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Value creation architecture and engineering

A business model encompassing the firm-customer dyad

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Abstract
Purpose – The purpose of this paper is to develop a conceptual framework for a value creation business (VCB) model. It seeks to unlock two essential research questions: "what constitutes value", and "how do firms create value for customers?" in the context of the firm-customer dyad.

Design/methodology/approach – The paper is conceptual and is premised on a review of the extant literature on value and value creation. It addresses the limitations pertaining to the dominance of the value-in-use perspective. It also addresses the call for a paradigm shift toward customer-centric marketing and operant resource-based dominant logic. Building on the review, the paper identifies essential components of value in value creation processes.

Findings – The VCB model is developed by integrating three perspectives of value including creating value for customers, value-in-offering, and value-in-use, capturing a contingency approach to theory building. The model enlightens how value creation architecture (the strategic space of value creation processes) and value creation engineering (the capability space of value creation processes) engage in creating value outcomes for both the firm and the customer.

Practical implications – The VCB model constitutes guidelines useful for practitioners in crafting value-based business processes and provides a base for academic researchers to further research on value and value creation.

Originality/value – The paper advances the literature on value by conceptualising value as consisting of the value offering and customer equity (the firm viewpoint), and customer value and brand equity (the customer viewpoint). The paper also highlights that value creation processes are initiated with the crafting of value creation architecture, followed by developing value creation engineering, and completed with value outcomes.

Keywords Value analysis, Customers, Customer relations, Brand equity

Paper type Conceptual paper

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Introduction
Marketing scholars have identified that the creation of superior value is a research priority and the development of value for the customer is a source of competitive advantage for the firm (Bharadwaj *et al.*, 1993; Ngo and O'Cass, 2009; Payne and Frow, 2005; Woodruff, 1997). Notably the concepts of value and value creation are of central importance in the current American Marketing Association (AMA) definition of marketing, which is defined as the activity, set of institutions, and processes for creating,

communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large (AMA, 2007). This definition and marketplace challenges raise important issues for marketing in that there are fundamental shifts at play and a new world of marketing is dawning. Being market-driven is outdated and the future belongs to firms that are value-driven (Webster, 1994). Value and value creation are the central elements of business strategy and the success of firms depends on the extent to which they create for customers what is of value to them (Mittal and Sheth, 2001; Payne and Holt, 2001). Such notions move marketing away from a singular focus on creating satisfied customers to creating value for customers.

Taking on board the marketplace challenges and new paradigms requires new approaches and for example, the continued success of companies such as Google, Sony, Intel, 3M, FedEx, Merck, Caterpillar, UPS, SYSCO, Monsanto, and Samsung appears to be based on their ability to create superior value offerings for the customer (Gourville, 2006; Mittal and Sheth, 2001; Kumar *et al.*, 2000; Slater, 1996; Rayport and Sviokla, 1995; Slater and Narver, 1994). Based on the internet search market, the success of Google, an internet search engine giant is premised upon providing customers with fast, accurate and easy-to-use services that are of value to customers. In the home entertainment market, Sony's PlayStation 2, the most popular gaming platform in the world, offers customers the most compelling interactive content and the capability to be used as a network terminal in the coming broadband era, enabling Sony to dominate the marketplace). Creating superior value offerings for customers also has the power to transform industries. For example, computer chip producers like LSI Logic Corporation and VLSI Technology provide customers with do-it-yourself tools that enable customer-chip-based manufacturers (e.g. toy manufacturers that need circuitry in their products) to design their own specialized chips, thus creating the custom computer chip market from virtually nothing to more than AU$20 billion (Thomke and von Hippel, 2002).

Notwithstanding the substantial attention given to value and value creation, fundamental questions about what constitutes value, and how firms create value for customers still remain for both marketing scholars and practitioners. There are three main limitations in the extant literature with regard to answering these two questions. The first limitation refers to the dominance of the value-in-use perspective in relation to value and value creation theory and research (Eggert and Ulaga, 2002; Anderson and Narus, 1998; Christopher, 1996; Zeithaml, 1988), which limits our understanding of the nature of the value concept. The main theme underlying the value-in-use perspective is that value is defined in the marketplace by the customer (Webster, 1994). Specifically, customers perceive value based on their subjective judgment of the trade-off between "what they get" and "what they give", thus the term value has been referred to as customer-perceived value within the value-in-use perspective (Eggert and Ulaga, 2002; Christopher, 1996; Zeithaml, 1988).

However, understanding value solely from the customer perspective has the potential to lead to a narrow application of the concept in the practice of managing firms toward value creation (Woodruff, 1997). The concept of value *per se* should be understood within a broader practical and theoretical domain by taking into account the multiple parties in the value creation process. In this sense a manager is also concerned about what their firm builds into its products and/or services to create superior value offerings for customers. This we refer to here as the value-in-offering perspective. Within the value-in-offering perspective (Ngo and O'Cass, 2009) knowing what value is to be created for the customer helps explain what value the firm will be rewarded for creating (Payne and Frow, 2005). A closer look at both the value-in-offering and value-in-use perspectives indicates that the firm and the customer are closely interrelated in value creation processes, as the value offering created by the firm for the customer is defined in the marketplace by the customer. Thus, the concept of value should be understood more broadly, for example encompassing the firm-customer dyad. Understanding value with respect to both firm (value-in-offering) and customer (value-in-use) perspectives is of paramount importance in helping the firm to get a richer (and fuller) picture of what customers say they value and what managers want to create for customers. Surprisingly, the extant literature has yet to address the question: what constitutes value within the firm-customer dyad?

Second, the extant literature has yet to address mechanisms through which value is created for customers and the contribution of value creation to firm success. Although market orientation-based research holds the view that market orientation contributes to firm performance via the creation of value for customers (Slater and Narver, 1994), this value creation mechanism has been largely unexplored (Matear *et al.*, 2002). Indeed, in the market orientation – based stream of research, value or value offering, which has conventionally been labelled as customer value (Slater and Narver, 1994; Narver and Slater, 1990), has not been defined and measured, and the role of value in the link between market orientation and firm performance has yet to be investigated.

Finally, while focusing on market orientation, the extant literature has yet to address other firm characteristics that may enable firms to create superior value offerings for customers and thus aid firm success. In fact, a paradigm shift from market focus to customer focus (Sheth and Sisodia, 2003) alludes to a notion that market orientation is no longer a dominant behavioural orientation that firms should adopt in pursuing competitive advantage, particularly in the context of value creation. Other behavioural orientations including innovation orientation (Hurley and Hult, 1998), marketing orientation (Houston, 1986; Peterson, 1989), and production orientation (Pelham, 2000) exist, and can be implemented to also contribute to firm success.

