Unlocking the Roles of Product Innovation and Branding in Driving Customer Value Creation and Firm Value Appropriation

By

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Abstract

The creation of value for customers has been recognised as a central concern of marketing academics and managers. Yet, it is increasingly acknowledged that customer value creation alone is insufficient to ensure a firm’s profitability. Pragmatically firms have little incentives to engage in creating value for customers in the absence of opportunities to appropriate value back from their value creation effort. Hence, research needs to address how firms can achieve simultaneously – customer value creation and firm value appropriation. The study’s primary objective is to identify the mechanisms that assist firms to achieve customer value creation and firm value appropriation. The literature emphasises the firms’ capabilities (i.e. product innovation) as the means of creating customer value, to the neglect of firm value appropriation. This study contends that brand equity is a key mechanism that can link product innovation and customer value creation and firm value appropriation. This view is advanced because a brand adds value to the product endowed by that brand and at the same time the brand influences the customers’ preferences that favour the brand’s base of differentiation, resulting in competitive advantage attributable to the brand. The study’s secondary objective is to advance the roles of brand orientation, market orientation, and transformational leadership. This study examines the effect of the interaction between brand orientation and market orientation on product innovation and the moderating effect of transformation leadership on product innovation – brand equity relationship. The results show that brand equity mediates the relationship between product innovation and customer value creation and firm value appropriation. Further, the interaction between market orientation
and brand orientation acts as a key driver of product innovation in the development of a strong brand equity. Finally, transformational leadership moderates product innovation – brand equity relationship.
CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

The development of products and services that are of value to customers has long been recognised by academics and managers in marketing as critical for a firm’s profitability and survival (Woodruff, 1997; Smith & Colgate, 2007; O’Cass & Sok, 2013). Consequently, over the last two decades there has been sustained interest from both marketing researchers and practitioners about the creation of customer value (Woodruff, 1997; Eggert & Ulaga, 2002; Eggert et al., 2006; Ulaga & Eggert, 2006; Ngo & O’Cass, 2009; O’Cass & Ngo, 2011; O’Cass & Sok, 2013; Leroi-Werelds et al., 2014). Yet, the literature in this space has been branded as possessing a one-sided focus, with an overwhelming emphasis on the firms’ capabilities as the means of creating value for customers, to the neglect of appropriating value for firms (Reitzig & Puranam, 2009).

Focusing on creating value for customers to the neglect of appropriating value for firms can be problematic as creating value for customers alone is insufficient to ensure success. Pragmatically, firms may have little incentive to engage in creating value in the absence of opportunities to appropriate the

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1 Two approaches have been adopted by researchers to empirically examine customer value creation. The first approach focuses on the strategic role of customer value from the firm’s perspective and is often called “value offering”. The second approach focuses on the customers’ assessment of value from the customers’ perspective and is often called “customers’ perceived value”. This study adopted the latter perspective of customer value creation. Therefore, when the term “customer value creation” or “creating value for customers” is used, it is referred to “customers’ perceived value”. The detailed discussion on this aspect appears in Section 2.2 (Chapter Two).
economic return (i.e. value or profit back) from their value creation efforts (Raggio & Leone, 2009). Given the substantial amount of time and resources invested in the businesses and the potential risks associated with the investment that must be overcome (Dunkelberg et al., 2013), firms must develop the opportunity to generate profit from their offering. Consequently, it is critical that research investigates mechanisms that enable firms to create value for customers (satisfying customers) and appropriate value back (satisfying firms) simultaneously.

1.2 RESEARCH GAPS AND OBJECTIVES

This study argues that there are several major weaknesses in the theoretical and empirical development within the currently literature in understanding the process through which the dual outcomes of customer value creation and firm value appropriation can be achieved. First, while the contributions of research focusing on customer value creation and firm value appropriation are significant, there is still a lack of conceptual and empirical clarity pertaining to the process through which firms can achieve the simultaneous outcomes of customer value creation and firm value appropriation. As highlighted in Section 1.1 above, creating value for customers and appropriating value for firms simultaneously is imperative for firms’ success in the long run. Prior research often look at customer value creation and firm value appropriation in isolation and there has been limited research addressing issues related to the creation of value for customers and appropriation of value for firms in a single model (King & Slotegraaf, 2011). Moreover, the few studies on this theme are
very theoretical in nature (e.g., Wagner et al., 2010; Hsieh et al., 2011). As highlighted in Section 1.1 above, this study takes the view that firms cannot focus on only generating value for customers as they may have little incentive to engage in creating value in the absence of opportunities to appropriate the economic return from their value creation efforts. As such research that focuses on only customer value creation or firm value appropriation misses the practical nature of the firms. Although there are potential contributions of research focusing on the dual outcomes of customer value creation and firm value appropriation, it is cautioned that a dual emphasis is difficult to achieve and may cause tension within the firm because creating value for customers and appropriating value back for the firm reflect different organisational philosophies, have different centres of attention and compete for limited resources (Gibson & Birkinshaw, 2004; Simsek, 2009).

On the one hand, firms require continuous investment in product innovation in order to create superior customer value, which can enable the satisfaction of customers’ needs (Ngo & O’Cass, 2009; 2012). While satisfying customers is a source of the firm’s long-term success, it may disappoint shareholders or owners, as fewer dividends/profit may be available to them. On the other hand, if the firms satisfy shareholders or owners by allocating a large proportion of profits into dividend sharing with owners/shareholders, fewer funds will be available for further investment in product innovation in an attempt to provide better value to customers. In other words, while satisfying one group seems to be at the expense of dissatisfying another, it is still imperative that firms must be able to satisfy both customers and owners in order for firms to stay competitive in the long run. Therefore, examining the mechanism that can help
link the firm’s product innovation to the achievement of customer value creation and firm value appropriation simultaneously is of utmost important.

**Research question 1**

Product innovation research has long dealt with how well innovative firms are able to protect and appropriate their product innovation by preventing the economic value generated from slipping to competitors (e.g., Teece, 1986; Cockburn & Griliches, 1988; Harabi, 1995; Winter, 2006). Prior studies in this space have focused on examining the legal mechanisms (i.e. trademarks, patents, trade secrets, speed of getting a patent granted) (e.g., Levin et al. 1987; Harabi 1995; Shapiro 2001; Reitzig & Puranam 2009) to protect and appropriate value. This approach has two deficiencies. First, it looks at only one side of the issue, which is to appropriate value for the firm by assuming that once the product is introduced to the market, the customers will automatically accept it. This assumption is problematic as it is the customers who have the final say in accepting or rejecting the new products introduced into the market (Priem, 2007; Lisbao et al., 2011). Recent studies have also shown that customers buy a product only if they perceive the product to be valuable to them (e.g., Ngo & O’Cass, 2009; O’Cass & Sok, 2013). Therefore, it is crucial that research investigates mechanisms that not only help firms achieve firm value appropriation, but also customer value creation.

Second, while examining legal mechanisms has proven useful in industries such as pharmaceuticals, which are characterised by strong appropriability (Reitzig & Puranam, 2009), they may not be the case for consumer goods industries given the lower/weaker patent rights and ease with
which competitors can imitate. Further, while legal mechanisms have also proven useful for industries characterised by weaker appropriability such as mobile phone manufacturing compared to pharmaceuticals (Reitzig & Puranam, 2009), the rapid development of technology has weakened the value of the legal regimes such as patents. Competitors can still develop a similar technology surrounding the patents characteristics. For example, the not-yet-resolved disputes between leading technology firms Apple and Samsung where one has accused the other of stealing its technology shows how the evolution of technology weakens the significance of patents in protecting value appropriation from product innovations. Consequently, a critical challenge for marketing scholars is to identify mechanisms that help transform product innovation into customer value creation and firm value appropriation simultaneously because both are required for product innovation to be commercially successful.

A central idea of this study is the recognition that a brand (and its equity), among other things, adds value to the product endowed by that brand (Keller, 1993). A brand (and its equity) is created and managed overtime through highly firm-specific, legally protected, and socially complex processes in which a positional barrier is generated (Wernerfelt, 1984; Slotegraaf & Pauwels, 2008). Thus, the brand will not only protect the firm value from slipping to competitors (i.e. brand creates defensible competitive positions), but will also help create and add value for customers. Further, as noted by Reid et al. (2005), many products share the same or similar functionality; hence, it is the distinctiveness of the brand that differentiates the product in the customers’ eyes. On this basis, a fundamental question can be raised:
Research Question 1: To what extent does brand equity mediate the influence of product innovation capability on the dual outcomes of customer value creation and firm value appropriation?

The first objective of this study is to address this research question by examining how product innovation capability influences the dual outcomes of customer value creation and firm value appropriation via brand equity (mediation effect). This study takes on the view that while product innovation capability provides leeway to success, brand equity is the key mechanism that enables the firm to achieve the dual outcomes of customer value creation and firm value appropriation. This is because brand equity has a double-edge benefit. On the one hand, it helps create value for customers (Webster, 2000), thus satisfying customers. On the other hand, it is a precursor in triggering customers’ willingness to pay a higher price allowing the firm to generate more profit from their value offerings, enabling them to obtain greater financial gains (Aaker, 1999; Swaminathan et al., 2009), thus satisfying the firm.

Research question 2

Product innovation capability has been identified as the key contributor to firms’ success (e.g., Lau et al., 2010; Ngo & O’Cass, 2012; Mugge & Dahl, 2013; Slater et al., 2014; Troilo et al., 2014). Product innovation capability is argued in this study as a key contributor in achieving the dual outcomes of customer value creation and firm value appropriation through brand equity. Yet, there has been no research to-date investigating the antecedent(s) of product innovation
capability that allows firms to develop the right product that is well liked by customers in terms of its features, quality, and brand.

