BJM BRITISH JOURNAL OF MANAGEMENT
British Academy of Management
British Journal of Management, Vol. 22, 646–671 (2011)
DOI: 10.1111/j.1467-8551.2010.00694.x

Examining the Firm's Value Creation Process: A Managerial Perspective of the Firm's Value Offering Strategy and Performance

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The primary pursuit of any business is to understand what customers value and to create that value for them. While customers are the final arbiter of value, it is the firm's role to explore, interpret and deliver value based on what they believe customers are seeking. Based on this premise we adopt the firm's perspective on value creation to extend both Bowman and Ambrosini's theoretical framework and the work of DeSarbo, Jedidi and Sinha and focus on two issues. The first is the strategic emphasis firms place on the design and delivery of their value offering. The second is the extent the firm's value offering explains performance differentials at the customer-centric performance level. We present a conceptual model of how firms gain positional advantage via their value offering and the realized outcomes they achieve. We present two approaches to modelling the firm's value offering (type II and type IV models) and articulate the theoretical underpinnings and results for these models. Our results validate the conceptualization of the firm's value offering and suggest that creating superior value offerings enables firms to achieve superiority in customer-centric performance.

Introduction

The primary pursuit of business is to create and maintain value (cf. Conner, 1991; Sirmon, Hitt and Ireland, 2007). To this end, understanding what value is and how value is created has attracted significant attention over the past decade (Anderson, Narus and van Rossum, 2006; Bowman and Ambrosini, 2000, 2009; Lepak, Smith and Taylor, 2007; Mittal and Sheth, 2001; Möller, 2006; Payne and Holt, 2001; Sirmon, Hitt and Ireland, 2007; Smith and Colgate, 2007). Within this body of work, scholars indicate that value creation is a dynamic and multi-stage process involving different users of value[1] (Bowman and Ambrosini, 2000; Lepak, Smith and Taylor, 2007).

Value creation and its management are important to both the firm and the customer, and need to account for different points in time in the process (Bowman and Ambrosini, 2000; Ravald

The authors wish to acknowledge Professor Adrian Payne for reviewing an earlier version of the manuscript and the track editor Professor Veronique Ambrosini for her guidance during the review process.

[1]Different users of value are discussed in different terms in the value literature. For example, they are economic actors (firms, customers, resource suppliers, employees) in Bowman and Ambrosini (2000) and target of value (individuals, firms, consumers, government, society) in Lepak, Smith and Taylor (2007).

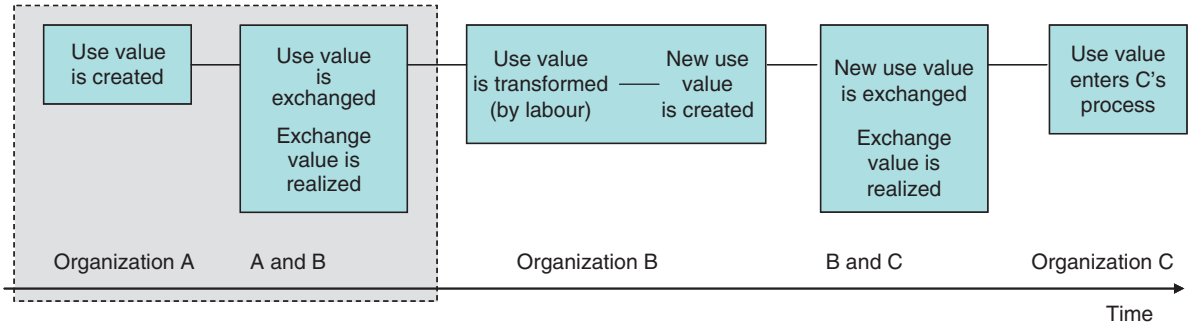

Figure 1. Bowman and Ambrosini's (2000) process of value creation

and Grönroos, 1996). Specifically, in the context of time value creation is impacted by the point in time at which one considers value, including the point of proposition, of purchase/exchange, of consumption/use, and of post-use where value is created, captured and evaluated by the firm and the customer. In addressing value creation and the points at which it is created, consumed and evaluated, two key streams of research have emerged. The first has primarily focused on explaining how value is created by the customer and the firm–customer interaction at the points of exchange, use and after use. Value creation is exogenously determined via *perceived use value* or *customer-perceived value* (Christopher, 1996; Zeithaml, 1988), *exchange value* (Bowman and Ambrosini, 2000) and *relationship value* (Payne and Holt, 2001; Ravald and Grönroos, 1996; Ulaga and Eggert, 2006). The second stream of research has addressed the importance of understanding how value is created by the firm at the *point of proposition* (Anderson, Narus and van Rossum, 2006; Bowman and Ambrosini, 2000; Lepak, Smith and Taylor, 2007; Mittal and Sheth, 2001; Ramirez, 1999; Sirmon, Hitt and Ireland, 2007; Slater, 1997; Verwaal, Commandeur and Verbeke, 2009).

Despite the growing body of knowledge on how value is created, an important gap exists in the literature in relation to the development of a conceptual framework that integrates the existing streams of research in a cohesive manner (Payne and Holt, 2001). Bowman and Ambrosini (2000), in a thought-provoking paper, propose a comprehensive, yet untested, theoretical framework of the value creation process as outlined in Figure 1, covering both streams of research on value creation. They outline that *use value* (which we refer to as the *pre-emptive strategic value offering*[2] and which is in effect the *firm's value offering*) is created at the *point of proposition* by the firm, while *perceived use value* is subjectively assessed by the customer and *exchange value*[3] is realized at the *point of exchange* via firm–customer interaction. In this paper, we extend Bowman and Ambrosini's (2000) theoretical framework by focusing on value creation at the *point of proposition* and addressing two key issues: first, the strategic emphasis firms place on the design and delivery of their value offering, and second, the extent to which the value offering contributes to the firm's customer-centric performance outcomes.

Our paper proceeds as follows. First, we outline the research gaps and the specific focus of this study; second we explain the theoretical underpinnings of our framework and develop specific hypotheses. Subsequently, we discuss the research design and data collection. Next, we present the analytical procedures and results. The final section discusses the theoretical contributions

[2]In this study, we extend Bowman and Ambrosini's (2000) work by arguing that *use value* created by the firm at the *point of proposition* as a *pre-emptive strategic value offering* is what the firm is seeking to deliver to the customer in its marketplace offering. In other words, value creation at the point of proposition is defined in terms of *pre-emptive strategic value offering*. We use the term *value offering* and *pre-emptive strategic value offering* interchangeably throughout the paper.

[3]According to Bowman and Ambrosini (2000), *perceived use value* is subjectively assessed by customers based on their perceptions of benefits of the offering, while *exchange value* is the amount paid by the customers to the firm for the *perceived use value*. Both *perceived use value* and *exchange value* are created at the *point of exchange*. Value creation at the point of exchange is defined in terms of *perceived use value* and *exchange value* (Lepak, Smith and Taylor, 2007).

and managerial implications of the study and outlines the limitations and future research directions on value creation and performance of firms.

Research gaps and research focus

The following discussion underlies the rationale for our focus on the strategic emphasis firms place on the design and delivery of value offerings and the extent the firm's value offering contributes to its customer-centric performance. First, from an academic point of view, understanding how value is created at the *point of proposition* is an important research topic that needs further theoretical and empirical attention (Lepak, Smith and Taylor, 2007; Sirmon, Hitt and Ireland, 2007). Specifically, from the firm's perspective, value creation begins by identifying what value to provide to customers (Payne and Frow, 2005; Sirmon, Hitt and Ireland, 2007). DeSarbo, Jedidi and Sinha (2001) state that creating superior value for the customer is a strategic issue that 'should be of interest to strategy researchers and practitioners' because of 'the positive economic consequences that it has for firms' (p. 847). The need for a strategic approach has been emphasized by Normann and Ramirez (1993, p. 65) who argue that 'strategy is the art of creating value', a point also raised by Payne and Holt (2001) who indicate that value creation is part of the strategic process.

Customer value analysis should be incorporated in devising firm strategy because the success of a firm's differentiation strategy depends on the extent to which firms identify what value customers are looking for in their value offerings (DeSarbo, Jedidi and Sinha, 2001). On this point, Bowman and Ambrosini's (2000) focus on perceived use value and exchange value at the *point of exchange* provides the impetus for arguing that the origins of value are the processes inside the firm that create the firm's value offering. This implies that at the *point of proposition*, firms need a *pre-emptive value offering strategy* to interpret and respond to what benefits or value customers are looking for in a marketplace offering. Importantly, firms that design and deliver a better value offering than competitors should obtain positional advantage.

From a managerial perspective, the strategic role of value creation at the *point of proposition* becomes essential in achieving superior positional advantage. This is because, when viewed through a managerial lens, understanding what constitutes the value offering provides managers with guidelines to developing, delivering and managing what is of value to customers which, as Bowman and Ambrosini (2000) identify, will manifest perceived use value and eventually help realize exchange value. The continued success of companies such as Google, Sony, Intel, 3M, FedEx, Merck, Caterpillar, UPS, SYSCO, Monsanto and Samsung is based on their ability to create superior value offerings for the customer (Gourville, 2006; Kumar, Scheer and Kotler, 2000; Mittal and Sheth, 2001). On this point, Anderson, Narus and van Rossum (2006) indicate that properly constructed value offerings force firms to focus on what their offerings are really worth to their customers.

Despite the importance of creating value for customers, most research on this issue is of a conceptual nature (e.g. Anderson, Narus and van Rossum, 2006), and from an empirical viewpoint value creation from the firm's perspective remains an under-researched topic (Sirmon, Hitt and Ireland, 2007), especially at the *point of proposition*. 'This area represents a key opportunity for the development of more sophisticated value measures' (Payne and Holt, 2001, p. 178) and theory building.

Second, understanding the extent to which the *value offering* contributes to firm performance, specifically customer-centric performance outcomes, is essential. Indeed, as our conceptualization of value offering rests on the theoretical premise that the value offering represents a firm's responsiveness to and interpretation of both explicit and latent customer needs, we propose that the effectiveness of a firm's pre-emptive value offering strategy resides at the customer-centric performance level. Importantly, while much of the strategic management literature has emphasized financial performance in the form of profit, sales and the like, we contend that customer-associated performance should be given a greater priority. Indeed, customers are one of the most important stakeholder groups and intangible assets for firms as they create revenue streams (Walsh *et al.*, 2009). More than half of the value of a firm is composed of intangible assets (Hogan *et al.*, 2002; Nagar and Rajan, 2005) and, as such, customer assets significantly influence financial

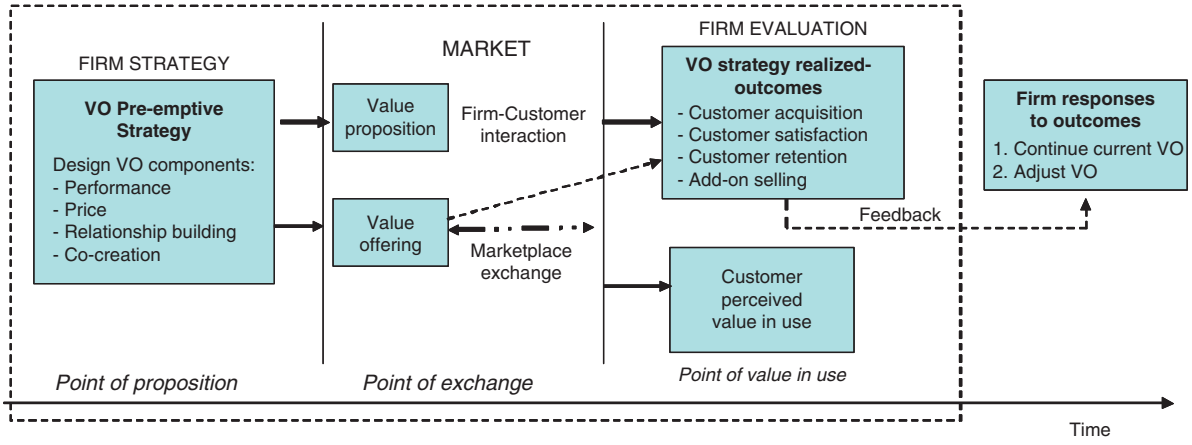

Figure 2. Gaining positional advantage via the firm's pre-emptive value offering (VO) strategy and realized outcomes

performance (e.g. Aksoy, Keiningham and Bejou, 2008; Fornell *et al*., 2006; Nagar and Rajan, 2005). Our focus on customer-centric performance reflects the fact that managers are increasingly turning their attention to linking their actions to the realizations of various non-financial performance indicators such as employee satisfaction, customer satisfaction, customer loyalty and the like (Dye, 2004; Ittner and Larcker, 2003; Kaplan and Norton, 2006; Nagar and Rajan, 2005). As such, the effectiveness of the firm's customer-focused (i.e. marketplace) efforts can be framed within the parameters of attracting customers and retaining them, as well as increasing add-on selling to them and also satisfying them (Blattberg, Getz and Thomas, 2001; Hanssens, Thorpe and Finkbeiner, 2008). Such outcomes are at the heart of customer-centric performance and are in our view manifestations of a firm's ability to design and deliver value to customers via the value offering.