Importantly, the creation of value for customers depends on firm capabilities, and we contend here that a more appropriate focus is on the possession, application, and utilization of specialized knowledge and skills for and to the benefit of the receiver (Ngo and O'Cass, 2009). Firms obtain competitive advantage when they possess capabilities that can be converted into value for customers (Slater, 1997). Thus, the significance of focusing on capability space in the context of value creation for customers is meaningful on both theoretical and managerial grounds. Both the views of Sheth and Sisodia (2003) as well as Vargo and Lusch (2004) highlight the potential significance of firm characteristics and a greater focus on the creation of value for customers. Such an extension sees value as being delivered with more than just the tangible product, and it is the extended product that delivers value as determined by the customer.

However, despite an increasing awareness of the significance of value creation (Slater, 1997; Woodruff, 1997), there remains a lack of understanding on how the value creation process should function (or be operated) with respect to potential firm characteristics, especially in the context of operant resources-based logic. Importantly, given the limitations pertaining to the dominance of the value-in-use perspective in the extant literature, the call for a paradigm shift that increasingly focuses on customer-centric marketing, value and value creation, and operant resource-based logic, developing a business model of value creation is worthy of pursuit.

The proposed model

The central logic of the value creation business (VCB) model development pursued here is that the value creation process should be understood from three perspectives of value, capturing a contingency approach to theory building. These perspectives include:

(1) creating value for customers;

(2) value-in-offering; and

(3) value-in-use.

Previous discussion on potential components of the value creation process provides an initial foundation for crafting the VCB model. Accordingly, we incorporate strategic postures, business orientations, firm capabilities, and value outcomes into a unifying theoretical model that captures the three perspectives of value to explain the mechanisms of value creation as shown in Figure 1. The premise of the VCB model is that creating value starts with developing (i.e. crafting) a firm's architectural infrastructure (i.e. its value creation architecture). Through this architecture the firm develops and nurtures value-creation capabilities (i.e. its value creation engineering), which is the primary engine that creates superior value outcomes for both the firm and the customer (and delivers a value box). The term value creation architecture is thought of as a strategic space on which the firm adopts its strategic positioning (i.e. its strategic postures) and its business culture and manifest behaviours (its business orientations) which allows for the establishment of an architectural infrastructure for the value creation process. Value creation architecture provides a logic for building and shaping capability-based business processes (value-creation capabilities), which are referred to as value creation engineering. Importantly, value creation architecture supports and drives the value creation engineering, which is the engine that drives value creation as a key outcome. Consequently, value outcomes (e.g. value offering, customer equity, customer value, brand equity), are referred to here as the value box, which is created as the consequences of value creation engineering.

We develop in the subsequent sections the VCB model via three stages. The first stage in the development is the articulation of value creation architecture encompassing strategic postures and business orientations, capturing a strategic space of value creation processes. The second stage is the development and articulation of value creation engineering that is premised on firm capabilities, capturing a capability space of value creation processes. The final stage is the development and articulation of the value

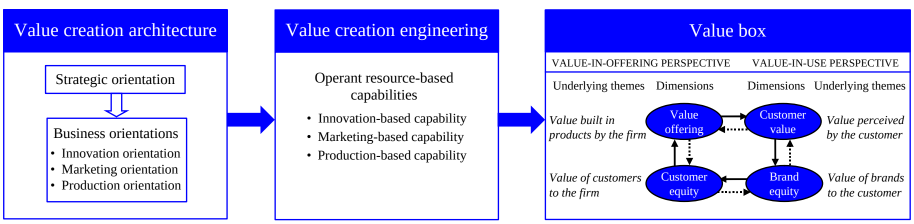

Figure 1. Theoretical development of VCB model

box that encompasses value offering, customer equity, customer value, and brand equity, capturing a value outcome space of value creation processes.

Developing value creation architecture: the strategic space of value creation processes

The first stage to develop the VCB model is concerned with identifying "the right things to do". These "right things to do" refer to the strategic orientation of the firm in response to environmental dynamics and a business orientation upon which creating value for customers is a priority. Strategic orientation refers to strategic postures adopted by a firm, while business orientation refers to the business's culture that influences business's activities. Strategic orientation and business orientations are different but closely intertwined as key dimensions of the value creation architecture and are designed to guide firm processes and activities in efforts to create superior value for the customer. Business practices have the potential to inspire multiple strategic and business orientations that provide firms with multiple platforms for value creation. Supporting this viewpoint, Slater (1997, p. 164) claims that "value-focused (e.g. market-focused) businesses have a wide variety of economic objectives and employ a wide variety of strategies in the pursuit of those objectives". For example, 3M views itself as a leading-global solution provider serving customers with new-to-the-world product categories in a broad product-market domain (e.g. healthcare, industrial, displays and graphics, consumer and office, safety, security and protection services, electronics and communications, and transportation). This proactive strategic posture encourages a culture, which holds the belief that matching new, marketable ideas with customers before anyone is 3M's business philosophy. Thus, adopting a business orientation that is aligned with a strategic posture is an important avenue to creating superior value for the customer.

The alignment between strategic postures and business orientations forms the value creation architecture of value creation processes. The value creation architecture is a strategic space that consists of strategic postures and business orientations, which refers to "the right things to do" in creating value for the customer. For every firm, crafting their value creation architecture is of paramount importance. For example, firms positioning themselves in the marketplace as prospectors should adopt an innovation orientation that enables them to become "first-to-the-market". At 3M, being a prospector and promoting an innovation-oriented culture creates a strategic architecture that directs its value-creation process. Indeed, 3M pioneers the use of the latest technologies in its products, and innovation remains the driving force of 3M culture and growth (Lilien *et al.*, 2001). Along similar lines, firms that possess an analyser strategic posture require regular market intelligence scrutiny, thus focusing on being market-oriented (Miles and Snow, 2003). An alignment between analyser strategic posture and market orientation positively enhances firm performance (Shoham *et al.*, 2002). Finally, firms positioning as defenders compete primarily on the basis of cost efficiencies, thus encouraging a defender-production orientation alignment (Olson *et al.*, 2005; Miles and Snow, 1986, 1978). As such, alignments between strategic postures and business orientations are essential to value creation processes.