The contributions of research focusing on the role of market orientation in driving product innovation capability are well established (e.g., Han et al., 1998; Hurley & Hult, 1998; Hult et al., 2004; Menguc & Auh, 2006; Ngo & O’Cass, 2012). However, Urde (1999) and Urde et al. (2013) argue that market orientation is uncomplicated, short-term and fundamental. They propose that with increasing competition in the market, firms need to move on to an additional degree of sophistication, which is to be brand oriented (Urde, 1999; Urde et al., 2013). They add that if a firm is only market oriented, then it evolves around only products and markets. While this point is critical, at present, there is still a lack of empirical investigation pertaining to the interaction role of market orientation and brand orientation as an antecedent in driving product innovation capability in the pursuit of achieving the dual outcomes of customer value creation and firm value appropriation. On this basis, a fundamental question can be raised:

*Research Question 2: To what extent does the interaction between market orientation and brand orientation contribute to product innovation capability in the pursuit of the dual outcomes of customer value creation and firm value appropriation?*

The second objective of this study is to address this research question by examining the interaction between market orientation and brand orientation on product innovation capability. This study takes on the view that market orientation is product-focused while brand orientation is brand-focused. In order
for firms to create value for customers and appropriate high return from the value offerings, firms need the capability to develop products that not only respond to the customer needs and wants, but also those that embody a strong brand. Customer needs change rapidly; hence, a firm achieves long-term competitive advantage to the extent that its offering does not only reflects customer needs but also has a strong brand that builds attachment with the customers to prevent customers from switching to the competitors (Keller, 2001).

**Research question 3**

While understanding the role of product innovation capability on the development of superior brand equity is critical, it is equally important to examine the contingency factors that enhance this relationship. Some scholars such as Jung et al. (2003), Matzler et al. (2008), among others argue that the ability of management to create an environment that is conducive to innovative activities underpins the firm’s ability to innovate and such abilities rest in transformational leaders (Jung et al., 2003). The relationship with product innovation (e.g., Bass, 1985; Bass & Riggio, 2006) is a major theme in the conceptual analyses of transformational leadership. However, some transformational leaders’ behaviours may have functional effects in some situations, yet have no or even dysfunctional effects in other situations (Wang & Rode, 2010). For this reason, several scholars suggest that more research is needed on the moderating or mediating role of transformational leadership on innovation (e.g., Hunt & Conger, 1999; Yukl, 1999). On this basis, a fundamental question can be raised:
Research Question 3: To what extent does transformational leadership enhance the effect of product innovation capability on brand equity?

The third objective of this study is to address this research question by examining the extent to which transformational leadership moderates the relationship between product innovation capability and brand equity. In summary of the three identified research questions above, the primary objective of this study is to examine the mediating role of brand equity in linking the relationship between product innovation capability and the dual outcomes of customer value creation and firm value appropriation. The primary objective is substantiated by investigating the interaction role of market orientation and brand orientation and its effect on product innovation capability. Finally, the primary objective is further substantiated by incorporating the contingency factor – transformational leadership - in enhancing the product innovation capability-brand equity relationship.

1.3 JUSTIFICATIONS AND SIGNIFICANCE OF THE STUDY

Despite advances in value literature, little is known about how firms can achieve customer value creation and firm value appropriation simultaneously. This lack of understanding is alarming given that firms have little incentive to innovate if they cannot appropriate much value from their innovation. In addressing the research objectives and questions set out above, this study attempts to resolve these critical issues, the results of which contribute to the current literature in the following ways.
First, current knowledge on value literature is extended by shedding light on the specific process through which product innovation capability contributes to the achievement of dual outcomes of customer value creation and firm value appropriation through brand equity. Critically, this study contends that while product innovation capability has the potential to drive customer value creation or firm value appropriation in isolation, it is brand equity that can transform product innovation capability into achieving the dual outcomes of customer value creation and firm value appropriation. Therefore, developing a model that unpacks the product innovation capability to achieve the dual outcomes of customer value creation and firm value appropriation through brand equity provides a more complete and accurate blueprint of the process in which both customers and the firms can be satisfied, which at present is missing from the literature.

Second, underpinned by the Resource-Based View (RBV) and the market orientation – product innovation – performance framework in particular, current knowledge on the antecedent(s) of product innovation capability that enhances the firm’s abilities to develop the product which is not only well liked by customers in terms of its feature or quality but also its brand is extended. This is achieved by considering the interaction role of market orientation and brand orientation as the key antecedent of product innovation capability. Examining this effect diverges from extant research which is predominantly dominated by research examining the effect of market orientation on firm performance yet lacks an understanding of the ‘action’ components that facilitate the implementation of market orientation to achieve performance outcomes. It also diverges from extant research by taking a first step to analyse the interaction between market orientation and brand orientation as the driver of product innovation capability in its attempt to achieve
the dual outcomes of customer value creation and firm value appropriation through brand equity.

Third, underpinned by the market orientation – product innovation – performance framework, current knowledge on the process in which the dual outcomes of customer value creation and firm value appropriation can be achieved via product innovation capability and then brand equity is extended. This is achieved by examining two mediators in sequence (product innovation capability and then brand equity) (Gong et al., 2012) that link the relationship between the interaction of market orientation and brand orientation and the dual outcomes of customer value creation and firm value appropriation. It diverges from existing literature by showing that neither product innovation capability nor brand equity is the mediator linking the relationship between market orientation-brand orientation interaction and the dual outcomes of customer value creation and firm value appropriation. It is, however, a sequence in which the relationship between market orientation-brand orientation interaction and the dual outcomes of customer value creation and firm value appropriation are mediated through product innovation capability and then through brand equity. It also diverges from existing market orientation – product innovation – performance framework and offers a more comprehensive model compared to that proposed by Hurley and Hult (1998), Ketchen et al. (2007), Ngo and O’Cass (2012).

Fourth, underpinned by the leadership theory, current knowledge on the role of leadership in contributing to the development of new products is extended. This is achieved by examining the contingency effect of transformational leadership on the relationship between product innovation capability and brand equity. This emphasis diverges from extant literature which has overwhelmingly
examined the effect of transformational leadership on product innovation capability by taking the view that transformational leadership plays an important role in shaping the relationship between the firm’s product innovation capability and its ability to build a product with a strong brand (brand equity). Therefore, this study suggests transformational leadership as an important contingency variable moderating the relationship between product innovation capability and brand equity. This emphasis is critical as employees play a very important role in new product development process (Amabile, 1988; Bharadwaj & Menon, 2000), and firms are increasingly relying on their employees who may possess various skills, knowledge, and perspectives to deal with complexity of new technologies and information to successfully innovate (Lovelace et al., 2001). Since people often work in teams, individual employees’ creative thinking and activities are often enacted in this context (see also Shalley et al., 2004), and leaders define the work context (Yu et al., 2013), transformational leaders can motivate employees within the teams to be more cooperative and enthusiastic in producing the common goals.

Finally, this thesis’s cross-level model which connects macro-level cultures and practices to micro-level employees attitude and then to firm-level outcome and customer-level outcome also responds to the rising concerns that organisational research has become bifurcated as either macro or micro-oriented (see also Kozlowski & Klein, 2000; Pearce, 2003; Zhou et al., 2008).
1.4 RESEARCH CONTEXT

This study focuses on firms operating in an emerging economy country – Cambodia – for two primary reasons. First, Cambodia is an emerging country with a growth rate of approximately 10% in the years preceding the 2008-2009 global financial crisis, second only in Asia in terms of growth after China (Economist Intelligence Unit, 2010). According to the World Bank data, Cambodia continues to enjoy robust growth, albeit at a slightly slower pace after the global financial crisis. Real GDP growth was approximately 6% in 2011, 6.3% in 2012, 7.4% in 2013, and 7% in 2014. Growth is expected to be about 6.9% in the coming years (2015 and 2016). The high constant growth in GDP in Cambodia in the last 10 years has led to a stronger purchasing power of its people who have turned their interest from unknown or little-known brand products to well-known brand products. Second, Cambodia is strategically located in the Southeast Asian Region, one of the fastest growing regions in the world. Southeast Asian Region is to create an ASEAN Economic Community (AEC) by 2015. The purposes of creating the AEC are to establish 1) a highly competitive economic region, 2) a single market and product base, 3) a region fully integrated into the global economy, and 4) a region of equitable economic development. Once the Southeast Asian Region becomes a single market like European Union, it will be the ninth largest economy in the world with a combined GDP of more than USD1.8 trillion and a population of more than 600 million. Such conditions with potential economy of scales and strong purchasing power provide good business opportunities for firms who can provide innovative products with strong
brand equity. As a result, Cambodia represents an ideal laboratory for scholarly research aiming to advance product innovation and branding literature.

1.5 RESEARCH METHOD

In order to empirically address the proposed research questions, a quantitative approach through the development and administration of a self-administered survey was adopted in this study. Existing scales that have been found to be reliable were used in this study (Liebert & Liebert, 1995) because existing scales from published works are believed to have construct validity (O’Cass, 2001). This study employed a multiple informant design using five key informants comprising of senior executive, R&D or project manager, marketing manager, employee, and customers.

A drop-and-collect technique was used to collect data for this study. Drop-and-collect is believed to be appropriate when research is conducted in developing countries (Ibeh et al., 2004) such as Cambodia (Sok & O’Cass, 2011). This technique is also argued to improve the response rate compared to other impersonal delivery systems (Ibeh et al., 2004) in which 40 to 90% response can be expected (Balabanis & Kiamantopoulos, 2004). A two-stage procedure to develop the questionnaire was adopted in this study. The first stage pertained to generating items and formatted the scale poles while the second stage pertained to refining items through pre-test and expert-judges evaluation of face validity.

The data for this study was collected from medium and large manufacturing firms in Cambodia. The census list of medium and large
manufacturing firms was obtained from the National Institute of Statistics of the Ministry of Planning of the Royal Government of Cambodia. A systematic sampling technique was adopted in which the sample was drawn by selecting a random starting point and then picking on every 5th element in succession from the list (Maholtra, 2006). After three attempts, 390 firms agreed to participate in the study. The senior executives of these firms were first initially contacted via telephone. They were given an explanation of the study, how their contact details were obtained, and the purpose of being contacted. They were specifically informed that by participating in this study, they would allow the researcher to seek consent from their R&D manager, marketing manager, employees, and their customers to take part in the study.