Given the importance of value creation, especially use value at the point of proposition as a strategic input into the value creation process, it is puzzling that no previous study has sought to provide empirical support addressing what the value offering is, and its contribution to business success. Our study attempts to address these issues by developing a model of pre-emptive value offering strategy and realized performance outcomes (Figure 2). To this end we adopt positional advantage theory (Day and van den Bulte, 2002; Day and Wensley, 1988; Hult and Ketchen, 2001) to extend Bowman and Ambrosini's (2000) theoretical framework and the work of DeSarbo, Jedidi and Sinha (2001) at the point of proposition in the value creation process.

Our model theorizes that the value offering is a firm's interpretation of and responsiveness to customer requirements via the delivery of superior performance in its value offering mix of performance value, pricing value, relationship building value and co-creation value. Our study explains the nature of a firm's value offering, and examines the contribution it makes to customer-centric performance outcomes, which consist of customer acquisition, customer satisfaction, customer retention and add-on selling. The findings help to explain not only how value is created, but also the consequences of value creation. Specifically, the findings suggest that by creating superior value offerings firms can not only acquire potential customers and retain them, but also satisfy them and increase add-on selling to them in a superior way. Our study also advances the positional advantage theory by signifying the importance of the value offering as a firm's efforts to deal with how it will achieve positional advantage in response to customers' requirements at the strategic level.

Theory and hypotheses

The firm's pre-emptive value offering strategy and realized outcomes

According to DeSarbo, Jedidi and Sinha (2001, p. 845), 'understanding what buyers value within a given offering, creating value for them, and

then managing it over time have long been recognized as essential elements of every market-oriented firm's business strategy'. Our theoretical framework presented in Figure 2 outlines how we action the claim by DeSarbo, Jedidi and Sinha (2001) and simultaneously extend the value creation process model suggested by Bowman and Ambrosini (2000) and shown in Figure 1 (where we focus our attention on the shaded section). Specifically, we theorize that at the *point of proposition* firms need a pre-emptive value offering strategy to design the value offering (e.g. performance, price, relationship and co-creation) that customers are looking for in the marketplace. Based on the proposed value offering, a value proposition statement is formulated to communicate to the customer (e.g. DeSarbo, Jedidi and Sinha, 2001). At the *point of exchange*, the customer subjectively determines the value offering based on his/her perceptions of the benefits (value) embedded in the value offering (customer-perceived use value). When the firm's value offering matches the value being sought by the customer, the firm will achieve realized performance outcomes. This exchange value is realized by the firm in the form of customer acquisition, customer satisfaction, customer retention and add-on selling. Subsequently, firms will make decisions on whether to continue with their current value offering or modify the value offering accordingly based on assessments of performance outcomes.

While our theoretical framework is built upon the value creation process by Bowman and Ambrosini (2000), we focus exclusively on the firm side and focus our theoretical and empirical testing on firms' efforts in designing the value offering and its contribution to the realized customer-centric performance. Our focus falls in the context of type 1 (value creation) and type 2 (value realization) firm main activities as suggested by Bowman and Ambrosini (2007).

Designing the firm value offering at the point of proposition

Designing the value offering involves the firm's efforts in interpreting and responding to what value it perceives customers are looking for in a marketplace offering. By doing this better than competitors, the firm obtains a positional advantage, which results from the strength of its pre-emptive value offering created at the point of proposition (e.g. Slater, 1997; Woodruff, 1997). A closer look at the extant literature indicates that value creation from the firm perspective operates at the level of positional advantage and thus we embed our theory in the work of Day and van den Bulte (2002), Day and Wensley (1988) and Hult and Ketchen (2001). Indeed, Day and Wensley (1988, p. 2) argue that superior performance requires a firm to achieve 'positional superiority based on the provision of superior customer value'. Specifically, a key task for managers is to decide what positional advantages (components of a value offering at the point of proposition) distinguish their businesses in the marketplace (Day and Wensley, 1988; Hult and Ketchen, 2001). Proponents of product-centric advantage contend that positional advantage can be obtained via product performance superiority with innovative features, high quality and meeting customers' needs better (Kroll, Wright and Heiens, 1999; Mittal and Sheth, 2001). Relational-view scholars in turn contend that positional advantage can be built upon developing and nurturing relationships with customers (Dyer and Singh, 1998; Ravald and Grönroos, 1996). Supporting these views, Day and van den Bulte (2002) propose that positional advantage consists of two forms: product advantage (through superior functionality) and relational advantage (through delivering services and handling relations with customers). Importantly, firms should attempt to achieve a hybrid of both types of positional advantage (Coviello, Winklhofer and Hamilton, 2006; Day and van den Bulte, 2002).

Drawing upon the theoretical premise of the positional advantage theory, we argue that designing a value offering that matches customers' expectations provides the means for firms to achieve positional advantage. In particular, firms need to understand customer expectations and transform these expectations into a bundle of value deliverables in the forms of product advantage and relational advantage. Customers are seen as buying benefits, and to this end the total offering provides the mechanism to satisfy their needs (e.g. Vargo and Lusch, 2004). Essentially, customers may look for superior value in various aspects of the offering. They may look for superior performance (e.g. product quality, personal preferences of attributes, and innovative features) delivered at affordable and

reasonable prices (Mittal and Sheth, 2001). These performance- and pricing-based benefits if delivered in a value offering enable firms to achieve product advantage (Day and van den Bulte, 2002). In addition, customers also place their emphasis on the benefits of having close customer–firm relationships (Ravald and Grönroos, 1996; Ulaga and Eggert, 2006) and co-creation experiences that suit their needs (DeSarbo, Jedidi and Sinha, 2001; Payne, Storbacka and Frow, 2008; Prahalad and Ramaswamy, 2004; Ramirez, 1999). These relational-based benefits if delivered in a value offering enable firms to achieve relational advantage (Day and van den Bulte, 2002).

Building on the above discussion, we argue that both product- and relational-based benefits can be broadly grouped into four value categories including performance value and pricing value, and relationship building value and co-creation value, which enable the firm to achieve product advantage and relational advantage, respectively. We further argue that the value offering is a combination of what can be labelled 'what can we do for you' via performance value and pricing value and 'what can we do with you' via relationship building value and co-creation value (Bendapudi and Leone, 2003; Ravald and Grönroos, 1996). The value offering could be seen as a value carrier (Ravald and Grönroos, 1996) or a distribution mechanism (Vargo and Lusch, 2004) for benefits that customers seek in performance, pricing, relationship building and co-creation activities. As such, we propose that the value offering is a composite construct that captures a firm's efforts (1) to deliver superior performance that customers are seeking in the offering, (2) to exercise pricing practices that customers are willing and happy to pay for the offering, (3) to provide customers with hassle-free purchase experience and beneficial relationships, and (4) to interact with customers to co-create the consumption experience.

Performance value. Customers look for products and services that deliver performance superiority to meet their explicit and latent requirements (Afuah, 2002; Day and Wensley, 1988). Indeed, product attributes and attribute performance are of paramount importance within the context of the positional theory and allude to how customers think about value (Woodruff, 1997). For example, some customers are particularly concerned about product quality, as it is of critical relevance for delivering superior performance value for them (Afuah, 2002; Mittal and Sheth, 2001). Performance value, however, is more than just product quality, as customers also look for offerings which possess innovative features and well-matched personal preferences that contribute to their utility or pleasure (Afuah, 2002; Mittal and Sheth, 2001). As such, we conceptualize performance value as a firm's efforts to respond to customers' requirements by creating and delivering products and services with high quality, innovative performance features, which meet consumers' personal preferences.

Pricing value. Generally, customers not only look for performance superiority in offerings, but also affordable and reasonable prices (Mittal and Sheth, 2001). Surprisingly, pricing has largely been neglected by managers and received little attention by academics although the impact of price on business success is substantial (Hinterhuber, 2004). Indeed, pricing is an important means by which firms appropriate value through market-based exchange (Dutta, Zbaracki and Bergen, 2003; Hinterhuber, 2004).[4] Importantly, integrating aspects of pricing in the discussion of value (e.g. value creation and value appropriation) is as essential as aspects of performance value (Hinterhuber, 2004) and, as such, pricing[5] is an important component of the value offering created for the customer at the point of proposition within the context of positional advantage theory. Proponents of reference price theory suggest that, to compete successfully in a value-conscious environment, firms often seek to enhance customers' perceptions of the acquisition value relative to selling price (Mazumdar, Raj and Sinha, 2005; Priem, 2007). Customers with a reference price in mind look for offerings they are willing to pay (fair price and value price). Fair

[4]We thank an anonymous reviewer for this insightful comment.

[5]Proponents of the value-in-use perspective contend that customers perceive value based on their subjective judgement of the trade-off between 'what they get' (perceived benefits, quality or performance) and 'what they give' (prices or sacrifice) (Anderson and Narus, 1998; Priem, 2007; Ulaga and Eggert, 2006; Zeithaml, 1988). Prices or sacrifice are accounted in customer perceived value at the point of exchange (Bowman and Ambrosini, 2000).

price is a price that customers believe is fair and reasonable, while value price is the price that customers consider more than justified by the total benefits received (Hinterhuber, 2004; Mittal and Sheth, 2001). Therefore, we conceptualize pricing value as a firm's efforts to create and deliver to customers pricing levels (practices) that customers are willing to pay.

Relationship building value. Customers also look for benefits beyond those associated with features, functions and pricing. They increasingly demand a much more holistic offering including everything from easy access to the business at any time, to rapid response with any enquiry (Mittal and Sheth, 2001). The reason for purchasing may be simply because the customer has experienced a positive relationship with the company (Ravald and Grönroos, 1996). In an on-going relationship, the customer has a strong desire to keep in touch with the firm to obtain a hassle-free purchase and consumption experience (Anderson, Narus and van Rossum, 2006; Mittal and Sheth, 2001). As such, we argue that within the context of positional advantage theory, relational aspects are a constituent of the value offering in response to more sophisticated, better informed and more demanding customers (Ravald and Grönroos, 1996). Unlike the relationship value that rests on cost reduction in a buyer–seller relationship (Ulaga and Eggert, 2006), relationship building value offers customers easy access, rapid responses, add-on values (e.g. status recognition), and an on-going and sustainable relationship. Therefore, we conceptualize relationship building value as a firm's efforts to create and deliver to customers a hassle-free purchase experience and beneficial relationships.

Co-creation value. Strong relationships are not the sole aspect of value creation within the context of positional advantage theory. Customers may seek and find it beneficial to exercise their influence in various parts of the business system to co-create their own unique personalized purchase and consumption experiences (Prahalad and Ramaswamy, 2004). Value is not added into the offering by the firm in isolation, but can also be mutually co-created among firms and customers via working together. Co-creation is increasingly seen as a firm's response to customers' changing needs (Ramirez, 1999). The customer is a co-producer of value according to DeSarbo, Jedidi and Sinha (2001) and Ramirez (1999) and 'the goal is not to create value for customers but to mobilize customers to create their own value from the firm's various offerings' (Normann and Ramirez, 1993, p. 69) in conjunction with the firm. That is, co-creation value rests on the premise of firm–customer working together to create a consumption experience.