Strategic orientation. Conventionally, the theory of strategy-environment alignment indicates that a strategic orientation refers to strategic posture(s) possessed by the firm in response to changes in aspects of its environment for a favourable alignment (O'Cass and Ngo, 2007). Particularly, the strategic postures suggested by Miles and Snow (1978, 2003) are considered as unique because they are categorized in a fashion that views the firm as a complete and integrated system in dynamic interaction with its environment (McDaniel and Kolari, 1987). The essence of Miles and Snow's approach is that strategic orientations are categorized into prospector, analyser, defender, and reactor according to the scope of product-market domain and responsive postures towards its environment. However, unlike the three other strategic postures (e.g. prospector, analyser, and defender), the reactor is not identified as a viable strategic posture for a firm, representing the absence of any well-developed plan for competing within an industry (Ruekert and Walker, 1987). The reactor is characterized as having no clear or consistent strategic posture, vacillating in its approach to competitive forces and, thus destined to fail (Hambrick, 2003; McDaniel and Kolari, 1987). While prospector, analyser, and defender are seen as ideal postures, reactor refers to a remainder posture (Miles and Snow, 2003, 1978), which is similar to stuck-in-the-middle (Porter, 1980). Importantly, reactor typology has been excluded in prior research in the strategic management and marketing literature (Olson *et al.*, 2005; Slater and Olson, 2001). Having considered the characteristics of the reactor, only three viable strategy postures are used here to develop strategic orientation components of the VCB model.

Business orientation. An examination of the literature reveals that there appear three dominant business orientations that firms adopt in pursuing competitive advantage, particularly in the context of creating value for the customer. They are innovation orientation, marketing orientation, and production orientation pertaining to three key functional activities within the firm. The contribution of these business orientations towards the creation of value has not been fully examined in the literature although market orientation has been theoretically discussed as a source of creating values for customers. Considered as the ways of doing business, these business orientations are perceived as a means to drive the mechanisms by which firms create and sustain value for customers.

A business orientation should contain both cultural and behavioural dimensions as a culture necessarily manifests itself in behaviours (Narver and Slater, 1998). That is, a combination of cultural and behavioural facets is necessary to conceptualize business orientations (Gray and Hooley, 2002). Specifically, the cultural facet of a business orientation refers to the beliefs held by the firm that directs behaviours in the behavioural facet of a business orientation. As such, a business orientation is a business philosophy described as reflecting both culture-driven (e.g. market-oriented belief) and behaviour-producing characteristics (e.g. intelligence generation, intelligence dissemination, and responsiveness to environmental changes). For example, Du Pont and Marriott, driven by their market-oriented culture, have developed customer – and competitor-focused programs to learn their customers' needs and potential competitors' strengths and weaknesses, and undertake appropriate responses (Slater and Narver, 1994).

Innovation orientation refers to innovativeness, the notion of openness to new ideas as an aspect of a firm's culture (Hurley and Hult, 1998). Innovativeness reflects firm's propensity to change through adopting new technologies, resources, skills, and administrative systems, thus exhibiting an innovation-oriented belief, which encourages and fosters the adoption of new ideas throughout the firm. The cultural aspect of innovation orientation is also reflected as being innovative, which refers to an organization's willingness to change (Hurt *et al.*, 1977). As such, we argue that innovation orientation is a combination of innovation-oriented beliefs and innovative behaviours, which together refer to the innovative-cultural aspect of the firm (Hurley and Hult, 1998) and to a set of innovative activities (Amabile *et al.*, 1996; Thompson, 1965). Thus, we define innovation orientation as a corporate culture which holds the belief that innovativeness (generating new ideas) pertaining to technical innovations (product and/or services, and production process technology) and non-technical innovations (managerial, market, and marketing) are of paramount importance.

Similar to the concept of innovation orientation, to be oriented towards the function or practice of marketing that enables firms to achieve their superior performance is to be marketing-oriented (Panayides, 2004). Given the contemporary definition of marketing by AMA (2007) and taking the view of marketing as a key business activity for building brand success, marketing orientation is defined here as an organizational culture which holds the belief that behaviours aimed at planning and executing the marketing mix, satisfying customers and building relationships to the benefits of all stakeholders are of paramount importance.

The competitive culture-based theory (Noble *et al.*, 2002) postulates that production orientation is premised on the belief that pursuing production efficiency is a way of doing business. Indeed, a review of the extant literature indicates the single dominance of production efficiency in the conceptualization of production orientation in which production efficiency is achieved via mass production (Pearson, 1993), mass distribution (Noble *et al.*, 2002), low cost (Miles and Munilla, 1993), and cost minimization (Peterson, 1989).

Drawing on the cultural and behavioural aspects of a business orientation, we theorize that while production-oriented behaviours (the behavioural aspect of production orientation) revolve around production efficiency via mass production, mass distribution, low cost, and cost minimization, production-oriented culture (the cultural aspect of production orientation) creates and nurtures a favourable setting to facilitate such behaviours. As such, production-oriented behaviours occur as a reflection of the production-oriented culture, that manifests itself in specific activities. Thus, production orientation is operationalized as a combination of production-oriented beliefs that promote production-oriented behaviours. We define production orientation as a corporate culture which holds the belief that production-focused efficiencies pertaining to product (and/or service) production (e.g. mass production, mass distribution, low cost, and cost minimization) are of paramount importance.

Developing value creation engineering: a capability space of value creation processes. Following on from the development of "the right things to do" components of the theoretical development, the second step in developing the VCB model concerns "doing the things right". The "right things to do" is in the value creation architecture component as the guiding principles that influence the firm's processes. As such, utilizing and leveraging firm resources to implement a value-creating strategy specified in value creating architecture are the principal concerns at this step. The view adopted here is consistent with the resource-based view, which has for some time realized the significance of leveraging firm resources to implement a value-creating strategy that its competitors cannot implement as effectively (Varadarajan and Jayachandran, 1999; Barney, 1991). Value creation engineering is a capability space that consists of capabilities necessary for value creation processes. Specifically, value creation engineering is defined as the integrative processes designed to possess, apply, and utilize the collective knowledge, skills, and resources of the firm to perform functional activities (e.g. innovation, marketing, and production). Driven by value creation architecture, value creation engineering (capability space) helps convert knowledge, skills, and resources into superior value for the customer. Such value creation engineering is embedded within the operant resource-based capabilities notion of knowledge, skills and resources.

