

# Creating value offerings via operant resource-based capabilities

Liem Viet Ngo<sup>1</sup>, Aron O’Cass<sup>\*</sup>

*University of Newcastle, Newcastle Graduate School of Business, University House, Auckland Street, Newcastle, NSW 2300, Australia*

Received 12 October 2006; received in revised form 1 November 2007; accepted 12 November 2007  
Available online 10 January 2008

## Abstract

There is growing recognition that leveraging firm resources appears to be an essential precondition for securing a competitive position in the marketplace and also for creating value for the customer. In moving forward within the new dominant logic as espoused by Vargo and Lusch, with its focus on operant resources, this research empirically examines the role of operant resource-based capabilities as antecedents to a firm’s value offering. The findings show that firms seeking to create a superior value offering for customers should invest in and nurture operant resource-based capabilities. The heterogeneity of operant resource-based capabilities helps explain value offering differentials in which firms that emphasize strongly innovation-based capability as a dominant operant resource-based capability appear to create a superior value offering compared to those emphasizing marketing-based capability, while firms that focus strongly on production-based capability create little for the customer in value offering.

© 2007 Elsevier Inc. All rights reserved.

*Keywords:* Behavioural orientations; Operant resource-based capabilities; Value offering

## 1. Introduction

There is a growing call for a paradigm shift in marketing. Some have called for a shift from market focus to customer focus and value creation. Sheth and Sisodia (2003) argue that “the focus now has to shift from markets to customers and from transactions to interactions, a dual transformation from current generation marketing to next generation marketing. Marketing is thus headed towards interaction and customer focus” (p.142). The debate has been added to recently by Vargo and Lusch (2004) who focus on the shift from operand resources to operant resources, with a view that a more appropriate unit of exchange might be the application of competencies, or specialized knowledge and skills for and to the benefit of the receiver. Such operant resources are intangible, continuous and dynamic.

Importantly, the views of both Sheth and Sisodia (2003) and Vargo and Lusch (2004) imply a greater focus on creating value for customers beyond just the tangible product, with greater

attention to the extended product that creates value as determined by customers. They also focus on more than physical resources (operand) and direct attention to skills and knowledge (operant) resources in value creation. Such a shift appears to be headed toward the notion of customer value, which interestingly is a cornerstone in consumer behaviour, as well as relationship marketing (Christopher, 1996; Zeithaml, 1988). Yet, surprisingly little theory exists and few studies have been conducted to examine the role of firm capabilities and their differential contribution to customer value as perceived by management in strategic marketing. As the term “customer value” has been interchangeably used in both consumer behaviour (e.g. Woodruff, 1997) and strategic marketing (e.g. Slater & Narver, 1994) to refer to the concept of value, here the term value offering is used to refer to value created by firms for customers, while the term customer value is used to refer to value perceived by customers.

There is growing recognition that value and value creation appears central to the business models pursued by firms (Slater, 1997; Woodruff, 1997). However, little is still known about how the notion value offering is incorporated into business processes, especially in the context of service-centered dominant logic. Given the call for a paradigm shift and growing

<sup>\*</sup> Corresponding author. Tel.: +61 2 4921 7729; fax: +61 2 4921 7398.

E-mail addresses: [liem.ngo@newcastle.edu.au](mailto:liem.ngo@newcastle.edu.au) (L.V. Ngo),  
[aron.ocass@newcastle.edu.au](mailto:aron.ocass@newcastle.edu.au) (A. O’Cass).

<sup>1</sup> Tel.: +61 2 4921 5578.

focus on value and value creation, we seek to assist in the further development of the new dominant logic by working toward creating a value-creation business model. The overall goal of this study is to model how operant resource-based capabilities create the firms' value offering for customers.

## 2. Theoretical background

### 2.1. *Operant resource-based capabilities vs. behavioural orientations*

An examination of the literature reveals that many of the key constructs in marketing including market orientation have scope for greater theoretical and empirical insights in performance-based research. It has been argued that market orientation lacks an underlying theory providing full explanatory mechanisms for its contribution to firm performance (Hunt & Lambe, 2000). A paradigm shift from market focus to customer focus as called for by Sheth and Sisodia (2003) alludes to the notion that market-oriented activity is no longer a dominant behavioural orientation that firms may adopt in pursuing competitive advantage, particularly in the context of value creation. Other behavioural orientations including (but not limited to) innovation-orientation (Hurley & Hult, 1998) and production-orientation (Pelham, 2000) exist to contribute to firm success. Innovation-oriented firms pursue competitive advantage by placing heavy emphasis on innovations in both technical and non-technical activities (Hurley & Hult, 1998), while production-oriented firms place an emphasis on production efficiencies (Kotler, 2000; Pearson, 1993).

The marketing literature has identified the role of various behavioural orientations as a premise for value-creation processes (Jaworski & Kohli, 1993; Narver & Slater, 1990). However, in moving from performance to value creation, the mechanisms for creating value for customers depend on a firm's capabilities. Slater and Narver (1994) proposed that the emphasis today has shifted to capabilities that enable firms to consistently create superior value for their customers. In deed, competitive advantage is obtained, when firms possess resources or skills that are valuable, unique, imperfectly imitable, and non-substitutable (Barney, 1991). Upon further consideration, 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 is important and meaningful on both theoretical and managerial grounds.

### 2.2. *"Value-in-offering" vs. "value-in-use"*

The extant literature has primarily viewed the concept of customer value from the "value-in-use" perspective. The main theme underlying this conventional perspective sees that value is defined in the marketplace by the customer (Webster, 1994). A firm's value offerings are those that customers assess and utilize to achieve their consumption goals (e.g. Woodruff, 1997). Specifically, customers perceive value based on their judgment of the trade-off between "what they get" (perceived benefits, quality, or performance) and "what they give". Value

through the eyes of customers are various, including product utility (Zeithaml, 1988), perceived benefits over the costs (Christopher, 1996), market-perceived quality adjusted for the relative price (Gale, 1994), and perceived benefits over sacrifices (Eggert & Ulaga, 2002).

As such, the substantive differences regarding the customer value concept may lead to limited application of the concept in the practice of managing firms toward superior value-creation processes (Woodruff, 1997). Generally speaking, in the context of value-creation process, value should be understood in a dual form, which consists of value-in-use and value-in-offering. Value-in-use refers to the voice of the customer in which value created in consumption, judgment, and confirmation made by the customer in the marketplace (Ballantyne & Varey, 2006; Lusch, Vargo, & Malter, 2006; Lusch, Vargo, & O'Brien, 2007; Vargo & Lusch, 2004). On the contrary, value-in-offering refers to proposed value that the firm builds in its market offering upon that the customer consumes, judges, and confirms in the value-in-use form. While attempting to know what constitutes value and how to create it, managers should give attention to examining the features that need to be in products and services to create value. A marketer must offer all of the value(s) that customers are seeking in the marketplace (Mittal & Sheth, 2001). Indeed, customers' product knowledge has been advanced due to the rapid development of information and communication technology, they are increasingly demanding and highly value-conscious. Moreover, emerging trends in marketplace and technological innovations impact value co-production (Pralhad & Ramaswamy, 2000), pushing firms to put more effort into developing value-creation programs, often from their own perspective. Thus, conceptualizing a firm's value creation from only the customer's perspective, may not be helpful to marketers in determining various value-creating strategies to be pursued in different markets. Value, which is considered a source of competitive advantage (Woodruff, 1997), should be understood from executives' perceptions, as well as customers and thus, this construct is conceived of as the value offering through the "value-in-offering" perspective.

While acknowledging value-in-use as the ultimate outcome that stands above any form of value in value-creation process, in this study we place our emphasis on value offering and its antecedents. Specifically, we attempt to validate an untested theoretical proposition suggested by Vargo and Lusch (2004) that "the service-centered view of marketing implies that marketing is a continuous series of social and economic processes that is largely focused on operant resources with which the firm is constantly striving to make better value propositions than its competitors". These processes in the context of value-in-offering perspective are discussed in terms of operant resource-based capabilities.

### 2.3. *Operant resource-based capabilities*

The role of resources and capabilities are of paramount importance in creating superior value for the customer, and in achieving competitive advantage over competitors (Barney, 1991; Peteraf, 1993; Prahalad & Hamel, 1990; Slater & Narver,

1994; Wernerfelt, 1984). Resources and capabilities are central constructs to the resource-based view (RBV), which emerged in the 1980s as a major shift from the industrial structure or IO view (Hall & Weiss, 1967; Mason, 1939; Porter, 1980), which emphasizes the importance of external environmental factors. The central logic for this shift is the inability of the IO view to explain why some firms within the same industry facing identical conditions outperform others (differ in performance) (Hawawini, Subramanian, & Verdin, 2003). The RBV emphasizes resources and capabilities as central to understanding competitive advantage and superior profitability (e.g. Admit & Shoemaker, 1993; Day, 1994).

The RBV takes an 'inside-out' perspective to offer an explanation for firm success or failure (Dicksen, 1996). Resources are valuable inputs for the firm that enable it to produce effectively and efficiently market offerings that have value for customers (Admit & Shoemaker, 1993; Fahy, Hooley, Greenley, & Cadogan, 2006; Griffith & Harvey, 2001; Hunt & Morgan, 1995; Morgan, Clark, & Gooner, 2002; Srivastava, Fahey, & Christensen, 2001). Resources can be categorized into tangibles and intangibles available to the firm (Barney, 1991; Wernerfelt, 1984). According to Hunt and Morgan (1995), tangible resources can be physical items such as facilities, raw materials, equipment, cash reserves, and the like, while intangible resources can be skills and knowledge of employees, knowledge of customers, competitors, suppliers, and the like.