A range of data analysis techniques such as descriptive statistics, reliability, discriminant validity, convergent validity, interrater agreement (to examine the reliability of the aggregated perceptions), regression analysis, and bootstrapping were used to describe data and test the hypotheses.

1.6 RESEARCH DELIMITATIONS

The scope and delimitations of the study are presented to clarify the boundaries in which the study is conducted. Such clarification is necessary because it enables the provision of several notable caveats with respect to the generalisability of the findings in this study. First of all, the data were collected from manufacturing firms in an emerging economy country, namely Cambodia, which may possess different business culture and political posture to firms operating in other emerging economies or developed economies. In addition, this
study’s results may also be delimited by firm size as the study focused on medium and large manufacturing firms.

1.7 OUTLINE OF THE STUDY

Underpinned by Perry’s (1998) approach, this study is organised into six chapters. Chapter One is an introductory chapter, which provides an overview of the thesis including the background, the context and the research objectives. This chapter introduces the issues that challenge marketers in the practical environment and warrant attentions. This chapter addresses these issues by identifying knowledge gaps in the extant literature and provides justification why addressing these issues are critical. This chapter concludes with the discussion of the overview of the methodological and analytical approaches adopted, and the outline, delimitations of the study, and the conclusion.

Chapter Two presents the detailed discussion and review of the relevant extant literature pertaining to value, the RBV, branding, transformational leadership, and the market orientation – product innovation – performance framework. This discussion and review provides a detailed analysis of the current development of the extant literature that is related to the topic of interest, thus providing a backdrop for theory-building.

Chapter Three establishes a theoretical model of this study. In doing so, key constructs are connected as demonstrated in Figure 3.1 through critical knowledge derived from Chapter Two. Underpinned by the theory discussed in Chapter Two, specific hypotheses are developed.
Chapter Four discusses the research design of the study, outlining the specific stages through which this study endeavour is implemented. This discussion serves as a detailed blueprint that guides the implementation of this study. In doing so, it addresses key issues pertaining to the selection of the research paradigm, data collection method, and anticipated data analysis techniques. It also describes the processes of sampling plan and measure development.

Chapter Five addresses the key findings of the study. It initially presents the results of the preliminary analysis in terms of the psychometric properties of the measures. It then presents the findings of the specific hypotheses developed in Chapter Three through relevant and appropriate quantitative data analysis techniques.

Chapter Six presents a detailed discussion and interpretation of the findings of the study derived from Chapter Five. In doing so, it describes an in-depth discussion of how the findings of this study would advance the current understanding of the literature, from which theoretical and practical implications are drawn, along with limitations of the study and implication for future research.

1.8 CONCLUSION

This Chapter One initially offered an introductory discussion of the fundamental structure of the study. It then discussed the relevant literature surrounding the proposed model and developed key research problems, related research objectives, and research questions. It later discussed the justifications and importance of the study. This concluded with the discussion of the
delimitations and the outlines of the study. The relevant literature that is related to the research objectives will be critically explored and examined in the next chapter – Chapter Two.
CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Value creation has long been considered as a central concept in marketing. An extensive body of literature has been developed examining value and the creation of value for customers (Woodruff, 1997; Smith & Colgate, 2007; O’Cass & Sok, 2013; Leroi-Werelds et al., 2014). However, while many scholars focus on creating value for customers, from a practical point of view customer value creation alone is insufficient as firms may have little incentive to create value for customers in the absence of opportunities to appropriate profits from their marketplace offerings (Raggio & Leone, 2009). Picking up on this contention and issues associated with achieving both customer value creation and firm value appropriation, the research gaps and questions identified in Chapter One were advanced. The primary purpose of this chapter is to build on the research objectives and research questions discussed in Chapter One by drawing on relevant literature and then critically investigating and analysing existing knowledge to establish the domain in which this study proceeds. Drawing on relevant literature and analysing existing knowledge are critical in establishing a

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2 Two approaches have been adopted by researchers to empirically examine customer value creation. The first approach focuses on the strategic role of customer value from the firm’s perspective and is often called “value offering”. The second approach focuses on the customers’ assessment of value from the customers’ perspective and is often called “customers’ perceived value”. This study adopted the latter perspective of customer value creation. Therefore, when the term “customer value creation” or “creating value for customers” is used, it is referred to “customers’ perceived value”. The detailed discussion on this aspect appears in Section 2.2.
robust foundation for the development of the theories and hypotheses in Chapter Three. Given the focal topic and research gaps presented in Chapter One, this Chapter begins with a review and discussion of the emergent issues of customer value creation and firm value appropriation. This review provides the setting to further investigate other components in this study. In this sense, the literature on value, the resource-based view, the market orientation – product innovation – performance framework, brand equity, brand orientation, and transformational leadership will be reviewed.

2.2 EMERGENT ISSUES OF CUSTOMER VALUE CREATION AND FIRM VALUE APPROPRIATION

The term value has many meanings; however, in the marketing discipline, two types of value dominate – value for the customer (customer perceived value or customer value creation) and value for the firm (value appropriation) (see also McNamara et al., 2013). It has long been argued that for a firm to achieve competitive advantage, it must create superior value for its customers (e.g., Ngo & O’Cass, 2009). However, long-term success depends not only on the firms’ ability to create superior customer value, but also its ability to capture or appropriate the value (firm value) from their product innovation. Firms that fail to appropriate value from their product innovation have no motivation to continuously improve; hence, such firms cannot survive or stay competitive in the long run (Raggio & Leone, 2009).

Customer value creation is an influential and widely adopted concept in the marketing literature (e.g., Woodruff, 1997; Bowman & Ambrosini, 2000;
DeSarbo et al., 2001; Payne & Holt 2001; Ulaga & Eggert, 2006; Priem, 2007; Sirmon et al., 2007; Ngo & O’Cass, 2009; Helkkula et al., 2012; O’Cass & Sok, 2013; Chandler & Lusch, 2014 among others). Studies on customer value creation first appeared in the early 1980’s, and have historically focused on the conceptualisation and measurement (sources) of customer value or customer perceived value (e.g., Zeithaml, 1983; Monroe & Krishnan, 1985). Zeithaml (1988) reports considerable heterogeneity among consumers in the integration of the underlying dimensions of perceived value. She defines perceived value as a trade-off of higher-order abstractions, such as perceived benefits and sacrifice, which are formed from both intrinsic and extrinsic product attributes, including texture, quality, price, performance, service, and brand name. In her study, she identifies perceived quality as the main source of customer value, which is consistent with many studies on customer value during the 1980s (e.g., Dodds & Monroe, 1984; Holbrook & Corfman, 1985; Parasuraman et al., 1986) that view quality as a source of customer value.

Later, in the 1990s, several scholars such as Gale (1994) and Treacy and Wiersema (1995) called for better management of the customer perceived value as the uppermost priority of its executives. To that end, customer value analysis has been accorded particular importance, and a host of value mapping approaches have been advanced in industry (e.g., Gale, 1994). This was evidenced by the call for papers in a special issue by Journal of the Academy of Marketing Science in 1997. The research that followed attempted to provide a more in-depth understanding of the customer value construct. It also sought to offer a synthesis of the literature on the subject, particularly the process of creating and leveraging customer value.
Although customer value has often been defined as a trade-off between quality and price, several marketing researchers note that customer value is a more obscure and complex construct, in which notions such as perceived price, quality, benefits, and sacrifice all are embedded (Bolton & Drew 1991; Holbrook, 1994) and whose dimensionality requires more systematic investigation. In addition, Woodruff (1997) observes that despite the increasing attention being focused on customer value, definitions of the construct are somewhat ambiguous (they typically rely on other terms such as utility, worth, benefits, and quality that are themselves not well defined) and take a rather narrow perspective (value is frequently measured as attribute-based desires or preferences that will influence purchase).

Woodruff’s (1997) discussion of the meaning and measurement of customer value and how companies can use customer value information in designing their strategies is a major contribution to the value creation literature. In his study, Woodruff defines customer value as a customer’s perceived preference for and evaluation of the product’s attributes, attribute performance, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations. This definition is broader than other definitions that focus primarily on the “give vs get” type customer evaluations that occur during or after product/service use (e.g., Gale, 1994; Zeithaml, 1988). The discrepancy between their perceptions of what they expect to receive (during use) and what they actually receive (after use) will have a major implication on customer value perceptions.

Two approaches have been adopted by researchers to empirically investigate customer value creation. The first approach focuses on the strategic
role of customer value creation from the firm’s (managerial) perspective (Sirmon et al., 2007; Ngo & O’Cass, 2009; O’Cass & Ngo, 2011, among others). For example, O’Cass and Ngo (2011) investigate from the managerial perspective, how customer value (they termed it value offering) in the form of performance value, pricing value, relationship building value, and co-creation value affect customer acquisition, customer satisfaction, customer retention and add-on selling. The underlying premise of this approach appears to rest on the view that the success of any firm’s differentiation strategy is contingent on how accurately the firm can identify what value of the products customers are seeking (DeSarbo et al., 2001) and the extent it is able to develop and offer that value to meet customer requirements or needs (O’Cass & Ngo, 2011).

While this approach to examine customer value creation has received substantial support in the literature, it is also not without criticism. For example, Ferraro et al. (2009) argue that in many real-world context, value may been seen in the presence of information which is not related to the product itself, and in practice, value initiatives may fail to deliver expected or anticipated results. Importantly, even though firms create the value for customers, it is the customers who perceive and act on in the markets (Bowman & Ambrosini, 2000) because they are the final arbiters of value (Priem, 2007). Therefore, customers should determine the value they receive which may influence their decision to either stay with the firm or switch to another firms (Colgate et al., 2007).