Operant resource-based capabilities. Firms are not considered as identical black boxes in a given market structure, but as dynamic collections of specific capabilities, which can be converted to superior value for the customer. The notion of capability has been primarily premised upon the resource-based view, which takes an "inside-out" perspective to offer an explanation for firm success (Day, 1994). Businesses must possess and utilize specific processes, which are necessary to transform resources into valuable outputs such as superior value for customers and firm performance (Vorhies and Morgan, 2005; Day, 1994). Capabilities, manifested in such business processes, are something beyond resources, which are valuable inputs for businesses to develop and maintain competitive advantage (Srivastava *et al.*, 2001). In line with this reasoning, Vargo and Lusch (2004) state that operant resources (e.g. knowledge and skills) and their use are the fundamental source of competitive advantage. While resources represent assets possessed by the firm, capabilities refer to the combination, development, and leveraging of these resources to achieve business objectives. Capabilities are a firm's competence in combining, developing, and sustaining resources (Grant, 1991) and they are of paramount importance for achieving competitive advantages (Weerawardena and O'Cass, 2004; Prahalad and Hamel, 1990). Operant resources-based capabilities are those aimed at creating superior value for the customer, thus are considered as value-creating capabilities.

Having considered the resource-based view on capabilities, and working toward consistency with the service-centred dominant logic, it is argued that an operant resource-based capability is one that has three facets: possession of, application of, and full utilisation of resources. Possession and application dimensions refer to the availability and application of sufficient resources, which enable the firm to engage in value-creating activities (e.g. innovation, marketing, production). The full utilisation dimension refers to the extent that the resources are maximized toward value-creating activities. As such, an operant resource-based capability is defined as an integrative process of possessing, applying, and utilising collective knowledge, skills, and resources to perform functional activities.

There are still questions as to which operant resource-based capabilities are contained in the value creation process and create value in the firm's offering for the customer. For example, researchers have proposed innovation as the "core value-creating capability" that enables a firm to consistently create superior value for its customer (Slater and Narver, 1994). However, in the quest for creating superior value for the customer, business practices have the potential to inspire multiple operant resource-based capabilities that provide firms with multiple platforms for creating value for the customer. In this fashion, capabilities that directly contribute toward value offering are consistent or co-aligned with respective business orientations adopted by the firm, thus they are innovation-based capability, marketing-based capability, and production-based capability.

Creating value box: a value outcome space of value creation processes

The final stage of the value creation process refers to a box of value outcomes derived from "doing things right" that is driven by "the right things to do". As the source of value creation, value creation engineering enables the firm to create a value box. In the context of creating value for the customer, the value box instead of firm performance is considered the expected consequence of the value creation process. Value outcomes are important indicators of firm success and are analogous to firm performance. A closer look at the extant literature suggests that competing on superior value for the customer becomes an essential precondition for securing a competitive position in the marketplace (Huber *et al.*, 2001; Day, 1990). Regardless of which routes to compete are chosen in the marketplace, creating superior value for the customer is the ultimate objective of firms (Day, 1990). As such, a value box is considered as a unique outcome to establish the effectiveness of the value creation process.

Understanding what constitutes value box is of paramount importance. Any effort to unlock the value box must come to grips with four central but interrelated questions:

(1) What value is to be built into products by the firm?

(2) What value is perceived by the customer?

(3) What is the value of brands as perceived by the customer?

(4) What is the value of the customer to the firm?

These four questions are graphically answered in Figure 2. Specifically, answering these questions with respect to both firm and customer perspectives provides insights into the core constituent elements in the value box (Figure 2).

Value offering – value built in products and/or services by the firm. The importance of understanding value from a value-in-offering perspective brings forth an essential challenge at the heart of all firms' existences: what value is to be built into products by the firm. Surprisingly, the extant literature has yet to fully explore this issue. Very few studies have been conducted on conceptualizing and studying this construct, thus there appears to be a lack of a clear conceptualization of value offering (Matear *et al.*, 2002). Mirrored against the value-in-use perspective, which rests on get-versus-pay view,

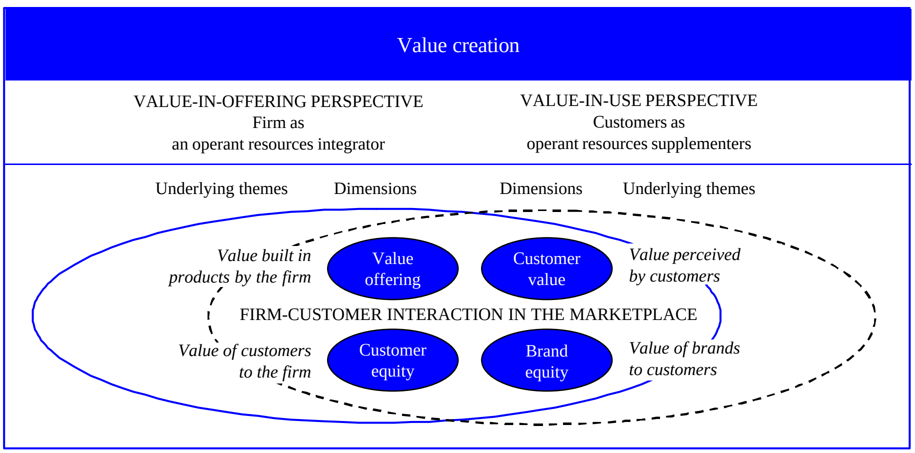

Figure 2.
Theoretical development of value box

performance value and pricing value have been conventionally considered as the two dimensions of a value offering. Customers look for products that deliver offerings they are seeking such as quality, innovative performance features, personal preferences, fair and beneficial pricings against competitive offerings (Mittal and Sheth, 2001). These attributes, embedded in products, represent the tangible offerings of value offering space for customers.

However, the tangible offerings themselves are not the only part of the value offering for the customer (Webster, 1994). The products are considered only as distribution mechanisms for value delivery embedded in services (Vargo and Lusch, 2004). Customers buy benefits, not products and they want to obtain the services the products render. Service offerings including easy access, rapid response, and relational nurture that are of value to the customer help develop and nurture the relationship between the firm and its customers (Mittal and Sheth, 2001). American Express, SYSCO, and 3M are typical examples of firms building superior relationships with customers. Relationship building is considered another dimension of a value offering within the creating value for customers perspective.

Having a hassle-free experience via relationship building is not the final dimensions of a value offering for customers. Customers also want to co-construct the consumption experience that suits their context, as they find it beneficial to exercise their influence in every part of the business system (Prahalad and Ramaswamy, 2004). Marketing practice has witnessed the emergence of firm-customer interaction in which customers increasingly engage in co-production activities, such as engagement in treatment dialogues with doctors, ordering books via Amazon.com, buying furniture at IKEA. America Online, Cisco Systems, Dell, eBay and many others have been encouraging high-quality interactions that enable customers to co-create value with the firms. In supporting the service-centred perspective, the customer is fundamentally an operant resource and is involved in the production of value to various degrees. As such, co-creation becomes an essential dimension of the value offering.