An examination of the extant literature reveals that the tangible–intangible resource dichotomy (Hunt & Morgan, 1995) is analogous to the operand–operant resource dichotomy suggested by Vargo and Lusch (2004) in the service-centered dominant logic. According to Vargo and Lusch (2004), operand resources refer to resources (e.g. physical resources such as facilities, raw materials, land, and the like) on which an operation is performed to produce an effect, whereas operant resources (e.g. intangibles such as competences, organizational processes, and the like) refer to those that operate on operand resources to produce effects. A closer look at the literature on operant resources reveals different kinds of resources that are classified as operant including skills, knowledge, mental competence, core competence, technology, organizational processes, relationships with competitors, suppliers, and customers (Hunt, 2004; Vargo & Lusch, 2004).

Given the nature of resources as presented above, in the quest for creating superior value for the customer, firms will (or should) have as many processes, as are necessary to transform their resources (operand and operant) into valuable outputs based on functional activities (Day, 1994; Vorhies & Morgan, 2005). Capabilities are manifested in typical business activities (Day, 1994) and are something beyond resources. While resources represent assets possessed by the firm, capabilities are the glue that combines, develops, and transforms the resources to create value offerings for customers (Day, 1994; Grant, 1991; Morgan, Kaleka, & Katsikeas, 2004; Teece, Pisano, & Shuen, 1997). As such, capabilities are built upon the processes developed by firms, by bringing people and resources together in repeated efforts (Vorhies, Harker, & Rao, 1999). In this fashion, both behaviour and ability are synthesized (i.e., not

separated) in defining capabilities. They are argued to be manifested within capabilities, which are not resources in and of themselves, but are the integrative processes by which resources are applied to add value to the resource inputs (Day, 1994). From these repeated efforts, complex patterns of coordination between people, and between people and other resources occur (Grant, 1991, 1996). These coordinated patterns of behaviour are often quite consistent, yet they remain dynamic and change as the firm's needs change. A synthesis of resource-based view and service-centered dominant logic indicates that capabilities possess operant characteristics as they act on both operand and operant resources to produce effects, but they are not operant resources. Thus, firm capabilities hereafter are labeled as operant resource-based capabilities.

Having considered the resource-based view on capabilities, and working toward consistency with the service-centered dominant logic, we conceptualize an operant resource-based capability as one that has three facets; *possession of, application of, and full utilization of resources*. The *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 utilization* 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 applying collective knowledge, skills, and resources to perform functional activities.

Within the context of the above conceptualization the extant literature has addressed a theoretical contention that value offering is created by operant resource-based capabilities (core value-creating capabilities) which exist throughout the entire organization (Slater & Narver, 1994). Particularly, innovation-based, marketing-based, and production-based capabilities are deemed the essential "core value-creating capabilities" that enable a firm to consistently create superior value for its customers (Bisp, 1999; Slater & Narver, 1994). A broader look at this view reveals that certain types of operant resource-based capabilities should correspond to the core processes for creating economic value (Day, 1994). In the quest for creating value offering, business practices inspire multiple operant resource-based capabilities that provide firms with multiple platforms for value creation. In this fashion, operant resource-based capabilities that directly contribute towards value offerings for customers are classified in a manner that matches the core operational functions of the firm such as innovation, marketing, and production. Moller (2006) argues that competitive intensity and the expanding scale of business operations press firms to specialize in a narrowing set of core value-creating capabilities. Drawing on these insights, we categorize operant resource-based capabilities into innovation-based, marketing-based, and production-based capabilities.

*Innovation-based capability* has been labeled in the literature as either *the capacity to innovate* (Hurley & Hult, 1998) and *organizational innovation intensity* (Weerawardena & O'Cass, 2004). The first is operationalized as the number of innovations successfully adopted by the firm, while the latter is a subjective measure referring to the extent to which a firm implements its

innovations. Both approaches have limited applicability in the service-centered dominant logic, in which innovation-based capability is different from *innovation intensity* and beyond *the capacity to innovate*. In this study, *innovation-based capability* is defined as the integrative process of applying the collective knowledge, skills, and resources of the firm to perform *innovation activities* pertaining to *technical innovations* (products and/or services, and production process technology) and *non-technical innovations* (managerial, market, and marketing).

Relatedly, *marketing-based capability* is defined as the integrative process of applying the collective knowledge, skills, and resources of the firm to perform marketing activities. This definition is in line with the literature on marketing capability, in which marketing capability is argued to enable firms' to add value to their products and services to meet competitive demands (Day, 1994; Vorhies et al., 1999; Vorhies & Morgan, 2005; Weerawardena & O'Cass, 2004). In this context a range of marketing activities including product, pricing, distribution, marketing communication, selling, market intelligence management, marketing planning, and marketing implementation are theorized to encompass a broader notion of marketing-based capability.

Further, *production-based capability* is a capability that enables a business to pursue a product-market specific business strategy (Cleveland, Schroeder, & Anderson, 1989). In this study, production-based capability is defined as the integrative process of applying the collective knowledge, skills, and resources of the firm to perform production activities (e.g., production adaptability, quality control, productivity, and production scheduling) of the business. These production activities are not only relevant in relation to physical products, but also services.

The conceptualization of innovation-based capability, marketing-based capability, and production-based capability follow the Type I second-order factor model as outlined by Jarvis, MacKenzie, and Podsakoff (2003). Specifically, innovation-based capability is conceived of as a second-order construct with three first-order factors including innovation-based possession, innovation-based application, and innovation-based full utilization. Similarly, marketing-based capability and production-based capability are conceptualized as second-order constructs, each has three first-order factors. For example, marketing-based capability consists of marketing-based possession, marketing-based application, and marketing-based full utilization and production-based capability consists of production-based possession, production-based application, and production-based full utilization. These first-order factors are reflective indicators, each of which consists of multiple reflective indicators.

Based on the above conceptualization of capabilities, and extending the argument of Vargo and Lusch (2004), which considers possessing resources and their use, as the two fundamental sources of competitive advantage, we theorize innovation-based capability, marketing-based capability, and production-based capability as second-order constructs each consisting of three facets of an operant resource-based capability: *possession of, application of, and full utilization of resources*.

#### 2.4. Value offering

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 to build in products. Many have discussed brand equity as the added value with which a given brand endows a product (Farquhar 1989). In the marketplace, brand value is created when consumers interact and respond to the marketing activities related to the brand. Differences in consumer responses to marketing efforts determine brand asset valuation (Ambler et al., 2002). Thus, brand equity is also defined as "the differential effect of brand knowledge on consumer response to the marketing of the brand" (Keller, 2002, p.7). In a similar vein, Ambler (2000) signified the role of brand knowledge by suggesting that brand equity is "what we carry around in our heads about the brand". It is worth noting that the customer mind-set is the premise of these definitions (Keller & Lehmann, 2001) and the notion of brand equity is applicable in the context of consumer perspective. As such, while it is acknowledged that brand equity is a source of value creation, in the context of this study, the value offering is conceived from the firm perspective.

However, the extant literature has yet to fully explore the issue of value creation and value offering from the firm perspective. Customers look for products that deliver offerings that include attribute performance (e.g. quality, innovative performance features, personal preferences) and pricing value (e.g. fair and beneficial pricings) and compare them against competitive offerings (Mittal & Sheth, 2001). These physical attributes represent the two tangible dimensions of the value offering to the customer. However, the tangible product itself is not the only part of the value offering created for the customer (Webster, 1994). In this sense the products are considered only as distribution mechanisms for value delivery embedded in services (Vargo & Lusch, 2004) delivered via product offerings. Customers buy benefits, not products and they want to obtain the services the products render. They may desire to keep in touch with the firm to get a hassle-free experience, which includes easy access, rapid response, and relational nurture (Mittal & Sheth, 2001). For example, American Express, SYSCO, and 3M are typical examples of firms building superior relationships with customers. We thus consider relationship building as the third dimension of the value offering.

Having a hassle-free experience via relationship building is not the final stop of a value-creation avenue. Customers also want to co-construct the consumption experience that suits their context, as some find it beneficial to exercise their influence in every part of the business system (Prahalad & 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, Yahoo! and many others have been encouraging high-quality interactions that enable customers to co-create value with the firms. In supporting the service-centered perspective, the customer is fundamentally an operant resource and is involved in

the production of value to various degrees. As such, co-creation becomes the fourth dimension of the value offering.

Having considered the above dimensions of value offering, we define value offering to the customer as the value that firms build in a particular product and/or service (brand) in terms of *attribute performance* (e.g., quality, innovation, and customization), *pricing* (fair price and value price), *relationship building* (easy access, rapid response, and relational nurture), and *co-creation* of the offering, to outperform competitors. As such, the conceptualization of value offering follows the Type I second-order factor model as outlined by Jarvis et al. (2003). Specifically, value offering is conceived of as a second-order construct with four first-order factors (e.g. performance value, pricing value, relationship building, and co-creation value) as reflective indicators, each of which consists of multiple reflective indicators.

### 3. Hypotheses development

Within the context of value-creation processes, operant resource-based capabilities refer to the extent to which the firm possesses and applies knowledge, skills, and resources to perform its functional activities, while the value offering represents the value outcomes derived from implementing value-creation processes. Creating a value offering for the customer depends upon the firm's ability to develop capabilities as the means to create superior performance on the attributes that are important to the customer (Ohmae, 1988; Stalk, Evans, & Shulman, 1992). Firms are considered as dynamic collections of specific operant resource-based capabilities in a given market structure, which are drivers of value offering for the customer. The value offering is the outcome of operant resource-based capabilities that accrue to a product or service. As such, we theorize operant resource-based capabilities of the firm as drivers of its value offerings, and therefore its ability to create value.