Supporting the view that customers are the final arbiters of value researchers such as DeSarbo et al. (2001); Ulaga and Eggert (2006); Priem (2007); Helkkula et al. (2012), among others examine customer value from the customers’ perspective. For example, Ulaga and Eggert (2006) examine customers’ perceived
value in the forms of product support, service support, delivery, supplier know-how, time to market, personal interaction, relationship value, and relationship costs in differentiating themselves in a buyer-seller relationship. This approach is premised on the view that customers are the final arbiters of value and will base their judgements of overall value on the perceptions of what is given and what is received (Ulaga & Eggert, 2006). For the purpose of this study, value creation from the customers’ perspective is adopted.

Further, scholars are increasingly recognising the importance of the firm value appropriation in addition to customer value creation (Mizik & Jacobson, 2003; Raggio & Leone, 2009; Wagner et al., 2010; Hsieh et al., 2012; McNamara et al., 2013). Within this research stream, it is recognised that firms that fail to appropriate sufficient value from customers through their offerings would not survive in the long run. In reviewing the literature, a distinction is made between customer value creation and firm value appropriation (Lepak et al., 2007); with some scholars recognising that, in some cases, firms that create new value will lose or have to share this value with other stakeholders, such as employees, competitors, or society (Coff, 1999; Makado & Coff, 2002). As such, the firm’s long term success is contingent on how they can simultaneously create value for customers and appropriate value from the firm’s offerings. Therefore, it is critical to explore mechanisms that may restrict competitive forces (i.e., erect barriers to imitation) so that firms are able to appropriate some of the value that they create for customers.
2.3. THE RESOURCE-BASED VIEW (RBV) THEORY

The resource-based view (RBV) theory is one of the most influential and widely adopted marketing theories used to explain why some firms perform better than others (e.g., Penrose, 1959; Barney, 1991; Day, 1994; Morgan et al., 2009; Ngo & O’Cass, 2009; O’Cass & Sok, 2013). The RBV dictates that firms that possess valuable, rare, inimitable, and non-substitutable (VRIN) resources will achieve competitive advantage and subsequent superior performance (Barney, 1991; Crook et al., 2008; Villanueva et al., 2012).

Despite significant theoretical and empirical advancements of the resource-performance relationship have been made (e.g., Morgan, 2012; Kozlenkova et al., 2014), some researchers argue that explaining firm performance differentials encompasses more than the mere VRIN resources that firms possess (Priem & Butler, 2001). Resources in this study refer to market-based resources (Kozlenkova et al., 2014). In this sense, resources are argued to be static (Priem & Butler, 2001) and are of no real value in isolation and it is the firm’s capabilities, rather than resources, that help some firms perform better than others (Teece et al., 1997; Eisenhardt & Martin, 2000; Ketchen et al., 2007; Ngo & O’Cass, 2009; Vorhies et al., 2009; Ngo & O’Cass, 2012).

Some researchers also suggest that the value of resources can be realised only if and when they are deployed through the firms’ capabilities (Eisenhardt & Martin, 2000). Along this line of reasoning, Atuahene-Gima (2005) argues that competitive advantage and ultimately superior performance is resulted not from the mere possession of VRIN resources, but rather from the firm’s capabilities to leverage its resources into superior customer value. Consequently, many
researchers support the tenet that resources only offer potential for the realisation of firm performance; yet without the capabilities to subsequently leverage or deploy resources, the firm performance can never be realised or achieved (Atuahene-Gima, 2005; Hult et al., 2005; Ketchen et al., 2007; Morgan et al., 2009; Vorhies et al., 2011).

Drawing from the theoretical underpinning discussed above, Morgan (2012, p. 104) conceptualises resources as “assets controlled by the firm that serve as inputs to organisational capabilities and thus have rent-earning potential”. Makadok (2001, p. 389) further suggests “if the organisational were completely dissolved, its capabilities would disappear, but its resources could survive in the hands of a new owner”. Such resources include tangible ones (i.e., financial, machinery, equipment) and intangible ones (i.e., market-based know-what knowledge, patent, reputation, trademarks) (Barney, 1991; Grant, 1996; Makadok, 2001; Galbreath, 2005) that can be valued and transferred or traded from one firm to another.

The firm’s capability, on the other hand, has been defined at two different levels: organisational level and individual level. At the organisational level, the firm’s capability is defined as the firm’s capacity to deploy resources, usually in combination, using organisational processes to affect a desired outcome (Amit & Schoemaker, 1993). At the individual level, the firm’s capability is defined as the realisation of a routine to the degree to which it can be repeatedly internalised a pattern of individual level external productivity effects (Felin & Foss, 2009). Although these two approaches (individual and firm’s level) to conceptualise capabilities have received supports from different researchers, the conceptualisation of capability at the firm’s level has received much greater
support in the literature (e.g., Ngo & O’Cass, 2009; Vorhies et al., 2009; O’Cass & Sok, 2013; O’Cass et al., 2014; Troilo et al., 2014).

One of the prominent frameworks involving the roles of resources and capabilities in driving firm performance is the market orientation – product innovation – firm performance framework (e.g., Hurley & Hult, 1998; Ngo & O’Cass, 2012). Given the emphasis of this study is to identify mechanisms that help transform the firm’s product innovation capability to achieve customer value creation and firm value appropriation simultaneously as well as the antecedents that can facilitate the development of products that are appealing to customers, this framework is deemed critical for this study and will be explored in more detail in the section below.

2.4. MARKET ORIENTATION – PRODUCT INNOVATION – PERFORMANCE FRAMEWORK

The theoretical underpinning of the market orientation – product innovation – performance framework is that market orientation is a know-what resource which “provides a knowledge structure that permits recognition of market dynamism and provides a knowledge base for developing the required processes and for developing and deploying a firm’s capabilities to serve its markets (Ngo & O’Cass, 2012, p. 863). Therefore, the more market-oriented a firm is, the more it will be able to identify and deploy distinctive capabilities more efficiently and effectively (Zhou et al., 2005; Menguc & Auh, 2006; Zhou et al., 2008; Morgan et al., 2009; Ngo & O’Cass, 2012).
Market orientation is argued to be set within a socially complex, firm level system of routines, which in turn has the potential to create greater causal ambiguity (Ngo & O’Cass, 2012). As such, market orientation will be more valuable and exhibit greater inimitability and rarity when complemented by a specific capability (i.e. product innovation) than when it is adopted by itself (Amit & Schoemaker, 1993; Teece et al., 1997; Ngo & O’Cass, 2012). Similarly, Hult et al. (2005) also suggest that while possessing a strong market orientation is critical for firms, market orientation by itself is not sufficient for attaining superior performance. It is because customers are attracted by and stay with firms that are capable of acting on knowledge about customer needs and deliver them the value they are seeking, rather because the firms possess a knowledge about customer needs, but not capable of acting on such a knowledge (Hult et al., 2005; Ngo & O’Cass, 2012). Therefore, the contribution of market orientation as a rare, valuable, and inimitable knowledge resource will be diminished in the absence of a specific capability (e.g., Menguc & Auh, 2006; Morgan et al., 2009).

Hult et al. (2004) and Ngo and O’Cass (2012) further argue that firms with a strong market orientation encourage the acquisition of specific capabilities that have the potential to create a link between what is to be offered to customers and what customers expect from those offerings. Consequently, managerial decisions and actions are oriented toward developing a specific capability (i.e. product innovation) that is guided by a strong market orientation. The firm’s capabilities that emerge from a strong market orientation are activities that become more refined and valuable through continuous investment over time (Ngo & O’Cass, 2012). Because firms with strong market orientation place greater emphasis on understanding both the expressed and the unexpressed needs of their customers
(Jaworski & Kohli, 1993; Slater & Narver, 1999), they need to possess a specific capability that allows them to develop products that can fulfil those needs – and one such capability is product innovation (Han et al., 1998; Hult et al., 2004; Keskin, 2006; Ngo & O’Cass, 2012).

Increasing competition and uncertainty within the market have put immense pressure on firms to innovate (Lau et al., 2010; Troilo et al., 2014). Product innovation capability is argued to be a key component in the success of any firm – small firms (Keskin, 2006; Sok & O’Cass, 2011) or large industrial firms (Hult et al., 2004; Ngo & O’Cass, 2012). Product innovation capability relates to the firm’s capacity to introduce new products or ideas in the organisation. It is further argued that product innovation capability is the name of the game for competition in the twenty-first century (Keskin, 2006; Troilo et al., 2014) and it is through product innovation capability that managers are able to devise solutions to business problems and challenges, which then offer the basis for the survival and success of the firm well into the future (Hult et al., 2004). Ngo and O’Cass (2012, p. 864-865) further suggest that product innovation “may help unlock the performance impact of market orientation because of their ability to transform the knowledge of the market into knowledge of what to do (i.e. which capabilities to deploy)”.

While there have been a few studies in the literature examining market orientation from the customers’ perspectives (e.g., Gounaris et al., 2003; Krepapa et al., 2003; Voon, 2006; Mulyaneara, 2011), the mainstream literature on market orientation emphasises on the firm’s perspective. Particularly, given that market orientation is about the firm’s emphasis (i.e. policy, strategy, or behavioural orientation) on serving customers, it is more appropriate to seek responses from
the firms rather than the customers. In particular, this study adopts the market orientation – product innovation – performance framework and as shown in Table 2.1, none of the studies that have adopted this framework has used customers’ perspectives.

A review of studies that have adopted the market orientation – product innovation – performance framework, as shown in Table 2.1, has shown that all are single informant studies in which either the senior executive (CEO) or senior marketing executive is the key respondent. However, they have adopted different approach to conceptualise and operationalise the key constructs of market orientation, product innovation, and performance.