Having considered the various dimensions of value offering, we define value offering as the value that firms build in a particular product and/or service (brand) in terms of performance value (e.g. quality, innovation, and customization), pricing value (e.g. fair price and value price), relationship building (e.g. easy access, rapid response, and relational nurture), and co-creation of the offering, to outperform competitors. Within the value-in-offering perspective, the value offering represents values built in a product by the firm. Firms, who can provide superior value offerings to the customer, might enhance their brand equity, which represents product-level profitability. However, from the value-in-offering perspective, managers are eager to explore customer-level profitability, which is the essential outcome of value creation process (Blattberg *et al.*, 2001; Rust *et al.*, 2000; Blattberg and Deighton, 1996). In line with this argument, Ambler *et al.* (2002) note that the concept of brand equity has been discussed around products and thus under-represents the financial contribution of the customer. "Products come and go, but customers remain" (Rust *et al.*, 2001, p. 3), and essentially this requires asking what the value of customers is to the firm leading to what is known as customer equity.

Customer equity – value of customers to the firm. Customer equity is considered an essential dimension reflecting the value of the customer to the firm. This issue has been the focus of much research interest in customer relationship management

(Payne and Frow, 2005) to the point where customer equity has become the central concept in the third generation of customer satisfaction and service quality research (Mittal, 2001). There appears to be two dominant approaches to the conceptualization of customer equity. The Rust approach indicates that customer equity is made up of three drivers: value equity, brand equity, and retention equity (Rust *et al.*, 2000). These underlying dimensions have been conceptualized under the marketing action perspective (Ambler *et al.*, 2002). The Blattberg approach, which is premised upon the marketing process perspective, signifies that customer equity is built around three core components: customer acquisition, customer retention, and add-on selling (Blattberg *et al.*, 2001). This conceptualization of customer equity is consistent with the VCB model development approach, which synthesizes three perspectives of value into a comprehensive process of value creation. Customer equity is defined as the firm's subjective assessment of the value of customer to the firm that consists of three subcomponents: customer acquisition – the interactions that occur between the firm and the customer from the time of first contact until the time that the customer makes a repeat purchase; customer retention – customer's tendency to stick with the firm; and add-on selling – the activity associated with selling any additional products and services to current customers.

The essence of the value creation process is that firms must develop the value creation architecture that cultivates the value creation engineering, which in turn delivers the value offering. Marketing theorists argue that satisfying the customer is the mission and purpose of every firm (Nakata and Sivakumar, 2001; Slater, 1997; Drucker, 1973) and it is achieved when superior value offering is delivered to the customer by the firm (Slater, 1997). This argument leads to another challenging question: what are the customers' perceived preference for and evaluation of the value offering?

Customer value – value perceived by customers. It has long been recognized in the marketing literature that "customer value is defined in the marketplace, not in the factory" (Webster, 1994, p. 12). As such, to further explore what constitutes a value box, the nexus of what managers think to put in their value offerings and what customers say they value (customer value), is worth noting. Customers form evaluative opinions or feelings about the actual value experience of using a product (Woodruff, 1997), thus they also have their own value box.

Customer value and value offering are two different concepts that are interrelated. Customer value is the mirror image of value offering. The value offering represents values the firm builds in a product and customer value represents the assessments of the value offering through the eyes of customers. As discussed in the previous section, one of most common themes underlying customer-perceived value research is the "get-versus-give" view, which primarily focuses on the evaluation of the differences between "what customers get" and "what customers receive". The extant literature reveals that this view not only leads to limited applications of the concept in the practice of managing firms toward customer value (Woodruff, 1997), but is also narrow in coping with changes in the marketplace such as new technologies, competitive intensity, and customer-behaviour changes. Thus, we define customer value as customer's perceived preference for and evaluation of performance, price and personalization values that facilitate (or block) achieving the customer's goals and purposes in use situations.

Customer value represents customers' perception of the value offerings built in a product. Interestingly, this perception is closely related to brands that are selected by customers. A firm might invest significantly to create and deliver values that are embedded in a product, but customers buy a brand they know and trust. "A product is something that is made in a factory; a brand is something that is bought by a customer" (Aaker, 1991, p. 1). As such, brands will become more important in the value that they convey to the customer in the future (Knox and Maklan, 1998; Naumann, 1995). The significance of brands indicates that while assessing values built in a product, customers also develop brand knowledge in the form of perceptions, beliefs, feelings, and attitudes, which is considered as the springboard for brand equity (Ambler *et al.*, 2002). As such, it is worth noting that how customers see values in a product influences what they will do with respect to the brand in the marketplace.

Brand equity – value of brands to customers. The brand is one of the most valuable assets of the firm (Yoo *et al.*, 2000; Aaker, 1996, 1991; Barwise, 1993). The brand is sold to the customer, whereas brand equity is retained by, and indeed enhanced for the brand owners (Ambler *et al.*, 2002, p. 23). Despite a considerable attention given to brand equity, research on this notion is quite fragmented (Yoo and Donthu, 2001). For example, O'Cass and Frost (2002) see brand equity simply as a result of the value customers place on a brand. Keller (1993, p. 2) defines brand equity as "the differential effect of brand knowledge on the consumer response to the marketing of the brand", whereas Aaker (1991, p. 15) defines brand equity as:

> [...] a set of assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or that firm's customers.

The extant literature about brand equity indicates that awareness, loyalty, associations, and perceived quality are conventional dimensions of brand equity, which have been the focus of much academic researchers (Ambler *et al.*, 2002; Yoo and Donthu, 2001; Aaker, 1996, 1991; Keller, 1993). However, questions about what would be a generally accepted definition of brand equity still remains (Ailawadi *et al.*, 2003; Yoo and Donthu, 2001). The principle reason underlying this question relates to a challenging debate among researchers as to "whether brand knowledge structures are organized by attributes or by brands" (Keller, 2003, p. 596). Attributes embedded in brand associations and perceived quality are described as reflecting tangible aspect of brand – the product in use situations, whereas brand knowledge embedded in brand awareness and brand loyalty are described as reflecting intangible aspect of brand – the brand itself. It is believed that customers' assessment of attributes of product in use situations (customer value) influences what they will do with respect to the brand in the marketplace (brand equity). As such, brand equity is the value of a brand name (Yoo *et al.*, 2000) and not the value of attributes in use situations. It is the extra value embedded in the brand as perceived by the customer. This argument is supported by a consensus among brand equity definitions indicating that brand equity is the incremental value of a product due to the brand name (Srivastava and Shocker, 1991; Farquhar, 1989).