The notion of co-creation of value is increasingly gaining credence (DeSarbo, Jedidi and Sinha, 2001; Payne, Storbacka and Frow, 2008). This is because the customer is a co-creator of value (Vargo and Lusch, 2004) as there is no value created until the proposed value offering is consumed. Although customers produce value themselves independently, firms decide how they will engage with the customer and can provide support and assist the co-creation of value (Prahalad, 2004; Storbacka and Lehtinen, 2001). It is the firm who strategically creates and manages opportunities for the co-creation of value (Payne, Storbacka and Frow, 2008).

Management practice has witnessed the emergence of firm–customer interaction in which customers increasingly engage in co-production activities. Examples of co-creation activities include self-service (e.g. a transfer of labour to the customer by IKEA), co-creation experience (e.g. a theatre experience at Disney Theme Park), self-selects (e.g. interactive response system at Citibank), product co-design (e.g. Quiken financial software by Intuit) and so forth (Normann and Ramirez, 1993; Payne, Storbacka and Frow, 2008). As such, customers increasingly are being encouraged to actively collaborate with firms to co-create customized consumption experience for themselves (Bendapudi and Leone, 2003; Payne and Frow, 2005). Therefore, we conceptualize co-creation value as a firm's efforts to interact with customers to co-construct their consumption experience.

Configuring value offering at the higher order level

The firm's value offering is seen as the specific configuration of value components, driven by the strategic choice of what emphasis to place on each component in the creation of the value offering. As such, this is the strategic mix of components the firm seeks to emphasize in the

market and forms the basis of how it will seek to gain a positional advantage. For example, firm A may seek to offer and gain advantage via superior performance, high price, and less relationship and co-creation. Firm B, competing in the same market, may seek to offer and gain advantages via standard performance and high price, coupled with superior relationships and co-creation. In effect these components are configured by firms to deliver the value they think customers are looking for in a value offering and which differentiate them. They can be seen as the value offering mix. This point has been emphasized by Ngo and O'Cass (2009, p. 48) when they stated that: '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'. It also emphasizes the importance of the firm, and its interpretation and response to the market.

With respect to the construct's nature, at the higher order level we conceive the value offering as a composite construct consisting of four components: performance value, pricing value, relationship building value, and co-creation value, each (first-order constructs) representing aspects that contribute to the value offering (the second-order construct). This conceptualization of value offering as a composition of its parts requires a formative operationalization at the higher order level. Indeed, while acknowledging other potential components of the firm value offering a census of formative indicators is unnecessary and practically impossible (Diamantopoulos and Sigaw, 2006). Accordingly, we outline two possible theoretical configurations of the value offering construct using the arguments of Jarvis, MacKenzie and Podsakoff (2003) and Diamantopoulos and Sigaw (2006). We first articulate a type II higher order formative model with reflective first-order indicators in conceptualizing and operationalizing value offering (see Figure 3(a)). Second, we further articulate an alternative conceptualization of value offering as a type IV higher order formative model with formative first-order indicators (see Figure 3(b)). These choices are premised upon the model specification criteria suggested by Jarvis, MacKenzie and Podsakoff (2003).

Regarding the interchangeability criterion, the value offering is defined by the above four components, and we take the view they are not sampled from a common domain and do not necessarily have to be highly correlated with each other. The value offering is seen as the firm's configuration of the bundle of value components and can be equated with a strategic choice of what emphasis to place on each component in the creation of their value offering configuration. Therefore, it is argued here that performance value, pricing value, relationship value and co-creation value are determinants of the firm's strategic value offering. Thus, while other indicators are plausible, the focus here is on the present four because of their deep roots in past literature. Therefore, we hypothesize that:

H1a: Performance value is a positive first-order indicator of the higher order value offering.

H1b: Pricing value is a positive first-order indicator of the higher order value offering.

H1c: Relationship building value is a positive first-order indicator of the higher order value offering.

H1d: Co-creation value is a positive first-order indicator of the higher order value offering.

Configuring value offering at the first-order level

In addition to conceiving and operationalizing value offering at the higher order level, attention needs to be given to its first-order theoretical foundations. The distinction between type II and type IV is not always clear-cut (Chwelos, Benbasat and Dexter, 2001); our modelling reflects the best theoretical judgement at this stage of theory development of the value offering construct. Therefore, we articulate two models at the first-order level, one with all first-order indicators as reflective and one with all first-order indicators as formative. Thus, we are confident that the results are not an artefact of our modelling decisions.

Adopting the suggestions of Jarvis, MacKenzie and Podsakoff (2003), the potential conceptualization of value offering could theoretically be feasible as a type II or type IV second-order factor model. Specifically, as shown in Figure 3(a) the firm's value offering is conceived of as a second-order construct with four first-order components, each of which consists of multiple

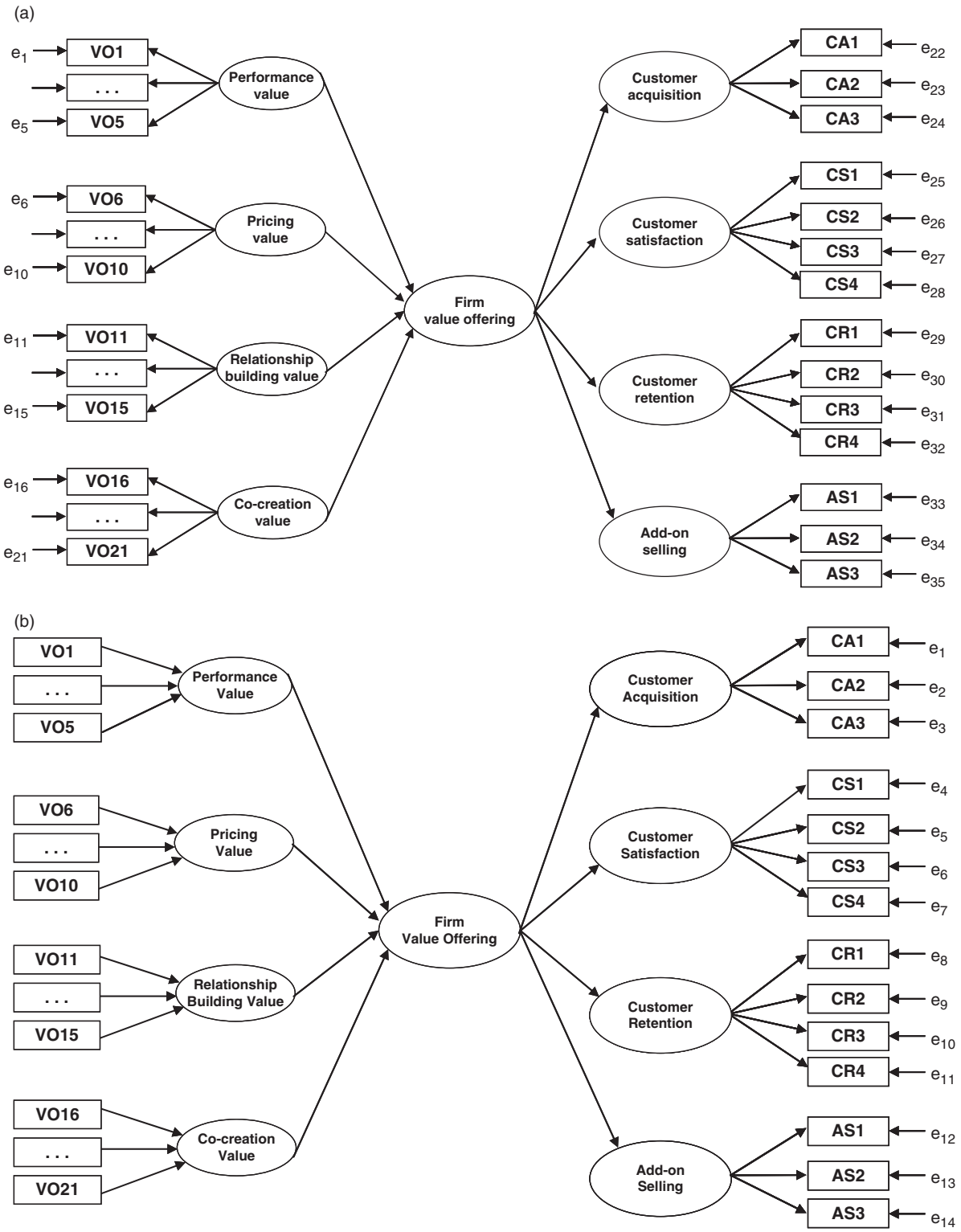

Figure 3. (a) Hypothesized relationships of higher order firm value offering as a type II and customer-centric performance outcome. (b) Hypothesized relationships of higher order firm value offering as a type IV and customer-centric performance outcome

reflective indicators. This approach sees the use of reflective indicators based on the theoretical premise that the observable indicators are reflections or representations of the four value offering components. This means that the components should theoretically be unidimensional and the items correlated. An increase in one indicator is accompanied by increases in the other indicators within the respective components (see Chin and Newsted, 1999; Jarvis, MacKenzie and Podsakoff, 2003).

Alternatively, it is theoretically conceivable to operationalize value offering as a type IV. Such an approach would see value offering as consisting of four dimensions as outlined above (see Figure 3(b)), each of which is composed of formative indicators. This conceptualization of value offering as a composition of its parts requires a formative operationalization (Diamantopoulos and Winklhofer, 2001; Jarvis, MacKenzie and Podsakoff, 2003). First, the direction of causality runs from the items to the first-order construct, such that more effective individual activities within for example relationship building value improve the overall state of relationship building value and its contribution to the firm's value offering. Second, certain value offering activities at the first-order level (e.g. relationship value) are independent of others (e.g. price and performance). Third, covariance is possible but not necessary between the first-order indicators of the value offering components; in other words, a change in one indicator does not necessarily mean a change in the others within each component. In terms of dimensionality, value offering represents a multidimensional construct with four components, each of which includes various facets of value offering that might indicate separate constructs, but that also represent integral parts of value offering at a more abstract level. Therefore, value offering becomes a function of the value offering components (performance, price, relationship and co-creation), which themselves consist of a series of formative indicators (single activities within the dimensions).

Pre-emptive value offering strategy and customer-centric performance

We argue that the effectiveness of a firm's pre-emptive value offering strategy is framed within the parameters of its ability to attract customers, retain them, increase add-on selling to them and satisfy them. Our focus on customer-centric performance is in line with a call for additional research on the effectiveness of firms' management efforts via customer-centric performance measures (Blattberg, Getz and Thomas, 2001; Hanssens, Thorpe and Finkbeiner, 2008; Ramani and Kumar, 2008). Shifting attention from explaining the firm's overall performance to explaining the existence of positional advantages at the level of business processes helps avoid the difficult appropriation problem of profits.

Specifically, we expect that when firms are better at creating and delivering superior value offerings they also achieve greater customer acquisition. Indeed, superior performance value (e.g. quality, innovative features) enables firms to attract new customers. For example, Kimberly-Clark has introduced to parents new Huggies trainer-pants with new performance features, which fit-like-real and are disposable, while still having all the absorbency of the conventional diaper. The superior performance value of Huggies enables Kimberly-Clark not only to extend customer life but also to gain potential customers (Pitt, Ewing and Berthon, 2000). In addition, fair and beneficial pricing practices are likely to result in early wins in attracting customers (Payne and Frow, 1997). Building positive relationships and delivering superior co-creation experience with existing customers also help generate positive word-of-mouth to potential customers (Danaher and Rust, 1996), thus increasing customer attraction. Therefore, we hypothesize that:

> *H2:* The firm's value offering has a significant effect on customer acquisition.