#### 3.1. Innovation-based capability and value offering

Possessing superior innovation-based capability enables firms to continuously create advancement in value offerings, for which customers still seek out their products even if they do not market them (Kim & Mauborgne, 1997). The substantial success of innovation-oriented Japanese firms against US competitors in the 1980s, can be explained by the notion "core competences" which resulted from heavy investment in R&D and the development of new technology (Prahalad & Hamel, 1990). Indeed, such innovation-oriented firms continuously develop leading edge positions based on their technology breakthroughs to not only satisfy current needs but also create value offerings that go beyond expectations of the customer.

Innovation-based capability and value offering for the customer are closely associated. Attribute performance appears to be a result of product innovations. Indeed, Porter (1983, p.22) argues that "product innovation is the dominant mode of innovation and aims primarily at improving product performance". Product innovations enables firm to provide new performance attributes that fulfill key customer needs better

than existing products. As such, in creating superior attribute performance (e.g. quality, innovative performance features, and personal preferences), firms need to possess, apply, and fully utilize resources needed to engage in product innovations. Breakthroughs in feminine protection such as dri-weave technology at P&G enables the firm to develop a line of feminine hygiene products such as Always, Whisper, Tess, and Otros Dias providing customers with a superior performance attribute and with much greater comfort and discretion than previously thought possible (P&G, 2006).

Innovation-based capability can also add significant value to the market offering via innovating experience environments for new co-creation experiences. With new products and services like networked Handycam, CyberShot cameras, and the PercasTV personal-casting service, Sony has built an experience environment where virtually anybody can be a content creator (Sony, 2006). Having superior innovation capabilities enables Sony to create a superior value offering for the content creators and helps them achieve greater efficiency. Such superior tangible and intangible value offerings (e.g. Handycam and personal content creation environment) rest on distinctive capability in product and process (e.g. display technology and epic-making production systems). Consequently, to achieve superior co-creation value for the customer, firms should be able to develop new ways (e.g. managerial, market, marketing innovations) to motivate customers to co-create value as well as ways to successfully monitor and manage the process along the way. As such, firms possessing a higher level of capabilities pertaining to technical and non-technical innovations appear to create enhanced value for the customer. Thus, it is hypothesized that:

**Hypothesis 1.** Innovation-based capability has a positive impact on a firms' value offering.

#### 3.2. Marketing-based capability and value offering

The extant literature suggests that marketing activities act as antecedents of value offerings to the customer. Possessing superior marketing-based capability as such enables firms to create offerings that are of value for customers. The rationale behind this proclamation is that marketing action represents the effect of accumulated marketing investments in products and services (Yoo, Donthu, & Lee, 2000). In the same vein, Aaker (1991) posits that the value of a firm's products and services (e.g. brand equity) can be strengthened by enhancing the efficiency and effectiveness of its marketing programs. Indeed, marketing processes such as attractive advertising and aggressive promotion campaigns can enable firms to successfully communicate and position products and services against competitors. As such, a firm's marketing-based capability is reflected in its ability to differentiate products and services from competitors and build successful products and services, which in turn enhance the value offerings for customers (Kotabe, Srinivasan, & Aulakh, 2002). Thus, it is hypothesized that:

**Hypothesis 2.** Marketing-based capability has a positive impact on a firms' value offering.

### 3.3. Production-based capability and value offering

Firms can provide higher value offering to customers via having highly extensive production adaptability, quality control, productivity, and production scheduling. As such, it is argued that production-based capability is associated with a firms' value offering. Specifically, firms that place heavy emphasis on productivity (e.g. labor and volume efficiencies) can produce widely available and relatively cost-competitive products, and thus provide higher pricing value for the customer (Kotler, 2000). For example, having greater productivity against its rivals by utilizing "cross-docking" inventory system enables Wal-Mart to provide "everyday low prices" as a key component of its offering to the customer (Stalk et al., 1992). In addition, having greater production system adaptability has the effect of keeping the cost and speed of changing from one product type and output to another down. This view is also consistent with the transaction cost theory, which describes advantages available to firms that create benefits for customers in the form of pricing value (e.g. fair and beneficial prices) through lowered production costs (Coase, 1937; Noble, Sinha, & Kumar, 2002). Ensuring quality performance by achieving a high level in the consistency of the product in meeting design specification also results in higher attribute performance. As such, a firm's ability to deliver to customers greater value offerings is achieved via key aspects of production-based capabilities. Thus, it is hypothesized that:

**Hypothesis 3.** Production-based capability has a positive impact on a firms' value offering.

## 4. Research design

### 4.1. Empirical setting

A quantitative-based descriptive study via a survey of business executives related to firm capabilities and value offering was developed. With respect to the selection of the empirical setting, Vietnam and DPI HoChiMinh City Business Directory 2005 was selected as the country setting sampling frame of this study. The rationale for this selection was twofold. First, Vietnam was chosen as the empirical setting as it has been considered an emerging economy with growth potential and a new dragon in Asia (Schultz & Pecotich, 1997; Vietnam Development Gateway, 2006). A stable and high growth rate of 9% in Vietnam's economy over the last decade has placed Vietnam as the second-highest growth economy in the Asia Pacific region, after China (Nguyen, Jung, Lantz, & Loeb, 2003). Second, HoChiMinh City is the largest commercial and industrial business centre of Vietnam with the GDP of \$AU14 billion by 2005, occupying 20% of the whole nation's GDP (DPI-HCMC, 2006).

The Department of Planning and Investment, HoChiMinh City (DPI-HCMC) is a highly respectable statutory organization set up to provide guidance of investment procedures and to issue business licenses. With a network of 13,000 registered firms, DPI-HCMC serves as a centre for business information and maintains a database of registered firms in HoChiMinh

City. A master list of 1000 Vietnamese companies, identifying one senior executive per company, was drawn from the local business directory, DPI HoChiMinh City Business Directory 2005. The 1000 companies were selected from the directory (a total of about 13,000) based on firm size targeting medium and large companies. The rationale for excluding small-sized firms from the sampling frame was that they are too small in terms of the scope of their business activities, whereby the theoretical conjecture is not applicable for them. Specifically, small businesses have their own constraints in terms of resource poverty (Cavusgil, 1994; Roth, 1992), thus bringing small businesses into the equation could cloud the theory. Indeed, it is evident in much of the extant research in strategic marketing that attention has been given to medium and large-sized companies (e.g. Matsuno & Mentzer, 2000) using sales volume and/or number of employees as a common criterion for the classification of firms (Coviello, Brodie, Danaher, & Wesley, 2002; Cross, Hartley, Rudelius, & Vasse, 2001; D'Amboise & Muldowney, 1988). The final sample of 400 companies was randomly selected from the master list of 1000 utilizing systematic sampling in which firms were arranged in decreasing order of sales volumes. As the ordering of the firms is related to the characteristics of interest (e.g. firm size), systematic sampling increases the representativeness of the sample (see Malhotra, Hall, Shaw, & Oppenheim, 2006). The systematic sampling is also a widely adopted approach in marketing research when sampling frames are available (e.g. Armstrong, 1991; Johnson, 1999).

The questionnaire was translated into Vietnamese forward and backward by two certified translation institutions. Specifically, the questionnaire was translated forward from English into Vietnamese by B.E.S.T, a certified translation institution in Vietnam following a quality assurance procedure. Following the forward translation the questionnaire was then translated backward into English by the Foreign Language Center - Vietnam National University - HCMC. Finally, a comparison between the two translated versions was made for equivalency resulting in the final version of the questionnaire. A drop-and-collect technique was employed in this study as the data collection method. This approach has been argued to improve response rates among organizational respondents compared to mail questionnaires and other impersonal delivery systems (Ibeh, Brock, & Zhou, 2004; Lovelock, Stiff, Cullwick, & Kaufman, 1976). In particular, a response rate of 40 to 90% is often considered satisfactory for drop-and-collect surveys (Balabanis & Diamantopoulos, 2004; Brown, 1987; O'Cass & Pecotich, 2005). Moreover, using drop-and-collect technique is encouraged in developing countries such as Vietnam (Ibeh & Brock, 2004) where interpersonal interactions are preferred as modes of information exchange (Hofstede, 1980).

### 4.2. Measurement instrument development

#### 4.2.1. Item generation

Having considered similarities of various procedures for developing measures of constructs (e.g. Churchill, 1979), a two-stage procedure was developed for this study. Specifically, stage one involved mainly generating items while stage two placed emphasis on the refinement of items by conducting expert-

judges evaluation of face validity and pre-test. Then the survey was finalized after developing and applying decision rules for removing and/or keeping representative items. In stage one, 94 items were generated capturing four constructs; innovation-based capability (19 items), marketing-based capability (22 items), production-based capability (20 items), and value offering (33 items). These items were generated from researchers' expertise and prior work in the extant literature by Weerawardena and O'Cass's (2004), Atuahene-Gima (1993), Vorhies, Harker, and Rao (1999), Vorhies and Morgan (2005), Cleveland, Schroeder, and Anderson (1989) and Stanley, Fawcett, and Smith (1996), Mittal and Sheth (2001), and Vargo and Lusch (2004).

#### 4.2.2. Face validity

In this study, twelve expert judges from within the marketing discipline were given the conceptual definitions of the four constructs with corresponding items and a set of instructions for judging. The expert judges were asked to rate each item as either "not representative", "somewhat representative", or "very representative" to the construct definition (e.g. Zaichkowsky, 1985). After receiving the expert-judges feedback, decisions about which items to delete and/or keep were based on a three-stage procedure that was developed as a synthesis of the sumscore approach (e.g. Lichtenstein, Netemeyer, & Burton, 1990) and the complete approach (e.g. Obermiller & Spangenberg, 1998) increasing in level of sophistication at each stage. In summary, 71 items were kept in the refined item pool, which was then critically examined to ensure the most parsimonious set of measures (see Low & Lamb, 2000). As suggested by Churchill (1979), expertise of a highly reputed scholar in marketing was employed in the examination of the parsimony of the refined item pool. Consequently, the most parsimonious set of measures was produced with 71 items.