Examination of Table 2.1 shows that market orientation has been conceptualised and operationalised from cultural or behavioural perspectives (Homburg & Pfleßer, 2000) or both simultaneously (Keskin, 2006). One group of scholars (e.g., Han et al., 1998; Agarwal et al., 2003; Hult et al., 2004; Menguc & Auh, 2006; Tajeddini et al., 2006; Augusto & Coelho, 2009) advances the cultural perspective of market orientation, viewing it as an aspect of organisational culture that gives priority to the creation and maintenance of superior customer value (Narver & Slater, 1990). Another group of scholars (e.g., Ngo & O’Cass, 2012) advances the behavioural perspective of market orientation and views it as “the organisation-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organisation-wide responsiveness to it” (Kohli & Jaworski, 1990, p. 6). Another group of scholars (e.g., Keskin, 2006) advances the cultural and behavioural perspectives of market orientation simultaneously and views it as cultural and behavioural processes and the activities associated with creating and satisfying
customers by continually assessing their needs and wants to increase business performance (Keskin, 2006).

Of particular interest, the conceptualisation and operationalisation of marketing orientation are very consistent. Those who advance the cultural perspective of market orientation operationalise the construct using the measure developed by Narver and Slater (1990). Those who advance the behavioural perspective of market orientation operationalise the construct using the measure developed by Kohli and Jaworski (1990) and Matsuno and Mentzer (2000), while those who advance the cultural and behavioural perspectives simultaneously operationalise the construct using the measure developed by Ruekert (1992).

Deeper analyses of these studies show that studies that have adopted the cultural perspective of market orientation in market orientation – product innovation – performance framework is consistent with scholars’ efforts in advancing the RBV theory. Building on the RBV, many scholars suggest that market orientation culture may represent a firm’s resource that can contribute to the achievement of performance (Menguc & Auh, 2006; Tajeddini et al., 2006; Augusto & Coelho, 2009). Because market orientation culture pays close attention to customers’ current and future needs, it offers the firm with insight about how to deliver better customer value and achieve firm performance outcome (Slater & Narver, 1998). Specifically, with knowledge about what customers are seeking for in the products, market oriented firms through product innovation can tailor the product offerings specifically for the specific needs of their customers as well as improve their product quality (e.g., Slater & Narver, 1998; Hult et al., 2004). This view is in line with that of Zhou et al. (2005) that market orientation does not automatically lead to superior performance. Instead, it
must first enable certain organisation wide activities such as product innovation capability that fosters firm performance. Without making discernable progress to implement the firm values and beliefs market-oriented firms will not achieve superior performance even if they recognise the importance of the market-oriented values and beliefs (Gebhardt et al., 2006).

In regards to the conceptualisation of the product innovation capability construct, an analysis of studies that have adopted the market orientation – product innovation capability – performance framework shown in Table 2.1, illustrates that scholars have conceptualised product innovation capability in four different ways. First, Hult et al. (2004), Menguc and Auh (2006), Tajeddini et al. (2006), and Augusto and Coelho (2009) have conceptualised product innovation capability as the firm’s capacity to introduce new products to the market – in this sense product innovation capability could be seen in terms of innovation outputs (subjective assessment).

Further, product innovation capability has also been conceptualised in terms of absolute number of innovations (e.g., Han et al., 1998; Agarwal et al., 2003) – in this sense product innovation could be seen in terms of the actual innovation outputs (objective assessment). Others such as Keskin (2006) have conceptualised product innovation capability as the firm’s openness and willingness to try out new ideas, seek out new ways to do things, and rate of product innovation – in this sense product innovation capability could be seen as an integration of the implementation of innovative activities and innovation outputs. Alternatively, Ngo and O’Cass (2012) have conceptualised product innovation capability as the integrative processes of applying collective knowledge, skills, and resources of the firm to perform innovation activities
pertaining to technical and nontechnical innovations – in this sense, product innovation capability could be seen as the processes firms have in place in performing innovation-related activities.

In addition, an analysis of studies shown in Table 2.1 also indicates that there are some inconsistencies between the conceptualisation and operationalisation of product innovation capability construct. For instance, Keskin (2006) conceptualises product innovation capability as an integration of the implementation of the firm’s innovation-related activities and innovation outputs. Yet, product innovation capability was operationalised by including the belief and values firms hold in being innovative, which is in fact should be part of innovation orientation (Siguaw et al., 2006). Similarly, Hult et al. (2004) conceptualise product innovation capability as the firm’s innovation output. However, product innovation capability is operationalised by including the beliefs/values of innovation and innovation activities. In addition, Menguc and Auh (2006) and Tajeddini et al. (2006) have conceptualised product innovation capability as the firm’s capacity to innovate; yet, they operationalise the construct as a combination of belief, innovation implementation, and outcome of innovation. Overall, these analyses show the inconsistencies between the conceptualisation and operationalisation which can be quite problematic. Consequently, it appears to be critical that researchers seek to put greater efforts in minimising such inconsistencies.

Of particular interest, scholars that have adopted the market orientation – product innovation capability – performance framework have also emphasised on different performance indicators. While, some studies focus purely on subjective financial indicators (e.g., Han et al., 1998; Hult et al., 2004; Keskin, 2006;
Menguc & Auh, 2006; Tajeddini et al., 2006), others take into account both subjective and objective financial indicators (e.g., Argarwal et al., 2003).

Noticeably, as shown in Table 2.1 these studies have adopted different approaches to conceptualise and operationalise the key constructs. They have been tested in different settings such as the US (e.g., Han et al., 1998; Agarwal et al., 2003; Hult et al., 2004), Turkey (Keskin, 2006); Portugal (Augusto & Coelho, 2009), Switzerland (Tajeddini et al., 2006) and Australia (Menguc & Auh, 2006; Ngo & O’Cass, 2012). They have also focused on different context such as banks (Han et al., 1998), hotels (Agarwal et al., 2003), SMEs (Keskin, 2006), manufacturing firms (Hult et al., 2004; Menguc & Auh, 2006; Augusto & Coelho, 2009) as well as manufacturing and service firms (Tajeddini et al., 2006; Ngo & O’Cass, 2012).

Overall, a key take away from the literature is that, while the studies discussed here have adopted different approaches to conceptualise and operationalise market orientation and product innovation capability, and have tested these constructs in different settings and contexts they have one point in common. They find the same or similar results – that is market orientation drives product innovation capability which in turn drives firm performance.
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<th>Study</th>
<th>Relationships</th>
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<td>Han, Kim, and Srivastava</td>
<td>Innovation as a mediator of MO – performance relationship</td>
<td>Banks – USA</td>
<td>Growth and profitability</td>
<td>Single respondent – Senior management in charge of marketing</td>
<td>Cultural perspective (Narver &amp; Slater, 1990) “A corporate culture, characterizes an organization’s disposition to deliver superior value to its customers continuously”</td>
<td>Technical and administrative innovations – absolute number of innovations (Damanpour &amp; Evan, 1984) “Technical innovations pertain to products, services, and production process technology; they are related to basic work activities and can concern either product or process,” whereas “administrative innovations involves organizational structure and administrative process; they are directly related to the basic work activities of an organization”</td>
</tr>
<tr>
<td>(1998)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adopted from Han et al. (1998) “A firm’s propensity to invest in generating new capabilities and figuring out whether or not it can come up with new ways to service customers”</td>
<td></td>
</tr>
<tr>
<td>Agarwal, Erramilli, and Dev</td>
<td>Innovation as a mediator of MO – performance relationship</td>
<td>Hotels – USA</td>
<td>Objective + subjective financial performance</td>
<td>Single respondent – CEO</td>
<td>Cultural perspective (Narver &amp; Slater, 1990) “Market orientation refers to a culture that places a high priority on creating buyer value while considering other stakeholders and emphasizing responsiveness to market information”</td>
<td></td>
</tr>
</tbody>
</table>
| (2003)                       |                                                                                 |           |                                               |                                    |                                                                 | 35                                                                jpg
<table>
<thead>
<tr>
<th>Source</th>
<th>Innovation as a mediator of MO – performance relationship</th>
<th>Firm Type/Location</th>
<th>Performance Measures</th>
<th>Respondent Details</th>
<th>Cultural Perspective</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hult, Hurley, and Knight (2004)</td>
<td>Innovative Large firms with over USD 100 million in sales from USA</td>
<td>Profitability, growth in sales, market share, and general performance</td>
<td>Single respondent – marketing executives</td>
<td>Cultural perspective (Narver &amp; Slater, 1990)</td>
<td>“Market orientation refers to a culture that places a high priority on creating buyer value while considering other stakeholders and emphasizing responsiveness to market information”</td>
<td>Adopted from Hurley and Hult (1998) – a combination of cultural, behavioural, and outcome</td>
</tr>
<tr>
<td>Keskin (2006)</td>
<td>Innovative SMEs in Turkey</td>
<td>Overall success, market share, growth rate, profitability, and business size</td>
<td>Single respondent – managing director</td>
<td>Cultural + behavioural perspectives (Ruekert, 1992)</td>
<td>“Cultural and behavioural processes and the activities associated with creating and satisfying customers by continually assessing their needs and wants to increase business performance”</td>
<td>Adopted from Calantone et al. (2002) – a combination of behavioural and outcome</td>
</tr>
</tbody>
</table>

“The willingness and ability to adopt, imitate or implement new technologies, processes, and ideas and commercialize them in order to offer new, unique products and services before most competitors. This willingness is based on a firm’s culture in terms of values and beliefs in the organization”
<table>
<thead>
<tr>
<th>Authors (Year)</th>
<th>Innovation as a mediator</th>
<th>Sample</th>
<th>Measures</th>
<th>Respondent</th>
<th>Cultural Perspective</th>
<th>Summary</th>
</tr>
</thead>
</table>

Benchmarking – products and service innovations, production process innovations, managerial innovations, market innovations, marketing innovation

“A firm’s interrelated organizational routines for performing innovation activities related to products and services, production process, management, market, and marketing”
2.5 BRAND EQUITY

Brand equity is often viewed as an incremental benefit that is associated with a product by the brand name (e.g., Keller, 2003; Keller & Lehmann, 2006; Slotegraaf & Pauwels, 2008). Such added value arises from what happened in the past (i.e. drivers such as marketing capability, innovation capability, and the like) and foresee what will happen to the brand in the future (i.e. outcomes such as market share, price insensitivity, and the like) (Keller, 2003). In addition, according to Keller (1993) brand equity results from consumers attributing more value to the focal brand than similar competing offerings. Keller (1993, p.1) further argues that “certain outcomes result from the marketing of a product or service because of its brand name that would not occur if the same product or service did not have the name”.