We theorize that a value offering positively contributes to customer satisfaction. Specifically, firms that provide customers with superior performance value (e.g. product quality, new features) are more likely to enhance customer satisfaction (Anderson and Sullivan, 1993). In addition, price also plays an important role in determining customer satisfaction (Anderson, Fornell and Lehmann, 1994). Fair and beneficial pricing practices enable firms to achieve a high level of customer satisfaction (Homburg, Koschate and Hoyer, 2005). Importantly, the relationship and interaction between firms and

customers can also result in greater customer satisfaction (Ramani and Kumar, 2008). As customers require experience with a value offering to determine how satisfied they are with it (Anderson, Fornell and Lehmann, 1994), co-creation practices enhance customer satisfaction. For example, by creating an effective customer–firm interaction via Dell's website, Dell Computers allows customers to customize their own computers and place orders online once they are satisfied with their specified packages (Pitt, Ewing and Berthon, 2000). Thus we hypothesize that:

H3: The firm's value offering has a significant effect on customer satisfaction.

We also argue that a value offering positively contributes to customer retention. For example, Apple with iPad has offered a variety of new performance features including 12 next-generation applications in a responsive high resolution multi-touch display that aims to bridge the gap between smart phones and laptops. The logic underlying these new performance value offerings is the expectation of extending customer life to keep them away from competitors with less effective performance values. Importantly, firms can also enhance customer retention via pricing value. Indeed, if customers experience unfair pricing, they might have uncomfortable feelings in making purchases, and prices can carry a psychological cost; thus there appears to be a higher possibility of switching to alternatives of competitors. 'Everyday fair pricing' at Zane's Cycles is a typical example of those who price fairly and beneficially to customers to minimize or eliminate the psychological cost, thus winning customer trust (Berry, 2001). Also having superior relationship building with customers necessitates their trustworthiness and reliance on the firm (Sheth and Parvatiyar, 1995), thus enhancing customer retention. Finally, co-creation practices also help to build the customer's bond with the firm and enhance customer retention (Coviello, Winklhofer and Hamilton, 2006). Therefore, we hypothesize that:

H4: The firm's value offering has a significant effect on customer retention.

We expect that a value offering positively contributes to add-on selling. By providing customers with superior performance value that meets the expressed and latent preferences of customers, firms can influence the add-on selling. Additionally, the appeal of fair and beneficial pricing is that it also enables firms to stimulate add-on selling. Rust, Zeithaml and Lemon (2000) argue that relationship building promotes the opportunities of repeat purchases of customers and even increases their spending. These customers are prospects of additional products and services (Rust and Chung, 2006). Moreover, firms that implement customer–firm interaction practices (e.g. via co-creation opportunities) may sell more to customers by providing relational offers (Zeithaml, 2000). Therefore, we hypothesize that:

H5: The firm's value offering has a significant effect on add-on selling.

Research design

Sample and data

The sampling frame consisted of 1000 Australian firms randomly selected from the IncNet Business Database, which comprises manufacturing and service firms operating in 20 different two-digit Standard Industrial Classification code industries (20, 30, 40), not only to provide a reasonably similar context for respondents but also to be broad enough for the results to be generalizable. A professional research company was responsible for selecting every fifth firm in an alphabetically sorted list from the IncNet Business Database until 1000 were identified. The research company then approached potential participants according to the guided sampling design and data collection procedure. First, the initial contact was made with the CEO of each firm requesting the firm's participation in the study. The CEOs were requested to provide the name of a senior executive within their firm to serve as the key informant. Second, the professional research company sent an email to the nominated executives inviting them to complete an online questionnaire and advising them of a username and password to gain access to the questionnaire. The online survey was a self-administered questionnaire enabling respondents to complete the survey at their convenience. A reminder email was sent to each nominated informant one week after the initial mailing. The online survey was completed by 301 respondents, for a response

rate of 30%. We followed a specific pre-screening of the respondents to ensure surveys were sent to those who were responsible for the development and management of the firm's marketplace offerings and customer performance monitoring (e.g. Bowman and Ambrosini, 1997).

The sample consisted of 24% of firms that served only domestic markets and 76% who served both domestic and international. Approximately 58% of the sample operated within the service/retail sector and 42% in the manufacturing sector. Specifically, business development services firms accounted for 17% of respondents, technical services 13.2%, retail 13%, education and recreation 8.6%, real estate and travel 5.7%, industrial manufacturing 19%, foods and healthcare goods 13.3%, information technology 6.6% and construction 3.6%. We used number of employees as a common criterion for the classification of firms (e.g. Damanpour, 2009; Papadakis and Barwise, 2002). The sample contained 46% small-sized firms (number of employees <20), 25% medium-sized firms (number of employees >20 and <200) and 29% large-sized firms (number of employees >200).

Measure development

We followed the scale development and testing procedures suggested by Hinkin (1995). We used literature in value and value creation (e.g. Afuah, 2002; Anderson, Narus and van Rossum, 2006; DeSarbo, Jedidi and Sinha, 2001; Mittal and Sheth, 2001; Prahalad and Ramaswamy, 2004; Ramirez, 1999; Ulaga and Eggert, 2006) and customer-centric performance (e.g. Blattberg, Getz and Thomas, 2001; Ramani and Kumar, 2008) as a guide to generate and refine the scales. An item pool of 55 items was deductively generated in which we sought multiple items that would tap the domains of the constructs.

To establish face validity, we provided six senior academic experts from different universities who possessed expertise in the area of customer value and value creation with the conceptual definitions of the constructs, corresponding items and a set of instructions for judging (cf. DeSarbo, Jedidi and Sinha, 2001). The expert judges were asked to rate each item as *not representative*, *somewhat representative* or *very representative* of the construct definition. After receiving the expert judges' feedback, decisions about which items to delete or keep were based on a three-stage procedure: a synthesis of the sum-score approach and the complete approach increasing in level of sophistication at each stage was adopted resulting in the inclusion of 35 items.

We pre-tested the draft survey with five senior executives (cf. DeSarbo, Jedidi and Sinha, 2001), who were asked to complete the draft questionnaire and discuss the items in the questionnaire for comprehension, logic and relevance. Specifically, they were asked whether they could think of more than one way to interpret what each item was asking and to report these interpretations. They were also asked to explain why they responded the way they did on each item. Having completed the in-depth interviews with executives, the development of the measures resulted in 35 refined items capturing value offering, customer satisfaction, customer acquisition, customer retention and add-on selling.

Value offering. The performance value component was measured via a five-item reflective measure capturing a firm's efforts to deliver the superior performance (e.g. quality, innovative features and personal preferences) that customers are seeking in the offering (sample item: 'Our business ensures that customers' personal preferences pertaining to products and/or services are satisfied'). The pricing value component was measured via a five-item reflective measure reflecting a firm's efforts to exercise pricing practices that customers are willing to pay for the offering (sample item: 'Our pricing policies are fair to all customers'). The relationship building value component was measured via a five-item reflective measure referring to a firm's efforts to provide customers with hassle-free purchase experience and beneficial relationships (sample item: 'Our business ensures that customers have easy access to the business at any time'). The co-creation value component was measured via a six-item measure capturing a firm's efforts to interact with customers to co-construct the consumption experience (sample item: 'Our business interacts with customers to serve them better'). We used a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). All items are relatively rated in comparison with major competitors of the firm.

Customer-centric performance. We measured customer acquisition using three items that represent a firm's efficiency in acquiring potential customers (sample item: 'Our business's acquisition margin [the profit on first purchase by customers] has been . . .'). We measured customer satisfaction using four items that indicate a firm's efficiency in satisfying customers via its marketing mix (sample item: 'Our business satisfies customers via products and services'). We used four items to measure customer retention as a firm's efficiency in retaining current customers (sample item: 'Our business's average customer retention rate has been . . .'). We used three items to assess a firm's efficiency in add-on selling (cross-selling) to customers (sample item: 'Our business's average margin on add-on selling [the profit on add-on selling] has been . . .'). We used a seven-point Likert scale ranging from 1 (very low) to 7 (very high) and 1 (strongly disagree) to 7 (strongly agree) to measure the customer-centric performance indicators. All items are relatively rated in comparison with major competitors of the firm. We measured firm financial performance via profitability and overall financial performance relative to stated objectives for the previous year. We also included industry type and firm size as controls for industry and firm heterogeneity. We dummy-coded firms as either manufacturing or service businesses. Firm size was the logarithm of the total number of full-time employees.

Analyses and results

Common method variance

We conducted two types of statistical analyses to test for common method bias. First, using Harmon's one-factor test (Podsakoff *et al.*, 2003) we found no single factor emerged, and the first factor accounted for 34.4% of the 70.4% explained variance. Second, we conducted a Lindell–Whitney marker variable test using a theoretically unrelated marker variable to adjust the correlations among the key constructs (Lindell and Whitney, 2001). Specifically, the adjusted correlations of the constructs of interest (r_A) are computed by partialling out the effect of the marker variable's correlation with the constructs (r_M) from their unadjusted correlations (r_U) (Lindell and Whitney, 2001; Malhotra, Kim and Patil, 2006). As the marker variable, we used market type (export versus domestic market), which had a non-significant correlation with the constructs of interest in this study ($r_M = 0.04$, $p = 0.55$). The mean change in correlations ($r_U - r_A$) when partialling out the effect of r_M was 0.02, providing no evidence of common method bias.

Measurement models

Type II model. We used PLS Graph 3.0 path modelling for estimation of the outer-measurement models for value offering (type II), customer acquisition, customer satisfaction, customer retention, add-on selling and the inner structural model. Partial least squares (PLS) path modelling allows for the conceptualization of a second-order measurement model through the repeated use of manifest indicators (e.g. Chin, Marcolin, and Newsted, 2003; Lohmöller, 1989; Tenenhaus *et al.*, 2005; Wetzels, Odekerken-Schröder and van Oppen, 2009; Wold, 1982). To approximate the second-order measurement model for firm value offering, we adopted this repeated indicator approach, which is widely used in the extant literature (e.g. Reimann, Schilke and Thomas, in press; Reinartz, Krafft and Hoyer, 2004; Ulaga and Eggert, 2006). As shown in Table 1, the examination of the model was undertaken via component loadings, bootstrap critical ratios (t-values), composite reliabilities (CRs) and average variance extracted (AVE). All the indicators in the measurement models had acceptable bootstrap critical ratios ($> \pm 1.96$) with loadings ranging from 0.65 to 0.92. All indicator loadings were greater than the recommended 0.5 (Hulland, 1999), except for value offering (VO) 9 and CR3 that demonstrated marginal but useable loadings of 0.41 and 0.47, indicating satisfactory explanatory power of the measurement model of value offering. In addition, all of the composite reliabilities, ranging from 0.80 to 0.93, fell within generally accepted limits (Nunnally, 1978). The AVEs for all first-order factors were uniformly acceptable ranging from 0.51 to 0.77. Further, the between blocks correlation coefficients of the residuals of the manifest variables were all relatively low suggesting that the blocks are distinctly defined. We also checked collinearity between the first-order components of value offering and found that the variance inflation factors (VIFs) range between 1.32 to 5.76, which is less than the benchmark of 10 (e.g. Bruhn,

