P. J. H. (1993). Strategic assets and organizational rent. *Strategic Management Journal, 14,* 33–46.

Arthur, W. B. (1994). *Increasing returns and path dependency in the economy.* Ann Arbor, MI: The University of Michigan Press.

Barney, J. B., (1991). Firm resources and sustained competitive advantage. *Journal of Management, 15,* 175–190.

Barney, J. B. (1997). *Gaining and sustaining competitive advantage.* Reading, MA: Addison-Wesley.

Barney, J. B. (2001). Is the resource-based "view" a useful perspective for strategic management research? Yes. *Academy of Management Review, 26* (1), 41–56.

Bharadwaj, S. G., Varadarajan, P. R., & Fahy, J. (1993). Sustainable competitive advantage in service industries: A conceptual model and research propositions. *Journal of Marketing, 57*, 83–99.

Boulding, W., Eunkyu, L., & Staelin. R. (1994). Mastering the mix: Do advertising, promotion, and sales force activities lead to differentiation? *Journal of Marketing Research, 31*, 159–172.

Bower, J. L., and Christensen, C. M. (1995). Disruptive technologies: Catching the wave. *Harvard Business Review,* Jan-Feb*,* 43–53.

Capron, L., & Hulland, J. (1999). Redeployment of brands, sales forces, and general marketing management expertise following horizontal acquisitions: A resource-based view. *Journal of Marketing, 63*, 2 (April).

Churchman, C. W. (1972). *The design of inquiring systems: Basic concepts of systems and organization.* New York: Basic Books.

Cohen, D. (1998). Toward a knowledge context: Report on the first annual U.C. Berkeley forum on knowledge and the firm. *California Management Review, 40* (3), 22–39.

Collis, D. J. (1994). Research note: How valuable are organization capabilities? *Strategic Management Journal, 15,* 143–152.

Collis, D. J., & Montgomery, C. A. (1995). Competing on resources: Strategy in the 1990s. *Harvard Business School,* July-August*,* 118–128.

Connor, K. R., (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management, 15,* 121–153.

Cook, S. D. N., & Brown, J. S. (1999). Bridging epistemologies: The generative dance between organizational knowledge and organizational knowing. *Organization Science, 19* (4), 381–400.

Davenport, T. H. (1993). *Process innovation: Reengineering work through information technology.* Boston, MA: Harvard Business School Press.

Day, G. S. (1990). *Market driven strategy: Processes for creating value.* New York: The Free Press.

Day, G. S. (1994). The capabilities of market-driven organizations. *Journal of Marketing, 58* (October), 37–52.

Day, G. S. (1997). Aligning the organization to the market. In D. R. Lehmann & K. E. Jocz (Eds.), *Reflections on the futures of marketing* (Chapt. 4, pp. 67–98). Cambridge, MA: Marketing Science Institute.

Day, G. S. (2001). *Capabilities for forging customer relationships*. Unpublished manuscript, The Wharton School, University of Pennsylvania.

Deephouse, D. L. (2000). Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *Journal of Management, 26* (6), 1091–1112.

Deligonul, Z. S., & Cavusgil, S. T. (1997). Does the comparative advantage theory of competition really replace the neoclassical theory of perfect competition. *Journal of Marketing,* 61 (October), 65–73.

Deshpande, R. (1999). Forseeing marketing. *Journal of Marketing, 63* (Special Issue), 164–167.

Dicksen, P. R. (1996). The static and dynamic mechanics of competitive theory. *Journal of Marketing, 60* (October), 102–106.

Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science, 35,* 1504–1511.

Drucker, P. (1983). *Post-capitalist society.* New York: Harper Business.

Drucker, P. (1986). *Innovation and entrepreneurship: Practice and principles.* New York: Harper & Row.

Eisenhardt, K. M. (1989). Building a theory from case research. *Academy of Management Review, 14* (4), 532–550.

Eisenhardt, K. M., & S. L. Brown (1998). Time pacing: Competing in markets that won't stand still. *Harvard Business Review,* (March-April), 60–69

Fahey, L. (1999). *Competitors: Outwitting, outmaneuvering and outperforming*. New York: John Wiley & Sons.