The literature on brand equity has been developed along two literature streams – which represent the firm and customer perspectives. Scholars who advance brand equity from the firm’s perspective (e.g., Davis et al., 2008; Baumgarth & Schmidt, 2010; Lai et al., 2010; Biedenbach et al., 2011; Golicic et al., 2012; Hsu, 2012) view it as the firms assessment of the objective value created by the brand or the objective value of the brand as a financial asset (Keller & Lehmann, 2006). It is also argued to contribute to effective advertising and promotion, helping firms securing key distribution channels, and facilitating the firm’s effort in expanding its product categories (see also Hoeffler & Keller, 2003; Keller & Lehmann, 2006). Consequently, products with superior brand equity contribute to increases in sales volume, sale revenue, share premium and the like of the firms (Aaker, 1996; Huang & Sarigollu, 2012).
Scholars who advance brand equity from the customer’s perspective (e.g., Yoo et al., 2000; Hamzaoui-Essoussi et al., 2011; Build et al., 2013) view it as the customer’s holistic evaluation of the brand not attributable to product attributes. Instead, it captures the customers’ attitudes, associations, awareness, and attachment towards the brand (Aaker, 1996; Huang & Sarigollu, 2012). It is also argued to play a very important role in attributing to customer’s willingness to pay a premium price for the focal product brand, their repeated purchases and their recommendations to others through positive word-of-mouth (e.g., Keller & Lehmann, 2006; Keller, 2008). Vorhies et al. (2011) further suggest that brand equity exists only when customers attribute more value to the brand and behave more positively towards the brand than the competing brands. For instance, customers may be more willing to pay a price premium for the favoured brand over the other competing brands and re-purchase the brand repeatedly (e.g., Kuhn et al., 2008).

An analysis of the literature shows that the customer’s perspective appears to have received more support than the firm’s perspective for two reasons. First, it is because brand equity from the customer’s perspective allows the assessment of the antecedents and consequences of brand equity. It also provides a diagnostic capability to predict future performance of the brand, a diagnostic tool that is not afforded by the financial measures of brand equity from the firm’s perspective (Gupta & Zeithaml, 2006; Buil et al., 2013). For example, financial-based brand equity measures from the firm’s perspective are diagnostic to the extent that “they can flag when a brand is in trouble and when it is strong, but they cannot explain the reasons for either situation” (Ailawadi et al., 2003; p. 2). Second, it is because the financial-based brand equity from the firm’s perspective is only the outcome
of customers’ responses to the brand and therefore the customers’ perceptions and responses to the brand that are the key drivers to determine the financial value of the brand, market share, and profitability (Keller & Lehmann, 2006; Christodoulides & de Chernatony, 2010). These two reasons clearly show that the financial-based brand equity is determined largely by the customers’ attitudinal and behavioural responses to the brand.

A review of prior studies as shown in Table 2.2 illustrates that brand equity has been used in prior studies either as a mediator (Baldauf et al., 2009; Lai et al., 2010; Beristain & Zorrilla, 2011) or dependent variable (Yoo et al., 2000; Davis et al., 2008; Baumgarth & Schmidt, 2010; Biedenbach et al., 2011; Hamzaoui-Essoussi et al., 2011; Valette-Florence et al., 2011; Golicic et al., 2012; Build et al., 2013). The analysis also shows that studies that have advanced brand equity literature by adopting the customer’s perspectives have multiple customers as the key respondents (e.g., Hamzaoui-Essoussi et al., 2011; Valette-Florence et al., 2011; Build et al., 2013). Other studies that have advanced brand equity from the firm’s perspective are either single-informant studies (Baldauf et al., 2009 – retailer manager; Baumgarth & Schmit, 2010 – senior manager; Lai et al., 2010 – purchasing manager; Hyun & Kim, 2011 – management who is responsible for purchasing IT software; Golicic et al., 2012 – senior manager) or multi-informant studies (Biedenbach et al., 2011 – CEO and CFO).

A closer examination at the literature also shows that while there is consensus about the underlying concept of brand equity, the dimensions by which it is operationalised are however diverse. As shown in Table 2.2, while some studies have followed the seminal works of Aaker (1996) and measured brand equity by focusing specifically on perceived quality, brand loyalty, brand
awareness, and brand associations (Yoo et al., 2000; Baldauf et al., 2009; Hyun & Kim, 2011; Build et al., 2013), others have followed the seminal works of Keller (1993) and measured brand equity by focusing specifically on brand awareness and brand image (Golicic et al., 2012). Other studies have followed the approach of Aaker (1996), yet focused on only some dimensions of the four dimensions (e.g., Beristain & Zorrilla, 2011 – perceived quality, brand awareness, and brand associations; Hsu, 2012 – brand awareness and brand associations; Biedenbach et al., 2011 – perceived quality, brand associations and brand loyalty). In addition, Lai et al. (2010) have adopted the approach of Aaker (1996) yet added brand satisfaction in addition to the four dimensions of brand equity. Interestingly, Hamzaoui-Essoussi et al. (2011) measured brand equity by accounting for brand image (Keller, 1993) and perceived quality (Aaker 1991, 1996), while Valette-Florence et al. (2011) focused on the dimensions of brand loyalty, brand knowledge, perceived quality, and social value in measuring brand equity.

As shown in Table 2.2, these studies have focused on different settings such as north America (e.g., Davis et al., 2008; e.g., Golicic et al., 2012), UK (e.g., Build et al., 2013), Taiwan (e.g., Lai et al., 2010; Hsu, 2012), France (Valette-Florence et al., 2011), South Korea (Hyun & Kim, 2011), Tunisia (Hamzaoui-Essoussi et al., 2011), Sweden (Biedenbach et al., 2011), Turkey (Beristain & Zorrilla, 2011), Germany (Baumgarth & Schmit, 2010), and Australia (Baldauf et al., 2009). They have also focused on different contexts such as logistic service providers (Davis et al., 2008; Golicic et al., 2012), retail stores (Baldauf et al., 2009; Beristain & Zorrilla, 2011), B2B firms (Baumgarth & Schmit, 2010), manufacturing and service firms (Lai et al., 2010), professional service firms (Biedenbach et al., 2011), IT firms (Hyun & Kim, 2011), and life insurance (Hsu,
Although the literature has adopted different conceptualisations and operationalisations of brand equity, focused on different contexts, a common theme that exists in this literature is the view that the development of a product with strong brand equity is critical for success.
### Table 2.2: Overview of Studies on Brand Equity