Table 1. Measurement model results

Components and manifest variables	Type II model		Type IV model	
	Loading	CR	Weight	CR
Value offering[a]				
Performance value AVE 0.72, reliability 0.93				
VO1: ensuring customers' personal preferences are satisfied	0.82	27.55	0.36	5.91
VO2: delivering quality products and/or services	0.87	45.24	0.13	2.04
VO3: delivering products and/or services that are exactly what customers want	0.90	54.11	0.24	3.14
VO4: delivering products and/or services that exceed customers' expectations	0.88	52.09	0.22	3.56
VO5: delivering products and/or services with innovative performance features	0.77	25.60	0.23	4.29
Pricing value AVE 0.55, reliability 0.85				
VO6: pricing policies are fair to all customers	0.84	40.02	0.29	3.76
VO7: pricing policies are consistent and accurate	0.86	40.64	0.12	1.70
VO8: pricing policies are more beneficial for customers than our competitors	0.67	13.57	0.18	2.69
VO9: pricing products according to how valuable customers perceive them to be	0.41	5.50	0.15	2.47
VO10: delivering quality products and/or services which are priced right	0.83	34.19	0.55	7.59
Relationship building value AVE 0.67, reliability 0.91				
VO11: ensuring that customers have easy access to the business at any time	0.81	24.89	0.12	1.97
VO12: ensuring rapid response standards to deal with any customer enquiry	0.84	37.82	0.41	6.06
VO13: having continuing relationships with customers	0.90	67.48	0.26	3.61
VO14: delivering add-on values (special offers, status recognition) to keep customers	0.67	14.59	0.25	5.88
VO15: maintaining long-term relationships with our customers	0.86	42.14	0.17	2.88
Co-creation value AVE 0.70, reliability 0.93				
VO16: interacts with customers to serve them better	0.78	28.85	0.58	12.00
VO17: working together with customers to produce offerings that mobilize them	0.85	36.46	0.06	1.16
VO18: interacting with customers to design offerings that meet their needs	0.84	32.86	0.11	2.06
VO19: providing services for and in conjunction with customers	0.89	52.69	0.12	1.92
VO20: co-opting customer involvement in providing services for them	0.86	46.30	0.10	1.91
VO21: providing customers with supporting systems to help them get more value	0.80	28.01	0.20	4.48
Customer-centric performance indicators[b]				
Customer acquisition AVE 0.64, reliability 0.84				
CA1: acquisition margin (the profit on first purchase by customers)	0.83	24.40		
CA2: acquisition expenditure (costs of customer acquisition activities)	0.65	8.10		
CA3: customer acquisition equity (the difference between acquisition margin and acquisition expenditure)	0.89	37.92		
Customer satisfaction AVE 0.56, reliability: 0.83				
CS1: satisfying customers via products and services	0.78	35.03		
CS2: satisfying customers via pricing strategy	0.78	23.77		
CS3: satisfying customers' distribution channel strategy	0.75	16.81		
CS4: satisfying customers via marketing communication strategy	0.68	13.87		
Customer retention AVE 0.51, reliability 0.80				
CR1: average customer retention rate	0.81	26.47		
CR2: average margin on customer retention (the profit on customer retention)	0.81	22.23		
CR3: average expenditure on customer retention	0.47	5.00		
CR4: average customer retention equity (the difference between average margin and average expenditure on customer retention)	0.73	13.99		
Add-on selling AVE 0.77, reliability 0.91				
AS1: average margin on add-on selling (the profit on add-on selling)	0.90	52.27		
AS2: average expenditure on add-on selling	0.79	19.45		
AS3: average add-on selling equity (the difference between average margin and average expenditure on add-on selling)	0.92	79.29		

[a]Value offering is the pre-emptive strategic value creation at the point of proposition delivered to customers in the forms of performance value and pricing value (product advantage) and relationship building value and co-creation value (relational advantage).
[b]Customer acquisition, customer satisfaction, customer retention and add-on selling are first-order constructs.

Table 2. Discriminant validity and tests of differences between correlations

Constructs	1	2	3	4	5	6	7	8
Discriminant validity								
1. Performance value (PV)	**0.85** (0.93)							
2. Pricing value (PRV)	0.65**	**0.74** (0.85)						
3. Relationship building value (RV)	0.63**	0.58**	**0.82** (0.91)					
4. Co-creation value (CV)	0.56**	0.45**	0.62**	**0.84** (0.93)				
5. Customer acquisition (CA)	0.30**	0.35**	0.32**	0.25**	**0.80** (0.84)			
6. Customer satisfaction (CS)	0.46**	0.48**	0.50**	0.49**	0.25**	**0.75** (0.83)		
7. Customer retention (CR)	0.37**	0.30**	0.45**	0.38**	0.49**	0.25**	**0.71** (0.80)	
8. Add-on selling (AS)	0.31**	0.29**	0.33**	0.33**	0.48**	0.27**	0.59**	**0.88** (0.91)

Test of differences between correlations of PV–CA, PRV–CA, RV–CA and CV–CA: $t_{(PRV–CA\ vs\ RV–CA)}$ 0.61; $t_{(PRV–CA\ vs\ PV–CA)}$ 1.10; $t_{(PRV–CA\ vs\ CV–CA)}$ 1.75*; $t_{(RV–CA\ vs\ PV–CA)}$ 0.43; $t_{(RV–CA\ vs\ CV–CA)}$ 1.46; $t_{(PV–CA\ vs\ CV–CA)}$ 0.96.
Test of differences between correlations of PV–CS, PRV–CS, RV–CS and CV–CS: $t_{(RV–CS\ vs\ CV–CS)}$ 0.23; $t_{(RV–CS\ vs\ PRV–CS)}$ 0.44; $t_{(RV–CS\ vs\ PV–CS)}$ 0.94; $t_{(CV–CS\ vs\ PRV–CS)}$ 0.19; $t_{(CV–CS\ vs\ PV–CS)}$ 0.64; $t_{(PRV–CS\ vs\ PV–CS)}$ 0.48.
Test of differences between correlations of PV–CR, PRV–CR, RV–CR and CV–CR: $t_{(RV–CR\ vs\ CV–CR)}$ 1.55; $t_{(RV–CR\ vs\ PV–CR)}$ 1.80*; $t_{(RV–CR\ vs\ PRV–CR)}$ 3.14**; $t_{(CV–CR\ vs\ PV–CR)}$ 0.20; $t_{(CV–CR\ vs\ PRV–CR)}$ 1.42; $t_{(PV–CR\ vs\ PRV–CR)}$ 1.55.
Test of differences between correlations of PV–AS, PRV–AS, RV–AS and CV–AS: $t_{(RV–AS\ vs\ CV–AS)}$ 0.00; $t_{(RV–AS\ vs\ PV–AS)}$ 0.43; $t_{(RV–AS\ vs\ PRV–AS)}$ 0.80; $t_{(CV–AS\ vs\ PV–AS)}$ 0.39; $t_{(CV–AS\ vs\ PRV–AS)}$ 0.70; $t_{(PV–AS\ vs\ PRV–AS)}$ 0.44

Note: p** < 0.01. Diagonal entries are the square root of AVE and composite reliabilities are in parentheses; the other values are correlation coefficients.
t* > 1.65; t** > 1.96.

Georgi and Hadwich, 2008), thus indicating low levels of multicollinearity.

Convergent validity. We examined convergent validity to assess the adequacy of outer-measurement models by calculating composite reliability (Hulland, 1999). Results of the analysis for convergent validity confirmed that all outer-measurement models and their first-order factors were above the threshold of 0.70 (cf. Hulland, 1999). The composite reliabilities of all constructs and their first-order factors range from 0.80 to 0.93.

Discriminant validity. We assessed discriminant validity of the three constructs in two ways. First, Fornell and Larcker (1981) suggest that discriminant validity is exhibited if the square root of the AVE is greater than all corresponding correlations. As shown in Table 2, the square roots of the AVE values are consistently greater than the off-diagonal correlations. Second, O'Cass and Ngo (2007) suggest that satisfactory discriminant validity among constructs is obtained when the correlation between two composite constructs (the off-diagonal entries) is not higher than their respective reliability estimates (the in-parentheses diagonal entries). An examination of Table 2 demonstrates that no individual correlations (0.18 to 0.74) were higher than their respective reliabilities (0.80 to 0.94), indicating satisfactory discriminant validity.

Type IV model. Regarding the outer-measurement model of value offering (type IV), conventional assessments of individual item reliability and construct validity in terms of convergent and discriminant validity are irrelevant to composite variables with formative indicators (Diamantopoulos and Winklhofer, 2001; Hulland, 1999). Thus, reliability and construct validity of formative measurement models are meaningless when composite variables are formed as a linear sum of measurements. Only weights, which refer to the extent to which each indicator contributes to the formation of the construct, are used to assess formative outer-measurement models (Chin, 1998). In addition, bootstrap critical t-values are calculated to test the significance of the formative outer-measurement model.

As shown in Table 1, the examination of value offering was undertaken via weights and bootstrap critical ratios (t-values). With weights ranging from 0.06 to 0.58, all the formative indicators in the measurement model of value offering had acceptable bootstrap critical ratios ($> \pm 1.65$) with the exception of VO17, which demonstrated a marginal t-value of 1.16. Though VO17 was marginally significant, this indicator was retained in the analysis for theoretical purposes (Helm, 2005) because it is part of the broader conceptual framework described previously. We computed VIFs for each indicator to check for the possible presence of collinearity. All VIFs are less than 2.20, which strongly indicates no multicollinearity.

Hypothesis testing: type II model results

To test the proposed hypotheses we initially conducted the analysis via the type II model of value offering outlined above. We calculated and reported beta coefficients (β), t-values and path variance along with R^2 for each endogenous construct, as shown in Table 3. In Hypotheses 1a, 1b, 1c and 1d we predicted that the four higher

Table 3. Partial least squares results for theoretical type II and type IV models

Predictor variables	Predicted variables	Path weights	Variance due to path	R^2	Critical ratio
Results for theoretical type II model					
H1a Performance value	Value offering	0.31			19.70[b]
H1b Pricing value	Value offering	0.22			13.52[b]
H1c Relationship building value	Value offering	0.31			18.52[b]
H1d Co-creation value	Value offering	0.36			14.77[b]
H2 Value offering	Customer acquisition	0.37	0.13[a]	0.13	6.41[b]
H3	Customer satisfaction	0.69	0.46[a]	0.45	17.29[b]
H4	Customer retention	0.46	0.22[a]	0.22	8.43[b]
H5	Add-on selling	0.38	0.14[a]	0.14	8.16[b]
Controls					
Firm size (log)	Customer acquisition	0.07	0.00		1.12
	Customer satisfaction	0.11	0.01		2.61
	Customer retention	0.01	0.00		0.19
	Add-on selling	0.09	0.00		1.54
Industry type (1 = manufacturing)	Customer acquisition	0.05	0.00		0.98
	Customer satisfaction	0.01	0.00		0.25
	Customer retention	0.09	0.01		1.68
	Add-on selling	0.05	0.00		0.92
AVA				0.24	
Results for theoretical type IV model					
H1a Performance value	Value offering	0.31			14.36[b]
H1b Pricing value	Value offering	0.22			11.37[b]
H1c Relationship building value	Value offering	0.31			11.39[b]
H1d Co-creation value	Value offering	0.36			10.61[b]
H2 Value offering	Customer acquisition	0.37	0.13[a]	0.13	5.68[b]
H3	Customer satisfaction	0.69	0.46[a]	0.45	16.66[b]
H4	Customer retention	0.46	0.22[a]	0.22	7.55[b]
H5	Add-on selling	0.38	0.14[a]	0.14	6.45[b]
Controls					
Firm size (log)	Customer acquisition	0.07	0.00		1.09
	Customer satisfaction	0.11	0.01		2.38
	Customer retention	0.01	0.00		0.19
	Add-on selling	0.09	0.00		1.55
Industry type (1 = manufacturing)	Customer acquisition	0.05	0.00		1.05
	Customer satisfaction	0.01	0.00		0.26
	Customer retention	0.09	0.01		2.19
	Add-on selling	0.05	0.00		0.96
AVA				0.24	

$p < 0.01$.
[a]Exceeds minimum acceptable level 0.015.
[b]Exceeds minimum acceptable level 1.96.

order components would be significant determinants of value offering. The results indicate that each of the four components make a significant contribution to the value offering with statistically significant βs (t-values >1.96, $p<0.01$), supporting Hypotheses 1a, 1b, 1c and 1d. We also found that value offering was positively associated with customer acquisition with $\beta = 0.37$ (t-value = 6.41, $p<0.01$; path variance 0.13), in support of Hypothesis 2. Hypothesis 3, which predicted that superior value offering would lead to superior customer satisfaction, was supported with $\beta = 0.69$ (t-value = 17.29, $p<0.01$; path variance 0.45). In support of Hypothesis 4, value offering was positively associated with customer retention with $\beta = 0.46$ (t-value = 8.43, $p<0.01$; path variance 0.22). In support of Hypothesis 5, value offering was positively associated with add-on selling with $\beta = 0.38$ (t-value = 8.16, $p<0.01$; path variance 0.14).