Fahey, L., & Randall, R. M. (1998). *Learning from the future: Competitive foresight scenarios.* New York: The Free Press.

Farquhar, P. H. (1989). Managing brand equity. *Marketing Research, 1* (September), 24–33.

Frels, J. K., Shervani, T. A., & Srivastava, R. K. (2001). *The integrated networks model: Explaining resource allocations in networked business markets*. Working Paper, University of Texas at Austin.

Glazer, R. (1991). Marketing in an information-intensive environment: Strategic implications of knowledge as an asset. *Journal of Marketing, 55* (Oct.), 1–19.

Godfrey, P. C., & Gregersen, H. B. (1997). Where do resources come from? A model of resource generation. *Academy of Management Proceedings,* 21–25.

Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy. *California Management Review, 22,* 114–135.

Haeckel, S. H. (1999). The premise and promise of sense and respond *Knowledge Directions,* Spring, 60–71.

Hamel, G., & Prahalad, C. K. (1994). *Competing for the future: Breakthrough strategies for seizing control of your industry and creating the markets of tomorrow.* Boston, MA: The Harvard Business School Press.

Hauser, J. R., & Clausing D., (1988). The House of Quality. *Harvard Business Review,* May-June, 63–73.

Huff, A. S. (1990). *Mapping strategic thought.* Chichester: John Wiley & Sons.

Hunt, S. D. (1997). Resource-advantage theory: An evolutionary theory of competitive firm behavior. *Journal of Economic Issues, 31,* 59–77.

Hunt, S. D. (2000). *A general theory of competition.* Thousand Oaks, CA: Sage Publications.

Hunt, S. D., & Morgan. R.M. (1995). The comparative advantage theory of competition. *Journal of Marketing, 59* (April), 1–15.

Kamakura, W. A., & Russell, G. J. (1994). Understanding brand competition using micro and macro scanner data. *Journal of Marketing Research, 31* (May), 289–303.

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing, 57* (January), 1–22.

Keller, K. L., & Aaker, D. A. (1992). The effects of sequential introductions of brand extensions. *Journal of Marketing Research, 29* (February), 35–50.

Kohli, A. K., & Jaworski, B. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing, 54* (April), 1–18.

Kotler, P. (2000). *Marketing management: Analysis, planning, implementation and control.* Upper Saddle River, NJ: Prentice Hall.

Lehmann, D. R. (1997). Some thoughts on the futures of marketing. In D. R. Lehmann & K. E. Jocz (Eds.), *Reflections on the futures of marketing* (Chapt. 6, pp. 121–135). Cambridge, MA: Marketing Science Institute.

Mahoney, J. T., & Pandian, J. R. (1992). The resource-based view within the conversation of strategic management. *Strategic Management Journal, 13,* 363–380.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science, 2* (February), 71–87.

McAlister, L., & Cooper, W. C. (1998). The importance of basic, applied research. *Journal of Market-Focused Management, 2*, 303–308

Miller, D., & Shamsie, J. (1996). The resource based view of the firm in two environments: The Hollywood film studios from 1936 to 1965. *Academy of Management Journal, 39,* 519–543.

Nelson, P. (1970). Information and consumer behavior. *Journal of Political Economy, 78,* 311–329.

Nohria, N., & Eccles, H. G. (1992). *Networks and organizations.* Boston: Harvard Business School Press.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge creating company: How Japanese companies create the dynamics of innovation*. New York: Oxford University Press.

Penrose, E. (1959). *The theory of the growth of the firm.* New York: Wiley.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal, 14,* 179–191.

Pine, II, J. B. (1993). *Mass customization: The new frontier in business competition.* Boston, MA: Harvard Business School press.

Priem, R. L., & Butler, J. E. (2001a). Is the resource-based "view" a useful perspective for strategic management research? *Academy of Management Review, 26* (1), 22–40.

Priem, R. L., & Butler, J. E. (2001b). Tautology in the resource-based view and the implications of externally determined resource value: Further comments. *Academy of Management Review, 26* (1): 57–66.