#### 4.2.3. Final measure

The *innovation-based capability scale* consisted of 19 items capturing three components of this construct (possession, application, and full utilization) as essential dimensions of an operant resource-based capability. Items pertaining to the first two dimensions were newly developed, while those pertaining to the last dimension were modified from Weerawardena and O'Cass's (2004) work. All items were measured via a seven-point scale with scale poles ranging from 'strongly disagree' to 'strongly agree', 'not at all' to 'extensively', and 'minimal' to 'extensive'.

The *marketing-based capability scale* consisted of 19 items capturing three components of this construct (possession, application, and fully utilization) as essential dimensions of an operant resource-based capability. Items pertaining to the first two dimensions were newly developed, while those pertaining to the last dimension were modified from the scale of marketing-based capability developed by Atuahene-Gima (1993), Vorhies et al. (1999), Vorhies and Morgan (2005), and Weerawardena and O'Cass (2004). All items were measured via a seven-point scale with scale poles ranging from 'strongly disagree' to 'strongly agree', 'not at all' to 'extensively', and 'minimal' to 'extensive'.

The *production-based capability scale* consisted of 12 items capturing three components of this construct (possession, application, and fully utilization) as essential dimensions of an operant resource-based capability. Items pertaining to the first two dimensions were newly developed, while those pertaining to the last dimension were modified from the scale of production-based capability developed by Cleveland et al. (1989) and Stanley et al. (1996). All items were measured via a seven-point scale with scale poles ranging from 'strongly disagree' to 'strongly agree', 'not at all' to 'extensively', and 'minimal' to 'extensive'.

*Value offering* was measured via a 21-item scale capturing four components of this construct (attribute performance, pricing value, relationship building, and co-creation). This scale was developed, based on the earlier work of Mittal and Sheth (2001) and Vargo and Lusch (2004). All items were measured via a seven-point scale with scale poles ranging from 'strongly disagree' to 'strongly agree'.

## 5. Analyses and results

### 5.1. Preliminary analysis

Following the drop-and-collect survey administration method modified from the framework of Ibeh, Brock, and Zhou (2004), 259 usable responses were obtained, producing an effective response rate of 60%. Preliminary data analysis was undertaken to examine the mean and standard deviations, and following this initial assessment correlations and reliability estimates were computed. Table 1 provides the composite means, standard deviations and correlations.

The descriptive statistics indicated that based on the number of employees, 62% and 31% were characterized as medium and large firms, respectively, and 7% was unclassified. In relation to sales volume, 51% had less than \$1 millions in sales, 15% had between \$1 and \$2 millions in sales, 17% had between \$2 millions and \$4.9 millions in sale, 7% had less than \$10 millions in sales, and 10% had more than \$10 millions in sales. The analysis also indicated that services firms accounted for 28% of the respondents, construction 25%, garment and textile 13%, plastics and rubber 12%, industrial manufacturing 10%, foods and beverage 8%, and leather and shoes 4%. Regarding respondents, the descriptive statistics indicated that marketing executives accounted for 59.1% of the respondents, non-marketing executives 37.8%, and 3.1% unclassified. The preliminary analysis indicated that some items had moderate levels of skewness (between  $-1.75$  and  $-0.372$ ) and kurtosis (between 3.18 and  $-0.071$ ).

Table 1  
Descriptive statistics and correlations among variables

Variables	Mean	STD.	1	2	3
1. Innovation-based capability	5.13	0.92			
2. Marketing-based capability	5.05	1.07	0.66**		
3. Production-based capability	5.16	1.20	0.43**	0.12*	
4. Value offering	5.82	0.80	0.68**	0.62**	0.23**

\* $p < 0.05$ ; \*\* $p < 0.01$ .

Partial Least Squares (PLS), specifically PLS-GRAPH v.3.00 was utilized to assess the adequacy of measurement models of the four constructs and the predictive relevance of the conceptual model, and thereby test the three hypothesized relationships. The selection of PLS was based on three main reasons. First, PLS is a variance-based structural equation modeling technique that is more advantageous than covariance-based approaches when measures are not well established (Fornell & Bookstein, 1982). In this context, PLS is appropriate in this study as a number of new and refined measures were developed (see Dawes, Lee, & Dowling, 1998; Smith & Barclay, 1997). Second, as PLS focuses on the explanation of variance using ordinal least squares, this technique is better suited for the investigation of relationships in a predictive rather than a confirmatory fashion (Fornell & Bookstein, 1982). The main objective of this study was to predict the contribution of operant resource-based capabilities to firm value offering, thus it is mainly concerned with maximizing the prediction of respective constructs. Finally, as PLS allows the examination of measures and theory simultaneously (e.g. Fornell & Bookstein, 1982), PLS is suitable for examining the measurement properties (outer-measurement model) and hypotheses (inner-structural model).

In this study we assessed the adequacy and significance of outer-measurement models (the relationships between the observed indicators and the construct they measure) and the predictive relevance of individual paths and the structural model. Given the theoretical formulation of the four constructs being hypothesized as the Type I second-order factor model as outlined by Jarvis et al. (2003), conventional procedures used to assess the validity and reliability of scales composed of reflective indicators are applicable (Diamantopoulos & Winklhofer, 2001). Consequently, the adequacy and significance of reflective outer-measurement models were assessed through an examination of a range of indices including individual indicator loadings, composite reliability, average variance explained (AVE), bootstrap *t*-statistic, convergent validity, and discriminant validity.

The theoretical formulation of the model focused on the second-order–first-order construct development for the operant resource-based capabilities and value offering. Given the theoretical formulation of the constructs being hypothesized as second-order factors the outer model tests were conducted and the results are presented in Table 2. Table 2 provides the factor loading derived from PLS analysis for the second-order factors based on the arguments and presentation of results by Weerawardena, O'Cass, and Julian (2006). The first-order constructs for innovation-based capability (IC), marketing-based capability (MC), production-based capability (PC) and value offering (VO) explained between 48% and 70%. The second-order factors (constructs) variance explained ranged between 50% and 91%, with loadings ranging between 0.55 and 0.96, and composite reliabilities of between 0.87 and 0.97 as indicated in Table 2.

Assessing measurement validity is important and on this issue Fornell and Larcker (1981) argued convergent validity is achieved if the average variance explained (AVE) in items by their respective constructs is greater than the variance

Table 2  
Result of measurement model

Measurement model paths	Factor loading	<i>t</i> -value
<i>Innovation-based capability CR .95 AVE .48</i>		
IC Possession CR .93 AVE .68		
IC1: availability of knowledge to engage in technical innovations	0.78	24.16
IC2: availability of skills to engage in technical innovations	0.79	24.49
IC3: availability of resources to engage in technical innovations	0.81	29.87
IC4: availability of knowledge to engage in non-technical innovations	0.83	40.40
IC5: availability of skills to engage in non-technical innovations	0.86	64.50
IC6: availability of resources to engage in non-technical innovations	0.85	55.94
IC Application CR .92 AVE .66		
IC7: application of knowledge to engage in technical innovations	0.76	21.71
IC8: application of skills to engage in technical innovations	0.77	20.53
IC9: application of resources to engage in technical innovations	0.81	26.75
IC10: application of knowledge to engage in non-technical innovations	0.82	42.83
IC11: applications of skills to engage in non-technical innovations	0.85	54.62
IC12: application of resources to engage in non-technical innovations	0.82	42.52
IC Utilization CR .87 AVE .50		
IC13: utilization of product innovations	0.61	14.86
IC14: utilization of production process innovations	0.49	6.76
IC15: utilization of managerial innovations	0.79	34.53
IC16: utilization of market innovations	0.76	23.67
IC17: utilization of marketing innovations	0.75	21.33
IC18: utilization of technical innovations (product and production process)	0.62	11.01
IC19: utilization of non-technical innovations (managerial, market, marketing)	0.82	34.79
<i>Marketing-based capability CR .96 AVE .61</i>		
MC Possession CR .97 AVE.83		
MC1: availability of knowledge to engage in marketing activities	0.90	60.76
MC2: availability of skills to engage in marketing activities	0.93	91.90
MC3: availability of resources to engage in marketing activities	0.90	56.36
MC4: availability of knowledge to engage in marketing management	0.93	87.87
MC5: availability of skills to engage in marketing management	0.92	93.67
MC6: availability of resources to engage in marketing management	0.88	43.41
MC Application CR .94 AVE .74		
MC7: application of knowledge to engage in marketing activities	0.91	69.43
MC8: application of skills to engage in marketing activities	0.93	81.05
MC9: application of resources to engage in marketing activities	0.55	1.51
MC10: application of knowledge to engage in marketing management	0.93	92.07



Table 2 (continued)