Drawing on the review of the brand equity literature and the preceding discussion, we argue that brand equity consists of three conventional dimensions: brand acquisition, brand retention, and add-on buying. First, a brand becomes equity when customers are able to recognize and recall the brand (brand awareness) and more importantly they are willing to buy that brand at the price the firm motivates them to pay. The combination of brand awareness and willingness-to-buy is important as customers might be aware of a specific brand but they buy another. Once customers are able to recognize and willing to buy a brand, brand acquisition is established.

Second, another dimension of brand equity accommodated with customers' tendency to stick with the brand. The concept of brand loyalty has been used to refer to how loyal customers feel toward the brand (Oliver, 1997; Keller, 1993; Aaker, 1991). Upon further consideration, brand loyalty represents the stronger commitment of the customer to re-patronise a preferred brand indicating the retention power of the brand to customers. As such, if customers are likely to consistently favour a brand and refrain from switching to other brands (Grover and Srinivasan, 1992), brand retention exists.

Finally, the brand equity concept include not only brand acquisition and brand retention, but also customers' intention to buy any additional products and services that are related to the brand. For example, customers who have strong brand acquisition and brand retention with Dove "bar soap" brand are more likely to trust and buy Dove "hair care" brand. Other successful brands such as the Yamaha motorcycles brand also persuades customers to purchase hi-fi equipment, pianos, and sports equipment branded as Yamaha. The concept of add-on buying is adopted when customers engage in activities associated with buying any additional products and services that related to the brand. Thus, we define brand equity as the customers' assessment of the value of brand that is embedded in: brand acquisition – customers' awareness of a brand and willingness to buy that brand at the price the firm motivates them to pay; brand retention – customer's tendency to stick with the brand; and add-on buying – the activity associated with buying any additional products and services that are related to the brand.

Being created and delivered by value creation engineering, the value box has been discussed from the perspectives of both the firm and the customer. As outlined within the firm-based perspective, the value box consists of the value offering and customer equity, whereas within the customer-based perspective the value box consists of customer value and brand equity. Figure 2 shows the synthesis of value-in-offering and value-in-use perspectives to explain how the value box is created. Specifically, based upon the notion of value creation engineering which is driven by the value creation architecture, the firm creates and delivers value offerings that are embedded in its product (offering). The value offering is then assessed in the marketplace by customers via its mirror image, customer value. The perception of customers on attributes built in the value offering also influences what customers think of the brand, which is considered as brand equity. Finally, what the customer thinks of the brand (brand equity) drives the customer's profitability or customer equity for the firm.

We combine both firm-based (value-in-offering) and customer-based (value-in-use) perspectives in the development of the value box because although value offering is created and delivered by the firm, it is defined in the marketplace (Webster, 1994). A firm-based value perspective fundamentally involves drivers that firms emphasize to contribute towards the value creation process, especially in terms of maximizing the value offering and customer equity. It signifies the important role of a firm's knowledge about what to develop in their value offering and customer equity. In contrast, customer-based value perspective is related to customer knowledge about what value customers perceive about the offerings and brands. As such, the value box consists of value offering, customer equity, customer value, and brand equity.

Conclusion

We have highlighted a number of important implications for marketing theory. The first notable implication in relation to value creation theory is that this is one of the first attempts to unlock the nature of the value concept within the firm-customer dyad. Specifically, we attempt to advance the literature on value by theorizing that the term "value" should be understood in a broader fashion, and in the context of the dyad between the firm and the customer. Accordingly, we suggest that "value" is conceptualized as value outcomes (i.e. the value box) of value creation processes, which is analogous to the firm success. A value box consists of:

- the value offering (values built in products by the firm) and customer equity (value of customers to the firm) as key value outcomes within the value-in-offering perspective (the firm viewpoint); and
- customer value (value perceived by customers) and brand equity (value of brands to customers) as key value outcomes within the value-in-use perspective (the customer viewpoint).

Value offering and customer equity within the value-in-offering perspective are the mirror images of customer value and brand equity within the value-in-use perspective. This implication sheds light on the nature of the value concept by providing a new theoretical *modus operandi* to explicate "what constitutes value within the firm-customer dyad". Building on the dyad of the firm and the customer as the two key parties of value creation processes, we highlight that understanding value with respect to both firm (value-in-offering) and customer (value-in-use) perspectives is of paramount importance in helping the firm to get a richer picture of what customers say they value and what managers want to create for customers. Particularly, value creation processes within the VCB model are described via a unique mechanism: value creation architecture → value creation engineering → value box. Value creation processes start with crafting a value creation architecture (a strategic space consisting of strategic orientation and business orientations), followed by developing a value creation engineering (a capability space consisting of innovation-based, marketing-based and production-based capabilities), and ending with a value box that represents value outcomes of value creation processes. In effect the theoretical conjecture here provides new insights into value-based marketing knowledge, thus echoing the call for theoretical and empirical research to unlock value creation mechanisms (Slater, 1997).

Given the conceptual nature of this paper, developing and testing the propositions that comprise the VCB model from both the firm and the customer perspectives warrant the interest of marketing scholars. Importantly, future research is also needed to develop and validate the measurement instrument of the value offering. A fruitful direction for further research would be to address the moderating role of environmental characteristics (e.g. market turbulence, competitive intensity, and technological turbulence) and organisational structures (e.g. formalisation, decentralisation, and specialisation) in the VCB model. Such fit-as-moderation approach (Olson *et al.*, 2005) may be helpful for managers in their attempt to create superior value offering for the customer.

References

Aaker, D.A. (1991), *Managing Brand Equity*, The Free Press, New York, NY.

Aaker, D.A. (1996), *Building Strong Brands*, The Free Press, New York, NY.

Ailawadi, K.L., Lehmann, D.R. and Neslin, S.A. (2003), "Revenue premium as an outcome measure of brand equity", *Journal of Marketing*, Vol. 67, October, pp. 1-17.

AMA (2007), *Marketing Definitions*, American Marketing Association, available at: www. MarketingPower.com

Amabile, T.M., Conti, R., Coon, H., Lazenby, J. and Herron, M. (1996), "Assessing the work environment for creativity", *Academy of Management Journal*, Vol. 39, October, pp. 1154-84.

Ambler, T., Bhattacharya, C.B., Edell, J., Keller, K.N., Lemon, K.N. and Mittal, V. (2002), "Relating brand and customer perspectives on marketing management", *Journal of Service Research*, Vol. 5 No. 1, pp. 13-25.

Anderson, J.C. and Narus, J.A. (1998), "Business marketing: understand what customer value", *Harvard Business Review*, Vol. 76 No. 6, pp. 53-65.

Barney, J.B. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.

Barwise, P. (1993), "Brand equity: snack or boojum?", *International Journal of Research in Marketing*, Vol. 10 No. 1, pp. 93-104.