We assessed the predictive relevance of the structural model by examining the average variance accounted for (AVA) following Fornell and Bookstein's (1982) criterion. As presented in Table 3, the AVA values are of acceptable magnitudes for the inner-structural model at 0.23. Given that acceptable indices for predictive relevance of the structural model are higher than the recommended 0.10, the predictive power of individual paths and the structural models are satisfactory, supporting the theoretical soundness of the conceptual model. Table 3 also shows that the individual R^2 values, ranging from 0.13 to 0.45, are of acceptable magnitude (e.g. Cohen, 1988). However, we argue that a possibility to raise the low R^2 values of customer acquisition (0.13), customer retention (0.22) and add-on selling (0.14) could be to test additional relationships between customer-centric performance indicators.[6] For example, in line with existing literature, we tested whether customer satisfaction has a positive impact on customer retention and add-on selling. However, we found no empirical evidence to support these relationships. In addition, as shown in Table 3, firm size and industry type do not have any significant effect on customer-centric performance.

[6]We thank an anonymous reviewer for this suggestion.

Hypothesis testing: type IV model results

We repeated the above calculations and hypothesis testing with the type IV model of value offering as shown in Table 3. Interestingly, we obtained similar findings to those of the type II model of value offering in terms of beta coefficients, individual path variance, individual R^2 and the AVA. Similar to the results for the type II model, we found that firm size and industry type have no effect on customer-centric performance.

Model fit

We used the goodness-of-fit index (GoF) to assess the fit of both outer-measurement and inner-structural models to the data simultaneously (see Tenenhaus *et al.*, 2005). In comparison to covariance-based structural equation modelling techniques (e.g. LISREL), PLS does not optimize any global scalar function, leading to lack of an index for global validation of the model as in LISREL with the χ^2-based indices. The GoF represents an operational solution to this problem and acts as a global fit index for validating a PLS-computed model (Tenenhaus *et al.*, 2005). The GoF is computed by taking the square root of the product of the average communality of all constructs and the average R^2 value of the endogenous constructs as $\text{GoF} = (\overline{\text{communality}} \times \overline{R^2})^{1/2}$. The computed GoF for the model was 0.37 indicating good fit of the model to the data (see Schepers, Martin and de Ruyter, 2005).

Further, we also computed the Q^2 predictive relevance value (via the predictive sample reuse technique) as developed by Stone (1974). Q^2 represents a measure of how well the observed values are reconstructed by the model and the model parameters. Using this procedure and with omissions distances between 5 and 15 the Q^2 value for the model was 0.45, indicating excellent predictive relevance of the model.

Post hoc analyses using type II model configuration

To examine differences related to the contribution of individual components of the value offering to customer-centric performance indicators, we conducted a test of the differences across the correlations between performance value, pricing value, relationship building value and

co-creation value, and customer acquisition, customer satisfaction, customer retention and add-on selling, using the type II model. The results of the analysis, conducted via a Hotelling–Williams test when comparing non-independent correlations that share a variable (Steiger, 1980), are shown in Table 2. In particular, we found that pricing value is better than co-creation value in attracting customers ($t_{PRV–CA \text{ vs } CV–CA}$ 1.75) and relationship value is better than performance value ($t_{RV–CR \text{ vs } PV–CR}$ 1.80) and pricing value ($t_{RV–CR \text{ vs } PV–CR}$ 3.14) in retaining customers.

We also conducted additional analyses to examine the contribution of individual customer-centric performance indicators (i.e. customer acquisition, customer retention, customer satisfaction and add-on selling) to the financial performance (i.e. profitability and overall financial performance) of firms. Our additional analysis helps to further enrich knowledge of performance differentials between firms by placing value offering and customer-centric performance within a nomological network that includes specific financial outcomes also. We found that customer retention ($\beta = 0.24$, t-value = 3.51, $p < 0.01$), customer satisfaction ($\beta = 0.13$, t-value = 2.29, $p < 0.01$) and add-on selling ($\beta = 0.12$, t-value = 1.92, $p < 0.05$) significantly influence firm financial performance. Interestingly, we found no empirical evidence to support the relationship between customer acquisition and firm financial performance ($\beta = 0.10$, t-value = 1.24, $p > 0.05$).

Discussion

Despite the strong appeal of value creation in the extant management literature, little research attention has been devoted to understanding how firms strategically create and manage their value offering and the corresponding consequences of creating and delivering superior value (Lepak, Smith and Taylor, 2007). Building on key contributions to the value creation literature (cf. Anderson, Narus and van Rossum, 2006; Bowman and Ambrosini, 2000, 2007; DeSarbo, Jedidi and Sinha, 2001; Mittal and Sheth, 2001; Prahalad and Ramaswamy, 2004; Ramirez, 1999; Sirmon, Hitt and Ireland, 2007; Ulaga and Eggert, 2006), we first focused on the emphasis firms place on the strategic design and delivery of their value offering, and second, explored the extent the firm's value offering contributes to its customer-centric performance outcomes. Our study is premised on the need to explore value creation and delivery from the firm's perspective, and as such underscores the need to adopt a managerial lens (an implementation view of value creation) to understand the nature of the firm value offering. Drawing on the positional advantage theory, we argue that understanding what customers expect and transforming these expectations into a bundle of value deliverables is central to achieving product-centric advantage and relationship-centric advantage. In particular, we propose a theory of the firm value offering that contributes to a better understanding of what value is to be created and delivered to customers (value offering) and explains what value is to be received by the firm (customer-centric performance) in return, i.e. the realized outcomes from the firm's delivery of value to customers. To this end, we offer a specific conceptualization and measurement of firm value offering and demonstrate its contribution to customer-centric performance (customer acquisition, satisfaction, retention and add-on selling). In this context, we developed and tested two models (type II and type IV) which achieved sound results. This being said we contend here that the type II model appears to be more suitable for theoretical and empirical work on value creation.

Theoretical contributions

We examine the contributions of our study in the context of, first, recent theoretical papers by Bowman and Ambrosini (2000, 2007) and DeSarbo, Jedidi and Sinha (2001), and second, Lepak, Smith and Taylor (2007), Priem (2007) and Sirmon, Hitt and Ireland (2007) that capture the state of value creation research. The primary pursuit of business is value creation, which begins by providing value to the customer (the ultimate arbiter of value), obtaining positional advantage, and creating wealth for the firm (Priem, 2007; Sirmon, Hitt and Ireland, 2007). Our contribution is in specifying key components of value creation management practice including performance value and pricing value (product advantage) and relationship building value and co-creation value (relationship advantage) that a firm and its managers must strategically develop and adopt to carry out its primary pursuit (value

creation). The four components of the value offering that we offer are valid conceptualizations and measures specifying where a firm is headed in its efforts to strategically develop and manage its value creation for customers. In particular, we specify the value offering as a firm's responsiveness to, and interpretation of, customer requirements via delivering superior performance that customers are seeking in the offering (performance value), exercising pricing practices that customers are willing to pay for the offering (pricing value), providing customers with hassle-free purchase experience and beneficial relationships (relationship building value) and interacting with customers to co-construct the consumption experience (co-creation value). Our study offers deeper theoretical and empirical insights into the nature of a firm's value offering, and the contribution it makes to specific performance outcomes.

Lepak, Smith and Taylor (2007) point out that it is essential to understand not only how value is created, but also the consequences of value creation. Through our study, we establish that a value offering leads to superior customer-centric performance. Specifically, our findings suggest that by creating superior value offerings firms can not only acquire potential customers and retain them, but also satisfy them and increase add-on selling to them in a superior way. This provides empirical support for Sirmon, Hitt and Ireland's (2007) proposition that creating superior value for customers enables firms to enjoy a competitive advantage and increased owner wealth (e.g. customer-centric performance indicators that guarantee the firm's long-term profit margin). Our study advances the positional advantage theory (Day and van den Bulte, 2002; Day and Wensley, 1988; Hult and Ketchen, 2001) by identifying the importance of the value offering as a firm's efforts to deal with 'how it will achieve positional advantage in response to customers' requirements' at the strategic level.

Our study also contributes to the theoretical and empirical advancement of value creation modelling, especially in the context of type II and type IV models of value. The question of the epistemic nature of firm value offering needs to be discussed concerning the type II and type IV models we articulated that have implications for theory and measurement. For example, in a major departure from much of the extant literature our type IV model articulates measures based on a set of indicators that form an index of a firm's value offering characteristics as perceived by firm managers who were the respondents. Accepting that value offering is a formative structure implies that the process illustrated within our theory needs to be followed when conceptualizing the measure within the type IV approach. Consequently, the measure portrayed here might prove a (formative) alternative to our type II value offering approach where we reflectively modelled value offering. The issue of taking different approaches to measure value offering at this stage of theory development has been discussed very rarely in the literature. Except for Ngo and O'Cass (2009) little theory or measurement attention has been attempted and these issues merit further investigation into the epistemic structure of the measures. In this sense, it becomes evident that researchers need to be aware of the conceptual differences between the measurement approaches and clearly identify their value offering (or value creation in general) model's epistemic nature. The paper's aim was to contribute to a better understanding of value offering from the firm's perspective and articulate the possible conceptualizations that help to build better theory and measures of value offering. This is an important step aiming at efficient value offering management.

In terms of methodology, this study demonstrates an appropriate usage of the guidelines for constructing both reflective and formative indices (Chin and Newsted, 1999; Diamantopoulos and Sigaw, 2006) to operationalized second-order constructs (specifically, types II and IV with formative dimensions and indicators, according to Jarvis, MacKenzie and Podsakoff, 2003). Existing applications of these guidelines mostly involve unidimensional constructs; in contrast, this research defines and operationalizes value offering as a multidimensional, higher order construct.

When using a trade-off model as the basis for conceptualizing value, researchers should question the use of reflective components, because a formative conceptualization of value is also a defensible conceptualization. The fundamental essence of any construct, whether reflective or formative, determines how to model the construct's structure (Jarvis, MacKenzie and Podsakoff, 2003); however, researchers may not have thoroughly considered the essence of value, because they appear to have ignored several

issues. First, a reflective approach suggests that each component is (or should be) highly correlated with the others, because changes in the underlying construct cause changes in the components, but the benefit and sacrifice components that previous research identifies generally are not highly correlated. Second, a reflective approach indicates that the various components are not independent but rather result from the underlying construct; in contrast, previous research generally posits that benefit and sacrifice components cause (or contribute to) value rather than vice versa. Third, a reflective approach suggests that the components are interchangeable; clearly some are not. In light of these issues, compared with previous studies, this study more closely captures the essence of value by constructing a formative index of the construct as outlined within the type II and type IV models. While both models are supported we contend that the type II model is conceptually and empirically superior and should form the basis of future research.

Importantly, allocation of resources also might vary according to the conceptualizations of value offering. A formative model enables a manager to determine which value components are the most influential in influencing customer value perceptions and, in turn, to allocate resources accordingly, depending on the relative weight of each in value perceptions. That is, our model can provide an indication of the relative importance of each component, so managers do not jeopardize customers' value perceptions by mistakenly focusing on relatively less important value components.

Further, our study suggests that customer acquisition does not significantly contribute to firm financial performance (profit and overall financial performance). Instead, customer retention, customer satisfaction and add-on selling are key contributors of firms' profitability. This finding supports a theoretical proclamation that retaining customers, satisfying them and increasing the activity of add-on selling is more profitable than acquiring customers (Payne and Holt, 2001). It may show that acquiring customers is an expensive activity and this reduces profit.

Managerial implications

The results have several implications for managers, including guidelines for designing and implementing firms' pre-emptive value offering strategy, such that firms that want to realize value offering should conduct analysis, define strategies and plan actions. For example, within the context of a firm's pre-emptive strategic value offering, firms need to carry out systematic customer value analysis by examining customers' sought after (desired) value offering components in the marketplace. Furthermore, they must address value offering in a strategic process, such that value plays an important role in their targeting, segmentation and strategy definition. Customer-directed actions should be oriented toward creating and delivery of a superior value offering based on assessment of the market's requirements, with a careful consideration of the potential contributions of specific components of the value offering for the management for value. If firms structure their value offering according to these activities, they have a good starting point for implementing a successful value offering strategy.