Measurement model paths	Factor loading	t-value
<b>MC Application CR .94 AVE .74</b>		
MC11: application of skills to engage in marketing management	0.92	75.54
MC12: application of resources to engage in marketing management	0.89	47.09
<b>MC Utilization CR .92 AVE .63</b>		
MC13: utilization of incorporation of customers' needs into products	0.61	13.36
MC14: utilization of pricing programs	0.65	14.68
MC15: utilization of distribution system	0.77	27.24
MC16: utilization of marketing communication programs	0.82	41.50
MC17: utilization of market information management activities	0.86	47.50
MC18: utilization of market planning activities	0.87	46.48
MC19: utilization of marketing implementation activities	0.88	62.58
<b>Production-based capability .97 AVE .70</b>		
<b>PC Possession CR .97 AVE .91</b>		
PC1: availability of knowledge to engage in production activities	0.94	94.10
PC2: availability of skills to engage in production activities	0.96	184.22
PC3: availability of resources to engage in production activities	0.94	96.07
<b>PC Application CR .97 AVE .91</b>		
PC4: application of knowledge to engage in production activities	0.94	85.81
PC5: application of skills to engage in production activities	0.96	159.21
PC6: application of resources to engage in production activities	0.94	107.78
<b>PC Utilization CR .95 AVE .74</b>		
PC7: utilization of production system adaptability (product type)	0.79	25.09
PC8: utilization of production system adaptability (volume)	0.78	24.04
PC9: utilization of quality control	0.88	52.06
PC10: utilization of labor productivity	0.91	57.06
PC11: utilization of product volume productivity	0.90	54.99
PC12: utilization of production scheduling	0.87	37.92
<b>Value Offering CR .94 AVE .50</b>		
<b>Attribute Performance Value CR .91 AVE .67</b>		
VO1: ensuring customers' personal preferences are satisfied	0.80	30.37
VO2: delivering quality products and/or services.	0.76	22.66
VO3: delivering products and/or services that are exactly what customers want	0.84	36.33
VO4: delivering products and/or services that exceed customers' expectations	0.83	27.72
VO5: delivering products and/or services with innovative performance features.	0.83	38.93
<b>Pricing Value CR .87 AVE .57</b>		
VO6: pricing policies are fair to all customers	0.72	17.59
VO7: pricing policies are consistent and accurate	0.76	19.48
VO8: pricing policies are more beneficial for customers than our competitors.	0.80	29.81
VO9: pricing products according to how valuable customers perceive them to be.	0.71	18.59
VO10: delivering quality products and/or services which are priced right.	0.76	25.28

Table 2 (continued)

Measurement model paths	Factor loading	t-value
<b>Relationship Building CR .90 AVE .64</b>		
VO11: ensuring that customers have easy access to the business at any time	0.69	12.90
VO12: ensuring rapid response standards to deal with any customer enquiry.	0.86	40.37
VO13: having continuing relationships with customers	0.83	38.98
VO14: delivering add-on values (special offers, status recognition) to keep customers.	0.79	22.39
VO15: maintaining long term relationships with our customers.	0.80	30.11
<b>Co-creation Value CR .93 AVE .69</b>		
VO16: interacting with customers to serve them better	0.81	33.25
VO17: working together with customers to produce offerings that mobilize them.	0.86	49.86
VO18: interacting with customers to design offerings that meet their needs.	0.84	37.48
VO19: providing services for and in conjunction with customers.	0.88	65.44
VO20: co-opting customer involvement in providing services for them.	0.80	23.11
VO21: providing customers with supporting systems to help them get more value.	0.76	17.80

unexplained (i.e., AVE > 0.50). Therefore, in order to assess the constructs convergent validity, the squared multiple correlations from the factor analysis were initially examined. The computed results of the AVEs are shown in Table 2. All constructs and their second-order factors using both methods had an average variance explained (AVE) greater than or equal to 0.50, therefore meeting the recommended criteria for convergent validity.

We assessed convergent validity by computing composite measures for the constructs, and undertook an assessment of discriminant validity as recommended by Gaski and Nevin (1985) and O'Cass (2002). If the correlation between two composite constructs is not higher than their respective reliability estimates, then discriminant validity is argued to exist. Therefore, construct correlations were examined and compared to the reliabilities calculated in the preliminary data analysis. Correlations ranged from 0.12 to 0.68 and the reliabilities ranged from 0.87 to 0.97. The comparison of individual correlations between constructs revealed that no correlations were higher than their respective reliabilities, and as such, discriminant validity is argued to exist. Therefore, the measurement model provides an assessment of convergent and discriminant validity.

The assessment of nomological validity of the scale was also discussed indicating the theoretical background and which part of the extant literature containing the concepts of interest this study used and built on. Specifically, theoretical predictions in this study were closely and comprehensively tied to two domains of the extant marketing literature that were synthesized into this study. The first domain is the RBV literature with the emphasis on operant resources. The conceptualization and operationalization of operant resource-based capabilities (e.g. innovation-based, marketing-based, and production-based capabilities) were based upon the prior work in the RBV literature by Day (1994), Grant (1991), Morgan, Kaleka, and Katsikeas (2004),

Teece, Pisano, and Shuen (1997), Hunt and Morgan (1995), Fahy, Hooley, Greenley, and Cadogan (2006), Morgan, Clark, and Gooner (2002), Griffith and Harvey (2001), Weerawardena and O'Cass's (2004), Atuahene-Gima (1993), Vorhies et al. (1999), Vorhies and Morgan (2005), Cleveland et al. (1989) and Stanley et al. (1996). The second domain is value creation with the emphasis on value-in-offering perspective. Value offering was conceptualized and operationalized from prior work in the value-creation literature by Mittal and Sheth (2001) and Vargo and Lusch (2004). Importantly, given acceptable convergent and discriminant validities, the test of the structural model then constitutes a confirmatory assessment of nomological validity (Anderson & Gerbing, 1988).

### 5.2. Hypotheses testing

With respect to the predictive relevance of individual paths, the strength and significance of individual paths were computed, providing evidence for testing the proposed hypotheses. The beta coefficients,  $t$ -values, individual variance due-to-path, along with  $R^2$  for each endogenous construct are reported in Table 3 as indices for predictive relevance of individual paths. The predictive relevance of the structural model was assessed via the average variance accounted for (AVA). All indices were computed on the basis of 200 bootstrapping runs (Chatelin, Vinzi, & Tenenhaus, 2002).

The focus here is on the inner model results where the hypothesized relationships between the latent variables specified as H1 to H3. Evaluation of the relationships was via statistical results that attempt to explain the data, congruence with the hypotheses and precision. An examination of the results for the hypotheses was undertaken via  $r^2$ , average variance accounted for (AVA), and regression weights and bootstrap critical ratios ( $t$ -values) and path variance.

In Table 3, the AVA for the endogenous variables is of an acceptable magnitude in the inner model at 0.55. Given the strength of the paths associated with the constructs is acceptable a reasonable criterion for evaluating their significance is the absolute value of the product of the path coefficient and the appropriate correlation coefficient (Falk & Miller, 1992). This produces an index of the variance in an endogenous variable explained by that particular path, where 1.5% (.015) of the variance is the recommended cut off point for acceptable path variance magnitudes. The paths in Table 2 exceed this criterion

except for the production-based capability-value offering path ( $<0.015$ ). Defined as the ratio between estimate and standard errors, the critical values greater than 1.64 and 1.96 are statistically significant at 90% and 95%. As such, the bootstrap critical ratios are of magnitudes above the acceptable benchmarks for all the paths, except for production-based capability — value offering. Overall, the results indicate that H1 and H2 were supported, whereas H3 was not supported.

Given that the hypotheses were supported (except for H3), it was considered relevant to assess the magnitude of the relationships and test for any significant difference in the relationships of the constructs innovation-based capability (IC), marketing-based capability (MC), and production-based capability (PC) with VO (value offering). To examine differences we undertook to test the difference between the correlations of IC–VO and MC–VO, which tests the difference between two non-independent correlations. To undertake this examination a Hotelling–Williams test was undertaken, as it is recommended when comparing non-independent correlations that share a variable (Steiger, 1980). The results of the tests indicate that the difference between IC–VO and MC–VO was significant ( $t=1.65$ ). As such, while the effects of IC and MC on VO were significant there is also a difference of the magnitude of the relationships, with the IC–VO relationship being significantly stronger than the MC–VO relationship. Following the same procedure, a test of differences was also undertaken for the constructs IC–VO and PC–VO, and MC–VO and PC–VO. The results of this test indicate that there are significant differences in the magnitude of the correlations between these constructs [ $t$  (IC–VO & PC–VO)=9.04;  $t$  (MC–VO & PC–VO)=5.82]. These results combined with the tests of the hypotheses indicate that IC and MC appear to be more strongly related to superior value offering.

## 6. Discussion and implications

This study was conducted with the objective of shedding light on mechanisms by which firms seek to create value offerings for their customers through operant resource-based capabilities. Our findings support the previously untested central premise of a value-creation theory of the firm, where operant resource-based capabilities drive value offerings for customers.

As indicated in Hypothesis 1, *innovation-based capability* was hypothesized to have a positive effect on a firm's *value offering*. The findings support this hypothesis, thus demonstrating that from the firm's perspective, possessing higher levels of capabilities pertaining to technical and non-technical innovations enables firms to create superior *value offering* for the customer with new performance attributes, innovative experience environments for new co-creation experiences, and the like. Such superior tangible and intangible value offerings rest on distinctive capability in product and process innovations. Taking the view that superior value created for customers is analogous to superior performance, the findings are in line with the proposition that *innovation-based capability* enables firms to achieve superior performance as documented by

Table 3  
Partial least squares results for hypothesized relationships

Predicted variables	Predictor variables	Path weights	Variance due-to-path	Critical ratio
H1 value offering	Innovation-based capability	0.56	0.403	7.32
H2	Marketing-based capability	0.23	0.146	3.43
H3	Production-based capability	0.012	0.003	0.24
AVA	0.55			

Damanpour and Evan (1984), Kimberly and Evanisko (1981), Weerawardena and O'Cass (2004), and Weerawardena et al. (2006). Importantly, the findings support a theoretical proposition that innovation-based capability is one of main contributors to the creation of value for customers (e.g. Slater, 1997; Slater & Narver, 1994; Webster, 1994).

The findings also indicate that *marketing-based capability* has a significant and positive effect on a firm's *value offering*, thus supporting Hypothesis 2. Possessing superior *marketing-based capability* appears to enable a firm to communicate, position, and differentiate products and services against its competitors, thus enhancing its *value offering* for customers. Taking the view that superior value offering is aligned with superior performance, the findings are consistent with previous empirical studies addressing a positive relationship between marketing-based capability and firm performance as documented by Cooper and Kleinschmidt (1991), Vorhies and Morgan (2005), and Weerawardena and O'Cass (2004). The findings also validate a theoretical proposition by Bisp (1999), Slater (1997), Slater and Narver (1994), and Webster (1994) that marketing-based capability is a contributor to the creation of value for customers.