Bharadwaj, S.G., Varadarajan, P.R. and Fahy, J. (1993), "Sustainable competitive advantage in service industries: a conceptual model and research propositions", *Journal of Marketing*, Vol. 57, October, pp. 83-99.

Blattberg, R.C. and Deighton, J. (1996), "Manage marketing by the customer equity test", *Harvard Business Review*, Vol. 74 No. 4, pp. 136-44.

Blattberg, R.C., Getz, G. and Thomas, J.S. (2001), *Customer Equity: Building and Managing Relationships as Valuable Assets*, Harvard Business School Press, Boston, MA.

Christopher, M. (1996), "From brand values to customer values", *Journal of Marketing Practice: Applied Marketing Science*, Vol. 2 No. 1, pp. 55-66.

Day, G.S. (1990), *Market-driven Strategy: Processes for Creating Value*, The Free Press, New York, NY.

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

Drucker, P. (1973), *Management*, Harper & Row, New York, NY.

Eggert, A. and Ulaga, W. (2002), "Customer perceived value: a substitute for satisfaction in business markets?", *Journal of Business & Industrial Marketing*, Vol. 17 Nos 2/3, pp. 107-18.

Farquhar, P.H. (1989), "Managing brand equity", *Marketing Research: A Magazine of Management & Applications*, Vol. 1, pp. 24-33.

Gourville, J.T. (2006), "Eager seller and stony buyers: understanding the psychology of new product adoption", *Harvard Business Review*, Vol. 84 No. 6, pp. 98-106.

Grant, R.B. (1991), "A resource-based theory of competitive advantage: implications for strategy formulation", *California Management Review*, Vol. 33 No. 3, pp. 114-35.

Gray, B.J. and Hooley, G.J. (2002), "Market orientation and service firm performance – a research agenda", *European Journal of Marketing*, Vol. 36 Nos 9/10, pp. 980-8.

Grover, R. and Srinivasan, V. (1992), "Evaluating the multiple effects of retail promotions on brand loyal and brand switching segments", *Journal of Marketing Research*, Vol. 29, February, pp. 76-89.

Hambrick, D.C. (2003), "On the staying power of Miles and Snow's defenders, analyzers, and prospectors", *Academy of Management Executive*, Vol. 17 No. 4, pp. 115-8.

Houston, F.S. (1986), "The marketing concept: what it is and what it is not", *Journal of Marketing*, Vol. 50, April, pp. 81-7.

Huber, F., Hermann, A. and Morgan, R.E. (2001), "Gaining competitive advantage through customer value oriented management", *Journal of Consumer Marketing*, Vol. 18 No. 1, pp. 41-53.

Hurley, R. and Hult, G.T.M. (1998), "Innovation, market orientation, and organizational learning: an integration and empirical examination", *Journal of Marketing*, Vol. 62, July, pp. 42-54.

Hurt, H.T., Joseph, K. and Cook, C.D. (1977), "Scales for the measurement of innovativeness", *Human Communication Research*, Vol. 4 No. 1, pp. 58-65.

Keller, K.L. (1993), "Conceptualizing, measuring, and managing customer-based brand equity", *Journal of Marketing*, Vol. 57 No. 1, pp. 1-22.

Keller, K.L. (2003), "Brand synthesis: the multidimensionality of brand knowledge", *Journal of Consumer Research*, Vol. 29 No. 4, pp. 595-600.

Knox, S. and Maklan, S. (1998), *Competing on Value: Bridging the Gap Between Brand and Customer Value*, Financial Times Pitman, London.

Kumar, N., Scheer, L. and Kotler, P. (2000), "From market driven to market driving", *European Management Journal*, Vol. 18 No. 2, pp. 129-42.

Lilien, G.L., Morrison, P.D., Searls, K., Sonnack, M. and von Hippel, E. (2001), "Performance assessment of the lead user idea generation process", *Management Science*, Vol. 48 No. 8, pp. 1042-59.

McDaniel, S.W. and Kolari, J.W. (1987), "Marketing strategy implication of the Miles and Snow strategic typology", *Journal of Marketing*, Vol. 51, October, pp. 19-30.

Matear, S., Osborne, P., Garrett, T. and Gray, B.J. (2002), "How does market orientation contribute to service firm performance? An examination of alternative mechanisms", *European Journal of Marketing*, Vol. 36 Nos 9/10, pp. 1058-75.

Miles, M.P. and Munilla, L.S. (1993), "Eco-orientation: an emerging business philosophy?", *Journal of Marketing Theory and Practice*, Vol. 1 No. 2, pp. 43-51.

Miles, R.E. and Snow, C.C. (1978), *Organizational Strategy, Structure, and Process*, McGraw-Hill, New York, NY.

Miles, R.E. and Snow, C.C. (1986), "Organizations: new concepts for new forms", *California Management Review*, Vol. 28 No. 3, pp. 62-73.

Miles, R.E. and Snow, C.C. (2003), *Organizational Strategy, Structure, and Process*, Stanford University Press, Stanford, CA.

Mittal, B. and Sheth, J.N. (2001), *Value Space: Winning the Battle for Market Leadership*, McGraw-Hill, New York, NY.

Mittal, V. (2001), "Book reviews: driving customer equity: how customer lifetime value is shaping corporate strategy", *Journal of Marketing*, Vol. 65, April, pp. 107-9.

Nakata, C. and Sivakumar, K. (2001), "Instituting the marketing concept in a multinational setting: the role of national culture", *Journal of the Academy of Marketing Science*, Vol. 29 No. 3, pp. 255-76.

Narver, J.C. and Slater, S.F. (1990), "The effect of a market orientation on business profitability", *Journal of Marketing*, Vol. 54, October, pp. 20-35.

Narver, J.C. and Slater, S.F. (1998), "Additional thoughts on the measurement of market orientation: a comment on Deshpande & Farley", *Journal of Market Focused Management*, Vol. 2 No. 3, pp. 233-6.

Naumann, E. (1995), *Creating Customer Value*, Thompson Executives Press, Cincinnati, OH.

Ngo, L.V. and O'Cass, A. (2009), "Creating value offerings via operant resource-based capabilities", *Industrial Marketing Management*, Vol. 38 No. 1, pp. 45-59.

Noble, C.H., Sinha, R.K. and Kumar, A. (2002), "Market orientation and alternative strategic orientations: a longitudinal assessment of performance implications", *Journal of Marketing*, Vol. 66, October, pp. 25-39.

O'Cass, A. and Frost, H. (2002), "Status brands: examining the effects of non-product-related brand associations on status and conspicuous consumption", *Journal of Product & Brand Management*, Vol. 11 No. 2, pp. 67-88.