<table>
<thead>
<tr>
<th>Study</th>
<th>Role of brand equity</th>
<th>Definition</th>
<th>Context</th>
<th>Respondent</th>
<th>Measure of brand equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoo, Donthu, and Lee (2000)</td>
<td>Brand equity as the dependent variable</td>
<td>The difference in consumer choice between the focal branded product and an unbranded product given the same level of product features.</td>
<td>---</td>
<td>Customers</td>
<td>Adopted from Aaker (1991; 1996) – perceived quality, brand loyalty, and brand awareness and associations</td>
</tr>
<tr>
<td>Davis, Golicic, and Marquardt (2008)</td>
<td>Brand equity as the dependent variable</td>
<td>The differential effect of brand knowledge on response to the marketing of the brand</td>
<td>Logistics service providers and customers in North America</td>
<td>Multiple informants – managers who regularly interfaced with customers and had knowledge of their firm’s marketing and brand strategies + customers of the firms</td>
<td>Adopted from Keller (1993) – brand awareness and brand image</td>
</tr>
<tr>
<td>Baldauf, Cravens, Diamantopoulos, and Zeugner-Roth (2009)</td>
<td>Retailer-perceived brand equity as a mediator of marketing mix elements and brand profitability performance</td>
<td>A set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or that firms customers</td>
<td>Retailers in Australia</td>
<td>Single respondent – retailer manager</td>
<td>Adopted from Aaker (1991) – perceived quality, brand loyalty, brand awareness of and associations with a brand</td>
</tr>
<tr>
<td>Baumgarth and Schmidt (2010)</td>
<td>Customer-based brand equity as the dependent variable</td>
<td>As the incremental value added to a product or product portfolio that is attributable to a brand name, brand logo or other branding devices</td>
<td>B2B firms in Germany</td>
<td>Single respondent – senior management</td>
<td>Adopted from Aaker (1991), Keller (1993) and Baumüller and Baumgarth (2008) – 1 our brand is better known than our most important competitor’s. 2) The quality of our brand as perceived by our customers is higher than our competitor’s. 3) Our brand seems more ‘friendly’ than competitors’ brands. 4) A high proportion of the products under our brand umbrella are leaders in their markets.</td>
</tr>
<tr>
<td>Lai, Chiu, Yang, and Pui (2010)</td>
<td>Brand equity as the mediator</td>
<td>The total value added by the brand to the core product.</td>
<td>Taiwanese manufacturing and service firms</td>
<td>Single respondent – Purchasing manager</td>
<td>Adopted from Washburn and Plank (2002) and Yoo and Donth (2001) – brand loyalty, perceived quality, brand awareness/association, and brand satisfaction</td>
</tr>
<tr>
<td>Valette-Florence, Guizani, and Merunka (2011)</td>
<td>Brand equity as the dependent variable</td>
<td>----</td>
<td>Product categories (i.e. coffee, athletic shoes, and cars)</td>
<td>Students and staff members of a large French university</td>
<td>Adopted from Keller (1993) and Aaker (1996) – brand loyalty, brand knowledge, perceived quality, and social value</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Concept</td>
<td>Description</td>
<td>Setting</td>
<td>Methodology</td>
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<tr>
<td>Beristain and Zorrilla (2011)</td>
<td>Store brand equity is the mediator</td>
<td>A set of components (assets and liabilities linked to a brand) that flow into a global and subjective value associated with a brand, generating a differential response from consumers.</td>
<td>Retail stores in Turkey</td>
<td>Single respondent – Purchase decision maker</td>
<td>Adopted from Taylor, Celuch, and Goodwin (2004) – perceived quality and brand awareness/associations</td>
</tr>
<tr>
<td>Hamzaoui-Essoussi, Merunka, and Bartikowski (2011)</td>
<td>Brand equity as the dependent variable</td>
<td>----</td>
<td>Two product categories and eight BO-COM combinations in Tunisia</td>
<td>Customers</td>
<td>Adopted from Lee and Bae (1999) and Dodds, Monroe, and Grewal (1991) – brand image and perceived brand quality</td>
</tr>
<tr>
<td>Hyun and Kim (2011)</td>
<td>Brand equity as the dependent variable</td>
<td>The value added to the branded product relative to the unbranded product</td>
<td>IT firms in Korea</td>
<td>Single respondent – management responsible for purchasing IT software</td>
<td>Adopted from Aaker (1996) – brand loyalty, perceived quality, and brand awareness/associations with the brand</td>
</tr>
<tr>
<td>Hsu (2012)</td>
<td>Brand equity as the dependent variable</td>
<td>The differential effect of brand knowledge on consumer response to the marketing of the brand</td>
<td>Life insurance companies in Taiwan</td>
<td>Single respondent – senior manager</td>
<td>Adopted from Aaker (1991) and Keller (1993) – brand awareness and brand association</td>
</tr>
<tr>
<td>Golicic, Fugate, and Davis (2012)</td>
<td>Brand equity as the dependent variable</td>
<td>The added value with which a given brand endows a product</td>
<td>Motor carrier base of a large, US their-party logistics firm</td>
<td>Single respondent – senior manager</td>
<td>Adopted from Keller (1993) and Aaker (1996) – brand awareness and brand image</td>
</tr>
<tr>
<td>Build, de Chernatony, and Martinez (2013)</td>
<td>Brand equity as the dependent variable</td>
<td>The differential effect of brand knowledge on consumer response to the marketing of the brand</td>
<td>Products and brands that are widely known to the UK customers</td>
<td>Customers</td>
<td>Aaker (1991) and Keller (1993) – Brand awareness, perceived quality, brand associations, and brand loyalty</td>
</tr>
</tbody>
</table>
2.6 BRAND ORIENTATION

Brand orientation is often viewed as the adoption of the branding concept which focuses on attributing its relevance and importance to branding (Wong & Merrilees, 2007; Santos-Vijande et al., 2013). Some researchers further argue that by adopting the branding concept, the brand-oriented firms not only ensure that the brand will have a dominant role within the business (Santhos-Vijande et al., 2013), but also considers the brand as the backbone of the firm’s strategies and operations in achieving a competitive advantage (Urde et al., 2013). The concept of brand orientation is closely connected with the concept of market orientation given their similar emphasis on satisfying customers’ needs and wants (Noble et al., 2002; Reid et al., 2005). Some scholars go further and argue that firms cannot develop a strong brand without sufficient knowledge about customers’ needs and wants (Gromark & Melin, 2013), and overtime a strong brand cannot isolate itself from the customers’ constantly changes in their preferences (Urde et al., 2013).

The difference between brand orientation and market orientation is that market-oriented firms attempt to do everything to satisfy the customers’ needs (Naver & Slater, 1990; Jaworski & Kohli, 1993) while brand-oriented firms attempt to satisfy the customers’ needs within the limits of the core brand identity (Urde et al., 2013) or within the space for manoeuvre allowed by the brand identity (Baumgarth et al., 2013). Consequently, brand-oriented firms would disregard any customers’ demands that lie beyond or simply do not align with the core brand identity of the product. Instead, brand-oriented firms would emphasise on emerging opportunities that fit with the firm’s brand platform (Helm & Jones, 2010; Nedergaard & Gyrd-Jones, 2013). Some researchers further suggest that
brand orientation is a market orientation plus given its emphasis on the conditional responses to customers’ preferences as an important avenue to protect the integrity of the core brand identity of the firms (M’zungu et al., 2010; Gromark & Melin, 2013).

A review of Table 2.3 shows that brand orientation has been conceptualised and operationalised from both cultural and behavioural perspectives. One group of scholars (e.g., Wong & Merrilees, 2007; Huang & Tsai, 2013) advances cultural perspective of brand orientation and views it as an aspect of organisational values and beliefs in the importance of the brand. In its effort to create superior value for customers continuously, brand orientation from the cultural perspective emphasises on the need to understand what the customers are seeking for in the product, yet those needs must be within the core brand identity (Baumgarth et al., 2013; Urde et al., 2013). Another group of scholars (e.g., Bridson & Evans, 2004; Ewing & Napoli, 2005) advances the behavioural perspective of brand orientation and views it as action-oriented – emphasising on the implementation of brand activities. Brand orientation from the behavioural perspective gives priority to activities that implement the firm’s brand strategies.

As also shown in Table 2.3 while both perspectives – cultural and behavioural – appear to focus on the focal brand (e.g., Urde et al., 2013), they have produced conflicting results. Studies adopting the behavioural perspective of brand orientation find a direct relationship between brand orientation and performance outcome (e.g., Bridson & Evans, 2004; Ewing & Napoli, 2005; Hankinson, 2012). These findings appear to be consistent with the RBV scholars who suggest that the behavioural approach of orientation is similar to that of firm’s capability and as such should have a direct relationship with performance.
outcome (e.g., Ketchen et al., 2007; Zhou et al., 2008). On the other hand, studies adopting the cultural perspective of brand orientation find mixed results. While scholars such as Huang and Tsai (2013) find that brand orientation has a direct relationship with brand performance, others such as Wong and Merrilees (2008) and Baumgarth and Schmidt (2010) find that brand orientation influences brand performance indirectly through brand equity (Baumgarth & Schmidt, 2010) and innovation process (Wong & Merrilees, 2008). The contention advanced by these scholars (e.g., Wong & Merrilees, 2008; Baumgarth & Schmidt, 2010) suggest that brand orientation defined from the cultural perspective which emphasises on the importance of the brand cannot be expected to directly influence performance. Instead, the belief of the importance of the brand must be translated into concrete actions to build a strong brand such as brand performance.

Although there have been a few studies in the literature examining brand orientation from the customers’ perspectives (e.g., Mulyanegara, 2011; Casidy, 2014), the mainstream literature on brand orientation emphasises on the firm’s perspectives. Interestingly, brand orientation is about the firm’s emphasis (i.e. policy, strategy, or behavioural orientation) on developing superior brand; consequently, it is more appropriate to seek responses from the firms rather than the customers. As shown in Table 2.3 these studies have adopted single informant approach in which members of the top management team (i.e. chief executive officer, marketing manager) are the key respondents. These studies have been tested in different settings such as Australia (Ewing & Napoli, 2005; Wong & Merrilees, 2007; 2008), Taiwan (Huang & Tsai, 2013), Germany (Baumgarth & Schmidt, 2010); UK (Hankinson, 2001; 2012), Finland (Hirvonen & Laukkanen, 2014), and Spain (Santos-Vijande et al., 2013). These studies have also focused
on different context such as charity (Hankinson, 2001), marketing destination organisations (Hankinson, 2012), retailing firms (Bridson & Evans, 2004), museums (Baumgarth, 2009), B2B firms (Baumgarth & Schmidt, 2010), not-for-profit organisations (Ewing & Napoli, 2005; Napoli, 2006), fitness and physiotherapy firms (Hirvonen & Laukkanen, 2014), manufacturing firms (Huang & Tsai, 2013), knowledge-intensive service businesses firms (Santos-Vijande et al., 2013), and retailing services and manufacturing sectors (Wong & Merrilees, 2007; 2008). In summary, it is observed that studies identified in Table 2.3 have adopted different approaches to conceptualise and operationalise (cultural vs. behavioural perspective) the construct of brand orientation. These studies have been tested in different settings, focusing on different contexts, and have produced some conflicting results. Yet, there is one thing in common – that is brand orientation facilitates (either directly or indirectly) the development of a product with strong brand.
Table 2.3: Overview of Studies on Brand Orientation