Unexpectedly, no evidence was found to support Hypothesis 3, which theorized that production-based capability has a positive effect on value offering. This suggests that production-based capability is not as important as innovation-based and marketing-based capabilities in creating the value offering from the firm's perception. The tests of the differences between the magnitude of the relationships between operant resource-based capabilities and value offering indicate that innovation-based capability and marketing-based capability appear to be more strongly related to superior value offering. To some extent, this finding corroborates a theoretical premise by Drucker (1954) that marketing and innovation are the two key functions to achieve a businesses primary purpose to create a customer, in which creating superior value offering for the customer is of paramount importance. Importantly, this theoretical premise was validated in the context of developing economy. In a transitional economy like Vietnam, marketing and innovation appear to be prudent choices for the firm to create superior value offerings for the customer.

Our study addresses a number of theoretical implications to the marketing literature. First, the findings highlight the importance of operant resource-based capabilities as sources of creating superior value offering for the customer. Specifically, the findings lend empirical support to an untested proposition in value-based competition theory suggested by Slater and Narver (1994) and Srivastava, Fahey, and Christensen (2001) that a value offering comes from successfully exploiting core capabilities such as innovation-based and marketing-based capabilities.

Second, in the context of capability-based competition theory, Stalk, Evans, and Shulman (1992, p.62) proposed the theoretical conjecture that "competitive success depends on transforming a company's key processes into strategic capabilities that consistently provide superior value to the customer". Our study took this theoretical conjecture and validated it, by showing that the value offering was found to be contingent on operant resource-based capabilities (innovation and marketing).

Third, our study provides new insights into the RBV literature by developing a parsimonious scale for measuring operant resource-based capabilities and assessing their differential effects on a firm's value offering. Specifically, our study advances the measurement of firm capabilities by explicating the concept of operant resource-based capability and positioning it within the service-centered dominant logic as suggested by Vargo and Lusch (2004), which articulates that value results from the beneficial application of operant resource (e.g. knowledge and skills). Despite the considerable literature on building firm capabilities, there exists a lack of a thorough theoretical understanding of capabilities (Day, 1994). Our work on capabilities extends that by Day (1994) in two ways. First, we clarified the differences between resources and capabilities in the context of service-dominant logic. Second, we elaborated that organizational processes are the hallmark of capabilities and they are aligned with coordinated patterns of behaviours. We clearly identified these processes/behaviours as possession, application, and utilization of resources which are implicitly reflected in the definition of capabilities by Day (1994, p.38) as "complex bundles of skills and accumulated knowledge, exercised through organizational processes, that enable firms to coordinate activities and make use of their assets." Specifically, we suggested that operant resource-based capabilities, conceptualizing as a Type I second-order construct model reflecting the possession, application, and full utilization of resources pertaining to functional activities (e.g. innovation, marketing, and production) in creating superior value offering for the customer. The findings validate the conceptualization of an operant resource-based capability as having three facets: possession of, application of, and full utilization of resources, thus providing a sound and reliable instrument for measuring capabilities to the emerging research on the service-centered dominant logic. This instrument will enable researchers to assess the extent to which operant resources (e.g. knowledge and skills) are embraced through a value-creation process.

Fourth, as far as the measurement instrument concerned, our study advances the notion of value by measuring value offering for the customer from the management perceptions as a "value-in-offering" perspective and linking this with operant resource-based capabilities. Value offerings through the eyes of the firm represent an essential outcome of the new dominant logic. Importantly, the findings were derived from the sound and reliable measure of value offering, thus demonstrating a strong reflective second-order model fit of value offering with observed data.

Fifth, our study also extends RBV theory, which focuses on the firm capabilities — firm performance linkage, by advocating a theoretical conjecture that firm success is the result of creating superior value offerings for customers via operant resource-based capabilities. The findings echo and extend the theoretical contention of Vargo and Lusch (2004), by indicating that value results from the beneficial application of operant resource (e.g. knowledge and skills). Importantly, while past research has considered firm capabilities (e.g. innovation-based, marketing-based, and production-based capabilities) as a primary predictors of firm performance (e.g. Cleveland et al.,

1989; Cooper & Kleinschmidt, 1991; Damanpour & Evan, 1984; Kimberly & Evanisko, 1981; Stanley et al., 1996; Vorhies & Morgan, 2005; Weerawardena & O'Cass, 2004), this study is among the first to examine their impact on the firm's value offering to the customer utilizing a broader conception of operant resource-based capabilities.

As such, new insights are provided into value creation, by empirically supporting a proclamation that firms seeking to maximize profits should increase value offerings created for customers by investing in and nurturing operant resources-based capabilities. Interestingly, it is suggested that the heterogeneity of operant resource-based capabilities might explain value offering differentials. Specifically, firms that strongly emphasize innovation-based capability as a dominant operant resource-based capability appear to create superior value for the customer compared to those emphasizing marketing-based capability as their dominant resource-based capability, while firms that strongly focus on production-based capability create little for the customer in terms of value creation.

From the perspective of the empirical setting, this study extends the extant literature by testing and validating the resource-based value-creation model utilizing data from Vietnam's emerging economy. The findings highlight the relevance of innovation and marketing in Vietnam's emerging economy, indicating that Vietnam's medium and large companies are compelled to be innovative and marketing-oriented in efforts to achieve superior business success. Within the context of Vietnam's market environment policies have been instituted to liberalize the economy. Taking such economic changes into account it appears that those with higher levels of innovation and marketing capabilities are reporting better performance than those with a lower level of innovation and marketing capabilities.

From managerial perspective, our study highlights important implications for managers in relation to the value-creation processes. The findings validated the positive effect of operant resource-based capabilities on value offering, thus offering managers a practical implication that in the quest for building proposed value in their offerings, firms should invest in developing operant resource-based capabilities in three key functional areas (e.g. innovation, marketing, and production). Theoretically, the profile of value offering that encompasses attribute performance, pricing value, relationship building, and co-creation value enables managers to understand what constitutes value and how to assess value in the context of the value-in-offering perspective.

Accordingly, managers should understand that while maximizing value offerings built in products and/or service as the primary indicator of business success. The proposed value offering scale constitutes an initial attempt towards developing a comprehensive instrument for assessing value created by the firm for customers. In summary, managers are provided through the findings of this study with three specific mechanisms of value-creation processes including (1) *innovation-based capability* → *value offering* (the innovation-based value creation); (2) *marketing-based capability* → *value offering* (the marketing-based value creation); and (3) *production-based capability* → *value offering* (the production-based value creation). Managers are advised that

although multiple mechanisms of value creation appear to complement each other or co-exist, one would be the dominant mechanism over the others. The findings provide managers with an important implication that the degree of value offering is highest with the innovation-based value-creation mechanism, second highest with the marketing-based value-creation mechanism, and lowest with production-based value-creation mechanism.

## 7. Limitations and future research directions

In moving forward with operant resource dominant logic research, we acknowledge a number of limitations with a view toward extending the present study. First, value offering pertaining to "values built in products by the firm" was chosen as the measure of value offering to the customer, which in a more general sense may include "values perceived by customers". Although value is created by the firm, it is determined in the marketplace by customers, who place a set of demands on it for delivering specific value, through various aspects of the offering. As the value offering is multifaceted, future researchers could explore implications of business orientations and operant resource-based capabilities on other aspects of value offering including "values perceived by customers", "values of brands to customers", and "value of customers to the firm". In particular, the use of brand equity and customer equity could help to extend the current findings and provide additional insights into the mechanisms of the value-creation process.

Second, future research may explore the role of value creation and strategic postures adopted by the firms. In response to an increasingly informed, sophisticated, and value-conscious global customer, firms should be committed to value-creation strategies, a strategic space that determines the nature and scope of a firm's value-creation mechanism. Successful firms today can be considered value-based enterprises converting operand and operant resources into a chain of outputs valued by the customer. The study is also limited as it was designed as a cross-sectional survey. Value creation can be a lengthy process and as such, use of longitudinal studies should be considered in the future research.

Regarding the empirical setting, this study was conducted in one cultural setting, Vietnam, thus the ability to generalize the findings beyond this empirical setting may be restricted. Although Vietnam shares many characteristics with other emerging economies (Hoskisson, Eden, Lau, & Wright, 2000), there might be some idiosyncrasies that limit the generalizability of the findings. As such, caution is warranted in attempting to generalize these findings to other settings (i.e., business environments). Replications of this research should be conducted in the future within different regions and different countries such as developed countries, where business culture and the way of doing business might be different from that of developing countries. Cross-national research is desired to test the differences in the contribution of operant resource-based capabilities across cultural contexts, thus indicating the extent to which the findings of this study can be generalized to other empirical settings. Replications of this study in different empirical settings should render proper qualifications to the findings of this study. It is also expected that the match between theory and empirical findings presented in this

study gives confidence that similar findings will be found in other empirical settings.

## 8. Conclusion

In this study, we attempted to validate an untested theoretical proposition suggested by Vargo and Lusch (2004) that “the service-centered view of marketing implies that marketing is a continuous series of social and economic processes that is largely focused on operant resources with which the firm is constantly striving to make better value propositions than its competitors”. Specifically, this study was premised on the view that to focus more on the value creation of the firm, we need to explore more broadly the notion of operant resource-based capabilities. Such capabilities include (but not limited to) innovation-, marketing- and production-based capabilities. It is such capability sets that contribute to the creation of value for customers. The research was also premised on the notion of a broader value-creation perspective of a value offering which is created from the “value-in-offering” perspective including attribute performance, pricing value, relationship building, and co-creation.