O'Cass, A. and Ngo, L.V. (2007), "Balancing external adaptation and internal effectiveness: achieving better brand performance", *Journal of Business Research*, Vol. 60 No. 11, pp. 11-20.

Oliver, R.L. (1997), *Satisfaction: A Behavioural Perspective on the Consumer*, McGraw-Hill, New York, NY.

Olson, E.M., Slater, S.F. and Hult, G.T.M. (2005), "The performance implications of fit among business strategy, marketing organization structure, and strategic behaviour", *Journal of Marketing*, Vol. 69, July, pp. 49-65.

Panayides, P.M. (2004), "Marketing in Asia-Pacific logistics companies: a discriminant analysis between marketing orientation and performance", *Asia Pacific Journal of Marketing and Logistics*, Vol. 16 No. 1, pp. 42-68.

Payne, A. and Frow, P. (2005), "A strategic framework for customer relationship management", *Journal of Marketing*, Vol. 69, October, pp. 167-76.

Payne, A. and Holt, S. (2001), "Diagnosing customer value: integrating the value process and relationship marketing", *British Journal of Management*, Vol. 12 No. 2, pp. 159-82.

Pearson, G.J. (1993), "Business orientation: cliché or substance?", *Journal of Marketing Management*, Vol. 9 No. 3, pp. 233-43.

Pelham, A.M. (2000), "Market orientation and other potential influences on performance in small and medium-sized manufacturing firms", *Journal of Small Business Management*, Vol. 38 No. 1, pp. 48-67.

Peterson, R.T. (1989), "Small business adoption of the marketing concept vs other business strategies", *Journal of Small Business Management*, Vol. 27 No. 1, pp. 38-46.

Porter, M.E. (1980), *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, The Free Press, New York, NY.

Prahalad, C.K. and Hamel, G. (1990), "The core competence of the corporation", *Harvard Business Review*, Vol. 68 No. 3, pp. 79-91.

Prahalad, C.K. and Ramaswamy, V. (2004), "Co-creation experiences: the next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3, pp. 5-14.

Rayport, J.F. and Sviokla, J.J. (1995), "Exploiting the virtual value chain", *Harvard Business Review*, Vol. 73 No. 12, pp. 75-87.

Ruekert, R.W. and Walker, O.C. (1987), "Marketing's interaction with other functional units: a conceptual framework and empirical evidence", *Journal of Marketing*, Vol. 51, January, pp. 1-19.

Rust, R.T., Zeithaml, V.A. and Lemon, K.N. (2000), *Driving Customer Equity: How Customer Life Time Value is Reshaping Corporate Strategy*, The Free Press, New York, NY.

Rust, R.T., Lemon, K.N. and Zeithaml, V.A. (2001), "Modeling the customer-firm relationship", Working Paper Series Number 01-108, Marketing Science Institute, Cambridge, MA.

Sheth, J.N. and Sisodia, R.S. (2003), "The future of marketing", in Kitchen, P. (Ed.), *The Future of Marketing: Critical 21st-Century Perspectives*, Palgrave Macmillan, New York, NY, pp. 140-62.

Shoham, A., Evangelista, F. and Albaum, G. (2002), "Strategic firm type and export performance", *International Marketing Review*, Vol. 19 No. 3, pp. 236-58.

Slater, S.F. (1996), "The challenge of sustaining competitive advantage", *Industrial Marketing Management*, Vol. 25 No. 1, pp. 79-86.

Slater, S.F. (1997), "Developing a customer value-based theory of the firm", *Journal of the Academy of Marketing Science*, Vol. 25 No. 2, pp. 162-7.

Slater, S.F. and Narver, J.C. (1994), "Market orientation, customer value, and superior performance", *Business Horizons*, Vol. 73 No. 2, pp. 22-8.

Slater, S.F. and Olson, E.M. (2001), "Marketing's contribution to the implementation of business strategy: an empirical analysis", *Strategic Management Journal*, Vol. 22 No. 11, pp. 1055-67.

Srivastava, R.K. and Shocker, A.D. (1991), "Brand equity: a perspective on its meaning and measurement", Report No. 91-124, Marketing Science Institute, Cambridge, MA.

Srivastava, R.K., Fahey, L. and Christensen, H.K. (2001), "The resource-based view and marketing: the role of market-based assets in gaining competitive advantage", *Journal of Management*, Vol. 27 No. 6, pp. 777-802.

Thomke, S. and von Hippel, E. (2002), "Customers as innovators: a new way to create value", *Harvard Business Review*, Vol. 80 No. 4, pp. 74-81.

Thompson, V.A. (1965), "Bureaucracy and innovation", *Administrative Science Quarterly*, Vol. 10 No. 1, pp. 1-20.

Varadarajan, P.R. and Jayachandran, S. (1999), "Marketing strategy: an assessment of the state of the field and outlook", *Journal of the Academy of Marketing Science*, Vol. 27 No. 2, pp. 120-43.

Vargo, S.L. and Lusch, R.F. (2004), "Evolving to a new dominant logic for marketing", *Journal of Marketing*, Vol. 68 No. 1, pp. 1-17.

Vorhies, D.W. and Morgan, N.A. (2005), "Benchmarking marketing capabilities for sustainable competitive advantage", *Journal of Marketing*, Vol. 69, January, pp. 80-94.

Webster, F.E. (1994), "Defining the new marketing concept", *Marketing Management*, Vol. 2 No. 4, pp. 23-31.

Weerawardena, J. and O'Cass, A. (2004), "Exploring the characteristics of the market-driven firms and antecedents to sustained competitive advantage", *Industrial Marketing Management*, Vol. 33 No. 5, pp. 419-28.

Woodruff, R.B. (1997), "Customer value: the next source for competitive advantage", *Journal of the Academy of Marketing Science*, Vol. 25 No. 2, pp. 139-53.

Yoo, B. and Donthu, N. (2001), "Developing and validating a multidimensional consumer-based brand equity scale", *Journal of Business Research*, Vol. 52 No. 1, pp. 1-14.

Yoo, B., Donthu, N. and Lee, S. (2000), "An examination of selected marketing mix elements and brand equity", *Journal of Academic Marketing Science*, Vol. 28 No. 2, pp. 195-211.

Zeithaml, V.A. (1988), "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence", *Journal of Marketing*, Vol. 52, pp. 2-22.

Further reading

Slater, S.F. and Narver, J.C. (1996), "Competitive strategy in the market-focused business", *Journal of Market-focused Management*, Vol. 1 No. 2, pp. 159-74.

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