Given increasing concerns regarding value creation and its management (Bowman and Ambrosini, 2000, 2007; Lepak, Smith and Taylor, 2007; Priem, 2007; Sirmon, Hitt and Ireland, 2007), our theoretical model and its measurement can serve as a practical means through which firms provide customers with what they are looking for in the marketplace and develop a positional advantage based on the strategic configuration of a value offering. That is, the value offering provides a template, in which firm efforts should be placed on creating and delivering performance value, pricing value, relationship building value and co-creation value to differing degrees. For example, firms that focus solely on developing superior performance value (e.g. digital imaging) without considering aspects of pricing value, such as Polaroid, cannot effectively compete against competitors (Dutta, Zbaracki and Bergen, 2003). Importantly, firms such as IKEA, Dell, Nike, Unilever and Google increasingly place emphasis on creating relationship and co-creation opportunities as strategic options for creating value (Needham, 2008; Payne, Storbacka and Frow, 2008; Ramaswamy, 2008; Thomke and von Hippel, 2002). Our model may help managers not only in the evaluation of their existing value offerings, but also in the development of future value offerings that need to be tailored to what value customers are seeking in their offering. Managers need to be cognizant that simply differentiating their value offerings on

a product-centric basis (e.g. performance value and pricing value) is not enough; they need to place emphasis on developing the relational-centric form of value offerings (e.g. relationship building value and co-creation value). Managers should conduct their value-based management practice via both 'what can we do for you' the customer and 'what can we do with you' the customer. Although there might be other potential components of value offering, our findings suggest that managers could place emphasis on value offering as a summative formation that is explained by these four key components.

Our findings may also help managers understand how the value offering enables firms to achieve superior customer-centric performance. For example, the managerial benefits of the development and delivery of a superior value offering are that the firm is better able (1) to attract potential customers, (2) to satisfy existing customers, (3) to retain the most valuable customers at a superior level and (4) to sell more to its customers. Thus, firms that focus on the four components of a value offering do in fact exhibit superior business success.

Importantly, our findings indicate that the contribution of the four key components of the value offering appear equal across customer satisfaction and add-on selling. While pricing value is better than co-creation value in attracting customers, relationship value is better than performance value and pricing value in retaining customers. These findings provide some possible guidance to managers in that exercising pricing practices that customers are willing to pay for the offering is of paramount importance in attracting new customers. In addition, providing customers with hassle-free purchase experience and beneficial relationships helps managers keep their customers better than focusing on performance value and pricing value. Our findings also suggest that, to achieve superiority in financial performance, managers should place their efforts on retaining customers, satisfying them and selling more to them. Importantly, retaining existing customers is critical as the cost of customer retention is much less than the cost of acquiring new customers.

Limitations and future research directions

The findings of this study should be set within the context of specific limitations, which are related to the unit of analysis, measurement approach and data collection. First, as an initial (pioneering) study, our study places emphasis on examining the contribution of value offering to customer-centric performance from the firm perspective. The value constructs from the value-in-use perspective (e.g. customer-perceived value and brand equity) were not taken into consideration. Thus, the empirical findings of this study are limited within the context of the views of one 'player' (the firm) in the firm–customer dyad and the value creation process and delivery process. This can also lead to possible bias on several measures of the value offering construct that are subjectively perceived by the individual customer (e.g. pricing value items such as VO6, VO8 and VO9). Further research is needed to understand the relationship between value creation and customer-centric performance within the firm–customer interface. As the value offering is determined in the marketplace by customers, who place a set of demands on the firm for delivering specific value(s), the use of customer-perceived value and brand equity could help to extend the current findings and provide additional insights into the value creation process. However, the focus here was initially on the firm (manager) perception, in that managers receive and interpret market information that guides their perceptions of what value to strategically build into their offerings.

Second, while focusing on value offering and customer-centric performance as key variables in the value creation process, we also acknowledge that effectively and efficiently managing resources and capabilities within a firm's given environmental context influences its value creation and value appropriation (e.g. Sirmon, Hitt and Ireland, 2007) capabilities. Future research may include additional customer and competitor variables[7] such as degree of competitive intensity, customer bargaining power, customer empowerment and economic conditions in our existing model as moderating effects. In addition, future studies may benefit from examining the impact of value creation and value appropriation capabilities (e.g. Dutta, Zbaracki and Bergen, 2003; Mizik and Jacobson, 2003) in explaining how firms create and capture value (Ambrosini and Bowman, 2009).

Third, potential biases of the measurement approach are acknowledged as no single mea-

[7]We thank an anonymous reviewer for this suggestion.

surement approach is errorless. Like many studies in the management literature, this study relied on self-reporting by a key senior executive in each surveyed firm. As such, the interpretation of the findings is limited. Although the use of subjective measures is common in the management literature, this measurement approach is limited in measuring customer-centric performance. Future research might need to validate our theoretical framework by using both subjective and objective measurement approaches to measure the perceptual and market value of offerings to the customer and the perceptual and market value of customers to the firm. Specifically, future research in this area needs to use objective performance indicators.

Concerning data collection, the findings of the study must be interpreted in view of certain limitations pertaining to key informants, the empirical setting, sampling frame and the survey design. With respect to key informants, single-informant reports were used to measure each of theoretical constructs in the study. This may create the potential for same-source bias. In particular, while the selected senior executive within the firm is likely to be in the best position to answer questions about value offering and customer-centric performance, other senior executives within the firm may have different perceptions on these questions. However, this practice is quite common in management research where executives are chosen as prime and reliable respondents. In addition, the in-depth interviews with marketing and management senior executives conducted in the measurement development stage gave confidence to the valid representation of executives' views on the firm's value creation process. However, multiple-informant reports might be of consideration to further facilitate the generalizability of the findings in this study in future research. Furthermore, as value creation can be a lengthy process, longitudinal research could be considered in future research.

Conclusion

Overall, our study provides new insights into a theory of value creation set within the domain of the firm value offering and customer-centric performance. Our theoretical model (Figure 2) builds on extant literature and focuses on the preemptive value offering strategy and realized outcomes for the firm at the level of customer-centric performance. These aspects are placed within the firm placing its value offering into the marketplace and the firm–customer interactions in the context of exchange. Our theory further enhances value creation literature by developing a parsimonious scale for measuring value offering and examining the linkage between value offering and customer-centric performance. Our study is responsive to the call for greater understanding of value creation and its consequences by Bowman and Ambrosini (2000, 2007), Lepak, Smith and Taylor (2007), Priem (2007) and Sirmon, Hitt and Ireland (2007). We hope we have provided some further insight and contributions to the ongoing discussion of value creation and drawn attention to the issue of the value offering and customer-centric performance challenges facing both theorists and practitioners. Further, we hope through our study that the value offering is now recognized as a key driver of competitive advantage, acting as a driver of performance differentials between firms in any given market. This should draw attention to the strategic role of the value creation process as a key element in strategic management to achieve superior performance.

In the pursuit of opening up opportunities for the firm we contend here that potential opportunities revolve around creating and delivering value at superior levels to competitors. On this point, Teece (2007) argues that to identify and shape opportunities firms must constantly scan, search and explore. This activity not only involves investment in research activity and the probing and re-probing of customer needs; it also involves understanding latent demand, the structural evolution of industries and markets, and likely supplier and competitor responses. While these points are critical they miss an important aspect of firm activity – to make decisions about what to offer the market in terms of value and what emphasis gets placed on managing value creation and delivery of the various components of value.

Finally, we hope this study proves useful to the value creation literature by extending Bowman and Ambrosini's (2000) study, through our taking the firm's viewpoint in explicating the components of value offering, a viewpoint that is different from customer-based value-related concepts that dominate the literature. While acknowledging the customer as the ultimate arbiter of value, we

believe that a value offering reflects a firm's efforts in interpreting and responding to what value customers are looking for in a marketplace offering. Our implementation view of value creation is in line with emerging research in the resource-based view of the firm, where the action component is taken into consideration. Thus, we hope our study through its focus on exploring the firm's preemptive value offering strategy and realized outcomes through a managerial lens highlights in this domain that the firm value offering can make a major contribution and we need not only to explore customer perceptions of value but more rigorously pursue the firm's perspective.

References

Afuah, A. (2002). 'Mapping technological capabilities into product markets and competitive advantage: the case of cholesterol drugs', *Strategic Management Journal*, **23**, pp. 171–179.

Aksoy, L., T. L. Keiningham and D. Bejou (2008). 'Objectives of customer centric approaches in relationship marketing', *Journal of Relationship Marketing*, **6**, pp. 1–19.

Ambrosini, V. and C. Bowman (2009). 'The impact of causal ambiguity on competitive advantage and rent appropriation', *British Journal of Management*, Doi: 10.1111/j.1467-8551.2009.00644.x.

Anderson, E. W. and M. W. Sullivan (1993). 'The antecedents and consequences of customer satisfaction for firms', *Marketing Science*, **12**, pp. 125–143.

Anderson, E. W., C. Fornell and D. R. Lehmann (1994). 'Customer satisfaction, market share, and profitability: findings from Sweden', *Journal of Marketing*, **58**, pp. 53–67.

Anderson, J. C. and J. A. Narus (1998). 'Business marketing: understand what customers value', *Harvard Business Review*, **84**, pp. 53–61.

Anderson, J. C., J. A. Narus and W. van Rossum (2006). 'Customer value propositions in business markets', *Harvard Business Review*, **84**, pp. 90–99.

Bendapudi, N. and R. P. Leone (2003). 'Psychological implications of customer participation in co-production', *Journal of Marketing*, **67**, pp. 14–28.

Berry, L. L. (2001). 'Generous companies serve the best', *Marketing Management*, **10**, pp. 12–14.

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

Bowman, C. and V. Ambrosini (1997). 'Perceptions of strategic priorities, consensus and firm performance', *Journal of Management Studies*, **34**, pp. 241–259.

Bowman, C. and V. Ambrosini (2000). 'Value creation versus value capture: towards a coherent definition of value in strategy', *British Journal of Management*, **11**, pp. 1–15.

Bowman, C. and V. Ambrosini (2007). 'Firm value creation and levels of strategy', *Management Decision*, **45**, pp. 360–371.

Bowman, C. and V. Ambrosini (2009). 'What are dynamic capabilities and are they a useful construct in strategic management?', *International Journal of Management Reviews*, **11**, pp. 29–49.

Bruhn, M., D. Georgi and K. Hadwich (2008). 'Customer equity management as formative second-order construct', *Journal of Business Research*, **61**, pp. 12–92.

Chin, W. W. (1998). 'Commentary: issues and opinion on structural equation modeling', *MIS Quarterly*, **22**, pp. vii–xvi.

Chin, W. W. and P. R. Newsted (1999). 'Structural equation modeling analysis with small samples using partial least squares'. In R. Hoyle (ed.), *Statistical Strategies for Small Sample Research*, pp. 307–341. Thousand Oaks, CA: Sage.

Chin, W. W., B. L. Marcolin and P. R. Newsted (2003). 'A partial least squares latent variable modeling approach for measuring interaction effects: results from a Monte Carlo simulation study and an electronic mail emotion/adoption study', *Information Systems Research*, **14**, pp. 189–217.

Christopher, M. (1996). 'From brand values to customer values', *Journal of Marketing Practice: Applied Marketing Science*, **2**, pp. 55–66.

Chwelos, P., I. Benbasat and A. S. Dexter (2001). 'Research report: Empirical test of an EDI adoption model', *Information Systems Research*, **12**, pp. 304–321.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Sciences*. New York: Lawrence Erlbaum.

Conner, K. R. (1991). 'A historical comparison of resource-based theory and five schools of thought within industrial organization economics: do we have a new theory of the firm?', *Journal of Management*, **17**, pp. 121–154.

Coviello, N., H. Winklhofer and K. Hamilton (2006). 'Marketing practices and performance of small service firms: an examination in the tourism accommodation sector', *Journal of Service Research*, **9**, pp. 38–58.

Damanpour, F. (2009). 'An integration of research findings of effects of firm size and market competition on product and process innovations', *British Journal of Management*, Doi: 10.1111/j.1467-8551.2009.00628.x.

Danaher, P. J. and R. T. Rust (1996). 'Indirect financial benefits from service quality', *Quality Management Journal*, **3**, pp. 63–75.

Day, G. S. and C. van den Bulte (2002) 'Superiority in customer relationship management: consequences for competitive advantage and performance', Working Paper 02–123, Marketing Science Institute.