It is argued here that the focus here is in line with the argument that “for the past twenty years, there have been increasing calls for a paradigm shift in marketing” (Vargo & Lusch, 2004). During the same period, both academic and applied marketing have been witnessing shifts in focal concepts, if not in underlying models and logic. Examples of these shifts are (1) transaction to relationship, (2) manufactured quality to perceived quality, (3) products to experiences, (4) value-added to value co-creation, (5) value delivery to value propositions, (6) supply chains to value networks or constellations, and (7) goods to service, among others. Vargo and Lusch (2004) suggested that these shifts are converging on a new dominant logic, which has become known as the “service-dominant logic.” Others have suggested “solutions,” “relationship,” “network,” and “consumer culture,” sub-themes, if not alternative logics. Service-dominant logic will serve as the initial focus but divergent and alternative themes of convergence are also encouraged. Taking this as our lead, we focused on what appears to be a key issue in the pursuit of the new dominant logic, that being operant resource-based capabilities and value offering and their relationship. In this context, our findings support the previously untested central premise of value-creation theory of the firm, in which it is stated that operant resource-based capabilities drive value offering for customers. Therefore, in the evolution of a new dominant logic for marketing, the development and management of the correct operand and operant resources are critical to deliver higher order value offering. The logic here also extends to the movement away from the focus on the producer (manufacturer) to the neglect of the consumer, as well as a singular focus on the consumer to the neglect of the producer, to take the producers’ view of the consumer via the “value-in-use perspective”.

The logic put forward here based on the theoretical developments presented and findings is that operant resource-based capabilities are many and multifaceted in nature, as is the

value offering. Creating synergy between operant resource-based capabilities and value offering is vital in a firm’s movement toward a new dominant logic for marketing.

## References

- Aaker, D. A. (1991). *Managing Brand Equity*. New York: The Free Press.
- Admit, R., & Shoemaker, P. J. H. (1993). Strategic assets and organizational rents. *Strategic Management Journal*, 14(1), 33–46.
- Ambler, T. (2000). *Marketing and the Bottom Line*. London: Pearson Education.
- Ambler, T., Bhattacharya, C. B., Edell, J., Keller, K. N., Lemon, K. N., & Mittal, V. (2002). Relating brand and customer perspectives on marketing management. *Journal of Service Research*, 5(1), 13–25.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommendation two-step approach. *Psychological Bulletin*, 103(3), 411–423.
- Armstrong, J. S. (1991, September). Prediction of consumer behavior by experts and novices. *Journal of Consumer Research*, 18, 251–256.
- Atuahene-Gima, K. (1993). Determinants of inward technology licensing intentions: An empirical analysis of Australian engineering firms. *Journal of Product Innovation Management*, 10(3), 230–240.
- Balabanis, G., & Diamantopoulos, A. (2004). Domestic country bias, country-of-origin effects, and consumer ethnocentrism: A multidimensional unfolding approach. *Journal of the Academy of Marketing Science*, 32(1), 80–95.
- Ballantyne, D., & Varey, R. J. (2006). Introducing a dialogical orientation to the service-dominant logic of marketing. In R. F. Lusch & S.L. Vargo (Eds.), *The Service-Dominant Logic of Marketing: Dialog, Debate, and Directions*: M.E. Sharpe.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bisp, S. (1999). Barriers to increased market-oriented activity: What the literature suggests. *Journal of Market-Focused Management*, 4(1), 77–92.
- Brown, S. (1987). Drop and collect surveys: A neglected research technique? *Marketing Intelligence and Planning*, 5(1), 19–23.
- Cavusgil, T. (1994). Differences among exporting firms based on their degree of internationalization. *Journal of Business Science Research*, 12, 195–208.
- Chatelin, Y. M., Vinzi, V. E., & Tenenhaus, M. (2002). *State-of-art on PLS modeling through the available software*. Available at [http://www.hec.fr/hec/fr/professeurs\\_recherche/upload/cahiers/CR764.pdf](http://www.hec.fr/hec/fr/professeurs_recherche/upload/cahiers/CR764.pdf) (assessed August 2006).
- Christopher, M. (1996). From brand values to customer values. *Journal of Marketing Practice: Applied Marketing Science*, 2(1), 55–66.
- Churchill, G. A. (1979, February). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16, 64–73.
- Cleveland, G., Schroeder, R. G., & Anderson, J. C. (1989, Fall). A theory of production competence. *Decision Sciences*, 20, 655–668.
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386–405.
- Cooper, R. G., & Kleinschmidt, J. K. (1991). New product processes at leading industrial firms. *Industrial Marketing Management*, 20(2), 137–147.
- Coviello, N. E., Brodie, R. J., Danaher, P. J., & Wesley, J. J. (2002). How firms relate to their markets: An empirical examination of contemporary marketing practices. *Journal of Marketing*, 66, 33–46.
- Cross, J., Hartley, S., Rudelius, W., & Vassey, M. (2001). Sales force activities and marketing strategies in industrial firms: Relationships and implications. *The Journal of Personal Selling & Sales Management*, 21(3), 199–206.
- Damanpour, F., & Evan, W. M. (1984). Organizational innovation and performance: The problem of “organizational lag”. *Administrative Science Quarterly*, 29, 392–409.
- D’Amboise, G., & Muldowney, M. (1988). Management theory for small business: Attempts and requirements. *Academy of Management Review*, 13(2), 226–240.
- Day, G. S. (1994, October). The capabilities of market-driven organizations. *Journal of Marketing*, 58, 37–52.

- Dawes, P. L., Lee, D. Y., & Dowling, G. R. (1998). Information control and influence in emergent buying centers. *Journal of Marketing*, 62(3), 55–68.
- Diamantopoulos, A., & Winklhofer, H. M. (2001, May). Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research*, 38, 269–277.
- Dicksen, P. (1996, October). The static and dynamic mechanics of competitive theory. *Journal of Marketing*, 60, 102–106.
- DPI-HCMC. (2006). *HoChiMinh City Economic Overview*. Available at: <http://www.dpi.hochiminhcity.gov.vn/invest/html/ecol.html> (assessed August 2006).
- Drucker, P. (1954). *The Practice of Management*. New York: Harper and Row Publishers.
- Eggert, A., & Ulaga, W. (2002). Customer perceived value: A substitute for satisfaction in business markets? *Journal of Business and Industrial Marketing*, 17(2/3), 107–118.
- Fahy, J., Hooley, G., Greenley, G., & Cadogan, J. (2006). What is a marketing resource? A response to Gilbert, Golfetto and Zerbini. *Journal of Business Research*, 59, 152–154.
- Falk, R. F., & Miller, N. B. (1992). *A Primer for Soft Modeling*. Akron, OH: University of Akron Press.
- Farquhar, P. H. (1989). Managing brand equity. *Marketing Research: A Magazine of Management & Applications*, 1, 24–33.
- Fornell, C., & Bookstein, F. (1982). A comparative analysis of two structural equation models: LISREL and PLS applied to market data. In C. Fornell (Ed.), *A Second Generation of Multivariate Analysis* New York: Praeger.
- Fornell, C., & Larcker, D. F. (1981, February). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Gale, B. T. (1994). *Managing Customer Value: Creating Quality and Service that Customers Can See*. New York: The Free Press.
- Gaski, J. F., & Nevin, J. R. (1985, May). The differential effects of exercised and unexercised power sources in a marketing channel. *Journal of Marketing Research*, 22, 130–142.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114–135.
- Grant, R. M. (1996, July–August). Prospering in dynamically-competitive environments, organizational capability as knowledge integration. *Organizational Science*, 7, 375–387.
- Griffith, D. A., & Harvey, M. G. (2001). A resource perspective of global dynamic capabilities. *Journal of International Business Studies*, 32(3), 597–606.
- Hall, M., & Weiss, L. W. (1967). Firm size and profitability. *Review of Economics and Statistics*, 49(8), 319–331.
- Hawawini, G., Subramanian, V., & Verdin, P. (2003). Is performance driven by industry — Or firm-specific factors? A new look at the evidence. *Strategic Management Journal*, 24(1), 1–16.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills, CA: Sage Publication.
- Hoskisson, R. E., Eden, L., Lau, C. M., & Wright, M. (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249–267.
- Hunt, S. D. (2004, January). On the service-centered dominant logic for marketing. *Journal of Marketing*, 68, 21–22.
- Hunt, S. D., & Lambe, C. J. (2000). Marketing's contribution to business strategy: Market orientation, relationship marketing and resource-advantage theory. *International Journal of Management Reviews*, 2(1), 17–43.
- Hunt, S. D., & Morgan, R. M. (1995, April). The comparative advantage theory of competition. *Journal of Marketing*, 59, 1–15.
- Hurley, R. F., & Hult, G. T. M. (1998, July). Innovation, market orientation, and organizational learning: An integration and empirical examination. *Journal of Marketing*, 62, 42–54.
- Ibeh, K., & Brock, J. K. (2004). Conducting survey research among organizational populations in developing countries — Can the drop and collect technique make a difference. *International Journal of Market Research*, 46(3), 375–383.
- Ibeh, K., Brock, J. K., & Zhou, Y. J. (2004). The drop and collect survey among industrial populations: Theory and empirical evidence. *Industrial Marketing Management*, 33(2), 155–165.
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003, September). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal of Consumer Research*, 30, 199–218.
- Jaworski, B. J., & Kohli, A. K. (1993, July). Market orientation: Antecedents and consequences. *Journal of Marketing*, 57, 53–70.
- Johnson, J. L. (1999). Strategic integration in industrial distribution channels: Managing the interfirm relationship as a strategic asset. *Journal of the Academy of Marketing Science*, 27(1), 4–18.
- Keller, K. L. (2002). *Branding and Brand Equity*. Cambridge, MA: Marketing Science Institute.
- Keller, K. L., & Lehmann, D. L. (2001). *The Brand Value Chain: Linking Strategic and Financial Performance*. Tuck School Working Paper, Dartmouth College, Hanover, NH.
- Kim, C., & Mauborgne, R. (1997, January–February). Value innovation: The strategic logic of high growth. *Harvard Business Review*, 75, 103–112.
- Kimberly, J. R., & Evanisko, M. J. (1981). Organizational innovation: The influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovation. *Academy of Management Journal*, 24(4), 689–713.
- Kotabe, Srinivasan, S. S., & Aulakh, P. S. (2002). Multinationality and firm performance: The moderating role of R&D and marketing capabilities. *Journal of International Business Studies*, 33(1), 79–97.
- Kotler, P. (2000). *Marketing Management*. Upper Saddle River, NJ: Prentice Hall.
- Lichtenstein, D. R., Netemeyer, R. G., & Burton, S. (1990, July). Distinguishing coupon proneness from value consciousness: An acquisition–transaction utility theory perspective. *Journal of Marketing*, 54, 54–67.
- Low, G. S., & Lamb, C. W. (2000). The measurement and dimensionality of brand associations. *Journal of Product and Brand Management*, 9(6), 350–370.
- Lovelock, C. H., Stiff, R., Cullwick, D., & Kaufman, I. M. (1976, November). An evaluation of the effectiveness of drop-off questionnaire delivery. *Journal of Marketing Research*, 13, 358–364.
- Lusch, R. F., Vargo, S. L., & Malter, A. J. (2006). Marketing as service-exchange: Taking a leadership role in global marketing management. *Organizational Dynamics*, 35(3), 264–278.
- Lusch, R. F., Vargo, S. L., & O'Brien, M. (2007). Competing through service: Insights from service-dominant logic. *Journal of Retailing*, 83(1), 5–18.
- Malhotra, N., Hall, J., Shaw, M., & Oppenheim, P. (2006). *Marketing Research: An Applied Orientation*. Prentice Hall.
- Mason, E. S. (1939, March). Price and production policies of large-scale enterprises. *American Economic Review*, 29, 61–74.
- Matsuno, K., & Mentzer, J. T. (2000, October). The effects of strategy type on the market orientation–performance relationship. *Journal of Marketing*, 64, 1–16.
- Mittal, B., & Sheth, J. N. (2001). *ValueSpace: Winning the Battle for Market Leadership*. New York: McGraw-Hill.
- Moller, K. (2006). Roles of competences in creating customer value: A value-creation logic approach. *Industrial Marketing Management*, 35(8), 913–924.
- Morgan, N. A., Clark, B. H., & Gooner, R. (2002). Marketing productivity, marketing audits, and systems for marketing performance assessment: Integrating multiple perspectives. *Journal of Business Research*, 55, 363–375.
- Morgan, N. A., Kaleka, A., & Katsikeas, C. S. (2004, January). Antecedents of export venture performance: A theoretical model and empirical assessment. *Journal of Marketing*, 68, 90–108.
- Narver, J. C., & Slater, S. F. (1990, October). The effect of a market orientation on business profitability. *Journal of Marketing*, 54, 20–35.
- Nguyen, T. T. M., Jung, K., Lantz, G., & Loeb, S. G. (2003). An exploratory investigation into impulse buying behavior in a transitional economy: A study of urban consumers in Vietnam. *Journal of International Marketing*, 11(2), 13–35.
- Noble, C. H., Sinha, R. K., & Kumar, A. (2002, October). Market orientation and alternative strategic orientations: A longitudinal assessment of performance implications. *Journal of Marketing*, 66, 25–39.
- Obermiller, C., & Spangenberg, E. R. (1998). Development of a scale to measure consumer skepticism toward advertising. *Journal of Consumer Psychology*, 7(2), 159–186.
- O'Cass, A. (2002). Political advertising believability and information source value during elections. *Journal of Advertising*, 31(1), 63–74.