Quinn, J. B. (1992). *The intelligent enterprise,* New York: The Free Press.

Reed, R., & DeFillippi, R. J. (1990). Causal ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review, 15,* 88–102.

Reichheld, F. F. (1996). *The loyalty effect.* Boston, MA: Harvard Business School Press.

Robertson, T. S. (1993). How to reduce market penetration cycle times. *Sloan Management Review, 35* (Fall), 87–96.

Rumelt, R. P. (1987). Theory, strategy and entrepreneurship. In D. J. Teece (Ed.), *The competitive challenge* (pp. 137–158). Cambridge, MA: Ballinger Publishing.

Rumelt, R. P. (1995). Inertia and transformation. In C. A. Montgomery (Ed.), *Resources in an evolutionary perspective: Towards a synthesis of evolutionary and resource-based approaches to strategy* (pp. 101–132). Norwell, MA: Kluwer Academic Publishers.

Schumpeter, J. A. (1934). *The theory of economic development.* Cambridge, MA: Harvard University Press.

Schwartz, P. (1991). *The art of the long view: Planning for the future in an uncertain world.* New York: DoubleDay Currency.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* New York: Doubleday Currency.

Shapiro, C., & Varian, H. R. (1998). *Information rules: A strategic guide to the network economy,* Boston: Harvard Business School Press.

Sheth, J. N., & Parvatiyar, A. (1995). The evolution of relationship marketing. *International Business Review, 4,* 397–418.

Sheth, J. N., & Sobel, A. (2000). *Clients for life.* New York: Simon & Schuster.

Simon, C. J., & Sullivan, M. (1993). The measurement and determinants of brand equity: A financial approach. *Marketing Science, 12* (Winter), 28–52.

Spender, J. -C. (1992). Strategy theorizing: Expanding the agenda. In P. Shrivastava, A. S. Huff, & J. Dutton (Eds.), *Advances in strategic management* (pp. 8–32). Greenwich, CT: JAI Press.

Spender, J. -C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal, 17* (Winter Special Issue), 45–62.

Srivastava, R. K., & Shocker, A. D. (1991). *Brand equity: A perspective on its meaning and measurement, Report # 91–124.* Cambridge, MA: Marketing Science Institute.

Srivastava, R., Shervani, T., & Fahey, L. (1997). Driving shareholder value: The role of marketing in reducing vulnerability and volatility of cash flows. *Journal of Market Focused Management, 2,* 49–64.

Srivastava, R., Shervani, T., & Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. *Journal of Marketing, 62* (1), 2–18.

Srivastava, R., Shervani, T., & Fahey, L. (1999). Marketing, business processes, and shareholder value: An organizationally embedded view of marketing activities and the discipline of marketing. *Journal of Marketing, 63* (Special Issue),: 168–179.

Srivastava, R., McInish, T. H., Wood, R., & Capraro, A. J. (1997). The value of corporate reputation: Evidence from the equity markets. *Corporate Reputation Review, 1,* 62–68.

Teece. D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18,* 509–533.

Von Hippel, E., Thromke, S., & Sonnack, M. (1999). *Creating breakthroughs at 3M.* Harvard Business Review, (September-October), *78* (5), 3–12.

Von Krogh, G., Ichijo, K., & Nonaka, I. (2000). *Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation.* New York: Oxford University Press.

Wayland, R. E., & Cole, P. M. (1997). *Customer connections: New strategies for growth.* Boston, MA: Harvard Business School Press.

Weick, K. E., & Roberts, K. (1993). Collective mind in organizations: Heedful interrelating on flight deck. *Administrative Science Quarterly, 38* (September), 357–381.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5,* 171–180.

Williamson, O. E. (1999). Strategy research: Governance and competence perspectives. *Strategic Management Journal, 20,* 1087–1108.

Zeithaml, V. A., Berry, L. L., & Parsuraman, A. (1988). Communication and control processes in the delivery of service quality. *Journal of Marketing, 52* (2), 35–48.