Day, G. and R. Wensley (1988). 'Assessing advantage: a framework for diagnosing competitive superiority', *Journal of Marketing*, **52**, pp. 1–20.

DeSarbo, W. S., K. Jedidi and I. Sinha (2001). 'Customer value analysis in a heterogeneous market', *Strategic Management Journal*, **22**, pp. 845–857.

Diamantopoulos, A. and J. Sigaw (2006). 'Formative versus reflective indicators in organizational measure development: a comparison and empirical illustration', *British Journal of Management*, **17**, pp. 263–282.

Diamantopoulos, A. and H. M. Winklhofer (2001). 'Index construction with formative indicators: an alternative to scale development', *Journal of Marketing Research*, **38**, pp. 269–278.

Dutta, S., M. J. Zbaracki and M. Bergen (2003). 'Pricing process as a capability: a resource-based perspective', *Strategic Management Journal*, **24**, pp. 615–630.

Dye, R. A. (2004). 'Strategy selection and performance measurement choice when profit drivers are uncertain', *Management Science*, **50**, pp. 1624–1638.

Dyer, J. H. and H. Singh (1998). 'The relational view: cooperative strategy and sources of interorganizational competitive advantage', *Academy of Management Review*, **23**, pp. 660–679.

Fornell, C. and F. L. Bookstein (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*, pp. 289–324. New York: Praeger.

Fornell, C. and D. F. Larcker (1981). 'Evaluating structural equation models with unobservable variables and measurement error', *Journal of Marketing Research*, **18**, pp. 39–50.

Fornell, C., S. Mithas, F. V. Morgeson and M. S. Krishnan (2006). 'Customer satisfaction and stock prices: high returns, low risk', *Journal of Marketing*, **70**, pp. 3–14.

Gourville, J. T. (2006). 'Eager sellers and stony buyers: understanding the psychology of new-product adoption', *Harvard Business Review*, **84**, pp. 98–106.

Hanssens, D. M., D. Thorpe and C. Finkbeiner (2008). 'Marketing when customer equity matters', *Harvard Business Review*, **86**, pp. 117–123.

Helm, S. (2005). 'Designing a formative measure for corporate reputation', *Corporate Reputation Review*, **8**, pp. 95–109.

Hinkin, T. R. (1995). 'A review of scale development practices in the study of organization', *Journal of Management*, **21**, pp. 967–988.

Hinterhuber, A. (2004). 'Towards value-based pricing – an integrative framework for decision making', *Industrial Marketing Management*, **33**, pp. 765–778.

Hogan, J. E., D. R. Lehmann, M. Merino, R. K. Srivastava and P. C. Verhoef (2002). 'Linking customer assets to financial performance', *Journal of Service Research*, **5**, pp. 26–38.

Homburg, C., N. Koschate and W. D. Hoyer (2005). 'Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to pay', *Journal of Marketing*, **69**, pp. 84–96.

Hulland, J. (1999). 'Use of partial least squares (PLS) in strategic management research: a review of four recent studies', *Strategic Management Journal*, **20**, pp. 195–204.

Hult, G. T. M. and D. J. Ketchen (2001). 'Does market orientation matter?: a test of the relationship between positional advantage and performance', *Strategic Management Journal*, **22**, pp. 899–906.

Ittner, C. and D. Larcker (2003). 'Coming up short on nonfinancial performance measurement', *Harvard Business Review*, **81**, pp. 88–95.

Jarvis, C. B., S. B. MacKenzie and P. M. Podsakoff (2003). 'A critical review of construct indicators and measurement model misspecification in marketing and consumer research', *Journal of Consumer Research*, **30**, pp. 199–218.

Kaplan, R. S. and D. P. Norton (2006). 'How to implement a new strategy without disrupting your organization', *Harvard Business Review*, **84**, pp. 100–109.

Kroll, M., P. Wright and R. A. Heiens (1999). 'The contribution of product quality to competitive advantage: impacts on systematic variance and unexplained variance in returns', *Strategic Management Journal*, **20**, pp. 375–384.

Kumar, N., L. Scheer and P. Kotler (2000). 'From market driven to market driving', *European Management Journal*, **18**, pp. 129–142.

Lepak, P. D., K. G. Smith and S. M. Taylor (2007). 'Introduction to special topic forum: Value creation and value capture: a multilevel perspective', *Academy of Management Review*, **32**, pp. 180–194.

Lindell, M. K. and D. J. Whitney (2001). 'Accounting for common method variance in cross-sectional research designs', *Journal of Applied Psychology*, **86**, pp. 114–121.

Lohmöller, J.-B. (1989). *Latent Variable Path Modeling with Partial Least Squares*. New York: Springer.

Malhotra, N. K., S. S. Kim and A. Patil (2006). 'Common method variance in IS research: a comparison of alternative approaches and a reanalysis of past research', *Management Science*, **52**, pp. 1865–1883.

Mazumdar, T., S. P. Raj and I. Sinha (2005). 'Reference price research: review and propositions', *Journal of Marketing*, **69**, pp. 84–102.

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

Mizik, N. and R. Jacobson (2003). 'Trading off between value creation and value appropriation: the financial implications of shifts in strategic emphasis', *Journal of Marketing*, **67**, pp. 63–76.

Möller, K. (2006). 'Role of competences in creating customer value: a value-creation logic approach', *Industrial Marketing Management*, **35**, pp. 913–924.

Nagar, V. and M. V. Rajan (2005). 'Measuring customer relationships: the case of the retail banking industry', *Management Science*, **51**, pp. 904–919.

Needham, A. (2008). 'Word of mouth, youth and their brands', *Young Consumers*, **9**, pp. 60–62.

Ngo, L. and A. O'Cass (2009). 'Creating value offerings via operant resource-based capabilities', *Industrial Marketing Management*, **38**, pp. 45–59.

Normann, R. and R. Ramirez (1993). 'From value chain to value constellation: designing interactive strategy', *Harvard Business Review*, **71**, pp. 65–77.

Nunnally, J. C. (1978). *Psychometric Theory*. New York: McGraw-Hill.

O'Cass, A. and L. V. Ngo (2007). 'Market orientation versus innovative culture: two routes to superior brand performance', *European Journal of Marketing*, **41**, pp. 868–887.

Papadakis, V. M. and P. Barwise (2002). 'How much do CEOs and top managers matter in strategic decision-making?', *British Journal of Management*, **13**, pp. 83–95.

Payne, A. F. and P. Frow (1997). 'Relationship marketing: key issues for the utilities sector', *Journal of Marketing Management*, **13**, pp. 463–477.

Payne, A. F. and P. Frow (2005). 'A strategic framework for customer relationship management', *Journal of Marketing*, **69**, pp. 167–176.

Payne, A. F. and S. Holt (2001). 'Diagnosing customer value: integrating the value process and relationship marketing', *British Journal of Management*, **12**, pp. 159–182.

Payne, A. F., K. Storbacka and P. Frow (2008). 'Managing the co-creation of value', *Journal of the Academy of Marketing Science*, **36**, pp. 83–96.

Pitt, L. F., M. T. Ewing and P. Berthon (2000). 'Turning competitive advantage into customer equity', *Business Horizons*, **43**, pp. 11–18.

Podsakoff, P. M., S. B. MacKenzie, J.-Y. Lee and N. P. Podsakoff (2003). 'Common method bias in behavioral research: a critical review of the literature and recommended remedies', *Journal of Applied Psychology*, **88**, pp. 879–903.

Prahalad, C. K. (2004). 'The co-creation of value – invited commentary', *Journal of Marketing*, **68**, p. 23.

Prahalad, C. K. and V. Ramaswamy (2004). *The Future of Competition: Co-creating Unique Value with Customers*. Boston, MA: Harvard Business School Press.

Priem, R. L. (2007). 'A consumer perspective on value creation', *Academy of Management Review*, **32**, pp. 219–235.

Ramani, G. and V. Kumar (2008). 'Interaction orientation and firm performance', *Journal of Marketing*, **72**, pp. 27–45.

Ramaswamy, V. (2008). 'Co-creating value through customers' experiences: the Nike case', *Strategy and Leadership*, **36**, pp. 9–14.

Ramirez, R. (1999). 'Value co-production: intellectual origins and implications for practice and research', *Strategic Management Journal*, **20**, pp. 49–65.

Ravald, A. and C. Grönroos (1996). 'The value concept and relationship marketing', *European Journal of Marketing*, **30**, pp. 19–30.

Reimann, M., O. Schilke and J. S. Thomas (in press). 'Customer relationship management and firm performance: the mediating role of business strategy', *Journal of the Academy of Marketing Science*.

Reinartz, W., M. Krafft and W. D. Hoyer (2004). 'The customer relationship management process: its measurement and impact on performance', *Journal of Marketing Research*, **41**, pp. 293–305.

Rust, R. T. and T. S. Chung (2006). 'Marketing models of service and relationships', *Marketing Science*, **25**, pp. 560–580.

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

Schepers, J., W. Martin and K. de Ruyter (2005). 'Leadership styles in technology acceptance: do followers practice what leaders preach?', *Managing Service Quality*, **15**, pp. 496–508.

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

Sirmon, D., M. Hitt and D. Ireland (2007). 'Managing firm resources in dynamic environments to create value: looking inside the black box', *Academy of Management Review*, **32**, pp. 273–292.

Slater, S. F. (1997). 'Developing a customer value-based theory of the firm', *Journal of the Academy of Marketing Science*, **25**, pp. 162–167.

Smith, J. B. and M. Colgate (2007). 'Customer value creation: a practical framework', *Journal of Marketing Theory and Practice*, **15**, pp. 7–23.

Steiger, J. (1980). 'Tests for comparing elements of a correlation matrix', *Psychological Bulletin*, **87**, pp. 245–251.

Stone, M. (1974). 'Cross-validatory choice and assessment of statistical predictions', *Journal of the Royal Statistical Society*, **36**, pp. 111–133.

Storbacka, K. and J. R. Lehtinen (2001). *Customer Relationship Management: Creating Competitive Advantage through Win–Win Relationship Strategies*. Singapore: McGraw-Hill.

Teece, D. (2007). 'Explicating dynamic capabilities: the nature and micro-foundations of (sustainable) enterprise performance', *Strategic Management Journal*, **28**, pp. 1319–1350.

Tenenhaus, M., V. E. Vinzi, Y. Chatelin and C. Lauro (2005). 'PLS path modelling', *Computational Statistics and Data Analysis*, **48**, pp. 159–205.

Thomke, S. and E. von Hippel (2002). 'Customers as innovators: a new way to create value', *Harvard Business Review*, **80**, pp. 74–81.

Ulaga, W. and A. Eggert (2006). 'Value-based differentiation in business relationships: gaining and sustaining key supplier status', *Journal of Marketing*, **70**, pp. 119–136.

Vargo, S. L. and R. F. Lusch (2004). 'Evolving to a new dominant logic for marketing', *Journal of Marketing*, **68**, pp. 1–17.

Verwaal, E., H. Commandeur and W. Verbeke (2009). 'Value creation and value claiming in strategic outsourcing decisions: a resource contingency perspective', *Journal of Management*, **35**, pp. 420–444.

Walsh, G., V.-W. Mitchell, P. R. Jackson and S. E. Beatty (2009). 'Examining the antecedents and consequences of corporate reputation: a customer perspective', *British Journal of Management*, **20**, pp. 187–203.

Wetzels, M., G. Odekerken-Schröder and C. van Oppen (2009). 'Using PLS path modeling for assessing hierarchical construct models: guidelines and empirical illustration', *MIS Quarterly*, **33**, pp. 177–195.

Wold, H. (1982). 'Soft modelling – the basic design and some extensions'. In K. Jöreskog and H. Wold (eds), *Systems under Indirect Observation II*, pp. 1–53. Amsterdam: North-Holland.

Woodruff, R. B. (1997). 'Customer value: the next source for competitive advantage', *Journal of the Academy of Marketing Science*, **25**, pp. 139–153.

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

Zeithaml, V. A. (2000). 'Service quality, profitability, and the economic worth of customers: what we know and what we need to learn', *Journal of the Academy of Marketing Science*, **28**, pp. 67–85.

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