- O'Cass, A., & Pecotich, A. (2005). The dynamics of voter behaviour and influence processes in electoral markets: A consumer behaviour perspective. *Journal of Business Research*, 58(4), 406–413.
- Ohmae, K. (1988, November–December). Getting back to strategy. *Harvard Business Review*, 66, 149–156.
- Pearson, G. J. (1993). Business orientation: Cliché or substance? *Journal of Marketing Management*, 9(30), 233–243.
- Pelham, A. M. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of Small Business Management*, 38(1), 48–67.
- Peteraf, M. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179–191.
- P&G. (2006). *From always: high protection feminine pads*. Available at: [http://www.pg.com/science/pbi\\_always.jhtml;jsessionid=R2C0UZ0RMYKS5Q-FIAJIC0HWAVABHOLKG](http://www.pg.com/science/pbi_always.jhtml;jsessionid=R2C0UZ0RMYKS5Q-FIAJIC0HWAVABHOLKG) (assessed 4 May 2006).
- Porter, M. E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: The Free Press.
- Porter, M. E. (1983). The technological dimension of competitive strategy. In R. S. Rosenbloom (Ed.), *Research on Technological Innovation, Management and Policy* Greenwich, CT: JAI Press.
- Prahalad, C. K., & Hamel, G. (1990, May–June). The core competence of the corporation. *Harvard Business Review*, 68, 79–91.
- Prahalad, C. K., & Ramaswamy, V. (2000, January–February). Co-opting customer competence. *Harvard Business Review*, 78, 79–87.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 8(3), 5–14.
- Roth, K. (1992). International configuration and coordination archetypes for medium-sized firms in global industries. *Journal of International Business Studies*, 23, 533–549.
- Schultz, C. J., & Pecotich, A. (1997). Marketing and development in the transition economies of Southeast Asia: Policy explication, assessment, and implications. *Journal of Public Policy & Marketing*, 16(1), 55–68.
- Sheth, J. N., & Sisodia, R. S. (2003). The future of marketing. In P. J. Kitchen (Ed.), *The Future of Marketing: Critical 21st Century Perspectives* New York: Palgrave Macmillan.
- Slater, S. F. (1997). Developing a customer value-based theory of the firm. *Journal of the Academy of Marketing Science*, 25(2), 162–167.
- Slater, S. F., & Narver, J. C. (1994, March–April). Market orientation, customer value, and superior performance. *Business Horizons*, 37, 22–28.
- Smith, J. B., & Barclay, D. W. (1997). The effects of organizational differences and trust on the effectiveness of selling partner relationships. *Journal of Marketing*, 61(1), 3–21.
- Sony. (2006). *NAB 2002: innovation & emotion*. Available at <http://www.sonybiz.net/b2b/sony-business-es/657481574-sony-biz-espana-nab-2002-innovat-ion-emotionpresentation-by-sony-corp-president-coo-ando.html> (assessed May 2006).
- Srivastava, R. K., Fahey, L., & Christensen, H. K. (2001). The resource-based view and marketing: The role of market-based assets in gaining competitive advantage. *Journal of Management*, 27(6), 777–802.
- Stalk, G., Evans, P., & Shulman, L. E. (1992, March–April). Competing on capabilities: The new rules of corporate strategy. *Harvard Business Review*, 70, 57–69.
- Stanley, L., Fawcett, S. E., & Smith, S. R. (1996). Production capability in international operations: The impact of planning and information support. *Journal of Managerial Issues*, 8(4), 440–456.
- Steiger, J. (1980). Tests for comparing elements of a correlation matrix. *Psychological Bulletin*, 87, 245–251.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–535.
- Vargo, S. L., & Lusch, R. F. (2004, January). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68, 1–17.
- Vietnam Development Gateway. (2006). *Algerian newspaper: Vietnam, a new dragon in Asia*. Available at: <http://vietnamgateway.org/hotnews/index.php?id=99&cid=060621085950> (assessed 13 August 2006).
- Vorhies, D. W., Harker, M., & Rao, C. P. (1999). The capabilities and performance advantages of market-driven firms. *European Journal of Marketing*, 33(11/12), 1171–1202.
- Vorhies, D. W., & Morgan, N. A. (2005, January). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing*, 69, 80–94.
- Webster, F. E. (1994). Defining the new marketing concept. *Marketing Management*, 2(4), 22–31.
- Weerawardena, J., & O'Cass, A. (2004). Exploring the characteristics of the market-driven firms and antecedents to sustained competitive advantage. *Industrial Marketing Management*, 33(5), 419–428.
- Weerawardena, J., O'Cass, A., & Julian, C. (2006). Does industry matter? examining the role of industry structure and organization learning in innovation and brand performance. *Journal of Business Research*, 59(1), 37–45.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139–153.
- Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195–211.
- Zaichkowsky, J. L. (1985, December). Measuring the involvement construct. *Journal of Consumer Research*, 12, 341–352.
- Zeithaml, V. A. (1988, July). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52, 2–22.

**Liem Viet Ngo (PhD)** is a Lecturer in Marketing at Faculty of Business and Law, the University of Newcastle, Australia. His research interests include competitive strategies, business orientations, operant resource-based capabilities, customer value, and brand management. He has published in *Journal of Business Research* and *European Journal of Marketing*.

**Aron O'Cass (PhD)** is the Professor and Chair of Marketing at Faculty of Business and Law, the University of Newcastle. Professor O'Cass has published over 120 research papers on various issues in both consumer behaviour and strategic marketing. His publications appear in *Industrial Marketing Management*, *Journal of Business Research*, *European Journal of Marketing*, *Journal of Economic Psychology*, *Journal of Product and Brand Management*, *Journal of Vacation Marketing*, *Journal of Advertising*, *the Journal of Consumer Behaviour* and others.