<table>
<thead>
<tr>
<th>Study</th>
<th>Role of brand orientation</th>
<th>Definition</th>
<th>Context</th>
<th>Respondent</th>
<th>Measure of brand orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hankinson (2001)</td>
<td>Brand orientation as an antecedent of strong brand, successful fulfilment of organisational objectives, and an inclusive employee culture</td>
<td>Organizational wide-activities that regard the organization as a brand and whose actions and attitudes are consistent with the brand construct</td>
<td>Charity in the UK</td>
<td>Qualitative</td>
<td>Behavioural perspective</td>
</tr>
<tr>
<td>Hankinson (2012)</td>
<td>Brand orientation as an antecedent of organisational performance</td>
<td>An approach in which the processes of the organization revolve around the creation, development, and protection of brand identity in an ongoing interaction with target customers with the aim of achieving lasting competitive advantages in the form of brands</td>
<td>Destination marketing organisations in UK</td>
<td>Single respondent – senior manager</td>
<td>Cultural and behavioural perspectives</td>
</tr>
<tr>
<td>Bridson and Evans (2004)</td>
<td>Brand orientation as an antecedent of retailer advantage</td>
<td>the degree to which the organisation values brands and its practices are oriented towards building brand capabilities</td>
<td>Retailers in Australia</td>
<td>Single respondent - Senior executive</td>
<td>Behavioural perspective</td>
</tr>
<tr>
<td>Baumgarth and Schmidt (2010)</td>
<td>Brand orientation as an antecedent of internal brand equity, internal brand commitment, brand knowledge, internal brand involvement</td>
<td>A specific type of strategic orientation or corporate culture, characterized by high relevance of the brand as the basis of the business model</td>
<td>B2B firms in Germany</td>
<td>Single respondent – senior management</td>
<td>Cultural perspective</td>
</tr>
<tr>
<td>Baumgarth (2010)</td>
<td>Brand orientation as an antecedent of market performance</td>
<td>A specific type of strategic orientation or corporate culture, characterized by high relevance of the brand as the basis of the business model</td>
<td>B2B firms in Germany</td>
<td>Single respondent – senior management</td>
<td>Behavioural perspective</td>
</tr>
<tr>
<td>Ewing and Napoli (2005)</td>
<td>Brand orientation as an antecedent of organisational performance</td>
<td>Organizational wide process of generating and sustaining a shared sense of brand meaning that provides superior value to stakeholders and superior performance to the organization</td>
<td>Not-for-profit organisations in Australia</td>
<td>Single respondent – chief executive officer</td>
<td>Behavioural perspective</td>
</tr>
<tr>
<td>Hirvonen and Laukkonen (2014)</td>
<td>Brand orientation as an antecedent of internal branding and brand identity which in turn drive brand performance</td>
<td>An approach in which the processes of the organization revolve around the creation, development, and protection of brand identity in an ongoing interaction with target customers with the aim of achieving lasting competitive advantages in the form of brands</td>
<td>Fitness and physiotherapy firms in Finland</td>
<td>Single respondent – manager or owner</td>
<td>Cultural perspective</td>
</tr>
<tr>
<td>Huang and Tsai (2013)</td>
<td>Brand orientation as an antecedent of brand performance</td>
<td>A strategic orientation, in which companies seek to create value and increase their competitiveness through building brand equity</td>
<td>Manufacturing firms in Taiwan</td>
<td>Single respondent – top manager or marketing manager</td>
<td>Cultural perspective</td>
</tr>
<tr>
<td>Author(s) and Year</td>
<td>Concept</td>
<td>Description</td>
<td>Sector</td>
<td>Respondent</td>
<td>Perspective</td>
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<tr>
<td>Napoli (2006)</td>
<td>Brand orientation as an antecedent of organisational performance</td>
<td>The organisational wide process of generating and sustaining a shared sense of brand meaning that provides superior value to stakeholders and superior performance to the organisation.</td>
<td>Non-profit organisations in Australia</td>
<td>Single respondent – chief executive officer</td>
<td>Behavioural perspective</td>
</tr>
<tr>
<td>Santos-Vijande et al. (2013)</td>
<td>Brand orientation as an antecedent of customer performance which in turn drives firm performance</td>
<td>A mindset, a type of organisational culture that ensures that the brand will have a dominant role in the firm’s strategy and where the firm recognises the importance of brands as valuable assets and centres its marketing strategy and activities on developing the ability to build strong brands.</td>
<td>Knowledge-intensive service businesses firms in Spain</td>
<td>General manager or chief executive officer</td>
<td>Cultural perspective</td>
</tr>
<tr>
<td>Wong and Merrilees (2007)</td>
<td>Brand orientation as a moderator enhancing marketing strategy – brand performance relationship</td>
<td>A mindset that ensures that the brand will be recognised, featured and favoured in the marketing strategy.</td>
<td>Retailing service and manufacturing sectors in Australia</td>
<td>Single respondent – senior manager</td>
<td>Cultural perspective</td>
</tr>
<tr>
<td>Wong and Merrilees (2008)</td>
<td>Brand orientation drives brand performance through brand distinctiveness and innovation</td>
<td>A mindset that ensures that the brand will be recognised, featured and favoured in the marketing strategy.</td>
<td>Retailing service and manufacturing sectors in Australia</td>
<td>Single respondent – senior manager</td>
<td>Cultural perspective</td>
</tr>
</tbody>
</table>
2.7 TRANSFORMATIONAL LEADERSHIP

The increasingly level of competition and uncertainty in the marketplace has made the role of transformational leadership becoming more important in managing the workforces (Lim & Ployhart, 2004; Wang & Rode, 2010) who play an important role in fostering the firm’s innovation (Amabile, 1988; Bharadwaj & Menon, 2000). Leadership is a very important aspect of the work environment for employees (e.g., Oldham & Cummings, 1996). Transformational leaders encourage and foster a shared purpose that binds employees together and transcends their own self-interest for the good of the team or organisation (Bass, 1990; Lim & Ployhart, 2004; Bass & Riggio, 2006). Bass (1998) further argue that employees, who are encouraged to understand the importance of their contributions to the organisation, are more motivated to work creatively to achieve the vision of the organisation. Transformational leaders bring about these effects by acting as role models, show individualised consideration (i.e. supporting, mentoring, and developing employees) and provide inspirational motivation (i.e. energizing employees by articulating a compelling vision) and intellectual stimulation (i.e. challenging the status quo and taking novel approaches to problems) (Bass & Avolio, 1994).

As shown in Table 2.4 transformational leadership has been broadly and consistently defined in the literature as the style of leadership that fosters consciousness of collective interest among the organisation’s members and helps them to achieve their collective goals. Transformational leader is argued to be the motor and transmitter of innovative culture within the organisations (Van de Ven, 1986; García-Morales et al., 2012) and is more likely to encourage innovation
within the organisation than other types of leadership style (Kanter, 1983; Manz et al., 1989).

A review of prior studies as shown in Table 2.4 illustrates that transformational leadership has been mainly used in prior studies as an antecedent of organisational innovation (e.g., Jung et al., 2003; Aragon-Correa et al., 2007; García-Morales et al., 2008, 2012; Jung et al., 2008; Matzler et al., 2008; Gumusluoglu & Ilsev, 2009; Vaccaro et al., 2012; Noruzy et al., 2013) or a moderator (Jansen et al., 2008). The analysis further shows that while some studies have adopted a single informant approach (e.g., Jung et al., 2003; Aragon-Correa et al. 2007; García-Morales et al., 2008; 2012; Jung et al., 2008; Matzler et al., 2008; Vaccaro et al., 2012), others have adopted multiple informant approach (Eisenbeiss et al., 2008; Jansen et al., 2008; Gumusluoglu & Ilsev, 2009; Noruzy et al., 2013).

An examination at the literature on transformational leadership shows that while there is a consensus about the underlying concept of transformational leadership, the dimensions by which it is operationalised are however diverse. As shown in Table 2.4, while some studies have followed the seminal works of Bass and Avolio (1995) and measured transformational leadership using the Multifactor Leadership Questionnaire (MLQ-5X) others have followed Podsakoff et al. (1996) or McColl-Kennedy and Anderson (2002) with short versions of measurements.

Noticeably, as shown in Table 2.4 these studies have been conducted in different contexts such as Spain (Aragon-Correa et al., 2007; García-Morales et al., 2012), Dutch (Jensen et al., 2008; Vaccaro et al., 2012), Taiwan (Jung et al., 2003; 2008), Turkey (Gumusluoglu & Ilsev, 2009), Austria (Matzler et al., 2008)
and Iran (Noruzy et al., 2013). These studies have also focused on different context such as pharmaceutical (García-Morales et al., 2008), software development (Gumusluoglu & Ilsev, 2009), financial services (Jansen et al., 2008), electronics and telecommunication (Jung et al., 2003; 2008), among others.

In summary, although these studies have adopted different approaches to operationalise the construct, have been tested in different settings and focusing in different contexts, and have been used for different purposes (i.e. antecedent or mediator), there is one thing in common – that is transformational leadership facilitates the firm’s product innovation effort.
Table 2.4: Overview of Studies on Transformational Leadership (TFL)

<table>
<thead>
<tr>
<th>Study</th>
<th>Role of TFL</th>
<th>Definition</th>
<th>Context</th>
<th>Respondent</th>
<th>Measure of TFL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aragon-Correa, García-Morales, and Cordon-Pozo (2007)</td>
<td>TFL drives organisational learning and innovation which in turn drive performance</td>
<td>The style of leadership that includes a wide strategic vision about the advantages of change and adaptation, significant interest in communicative culture, attention to the development of people, and acceptance of mistakes</td>
<td>Farming, manufacturing, constructions, and services sectors in Spain</td>
<td>Single informant - CEO</td>
<td>5 items drawn from Podsakoff et al. (1996)</td>
</tr>
<tr>
<td>Eisenbeiss, van Knippenberg, and Boerner (2008)</td>
<td>TFL drives support for innovation which in turn drives team innovation</td>
<td>The style of leadership that targets at change and innovation</td>
<td>Research institute and automotive, semiconductor, packaging, and scientific instruments industries</td>
<td>Multiple informants – team members</td>
<td>20 items (MLQ-5X) developed by Bass and Avolio (1995)</td>
</tr>
<tr>
<td>García-Morales, Matías-Reche, and Hurtado-Torres (2008)</td>
<td>TFL drives innovation which in turn drives performance</td>
<td>The style of leadership that heightens consciousness by the organization’s members of a collective interest and helps them to achieve it</td>
<td>Pharmaceutical in US and Europe</td>
<td>Single informant - CEO</td>
<td>4 items drawn from Podsakoff et al. (1996)</td>
</tr>
<tr>
<td>García-Morales, Jiménez-Barriónuevo, and Gutiérrez-Gutiérrez (2012)</td>
<td>TFL drives organisational learning and innovation which in turn drive performance</td>
<td>The style of leadership that heightens consciousness by the organization’s members of a collective interest and helps them to achieve it</td>
<td>Automotive and chemical sectors in Spain</td>
<td>Single informant - CEO</td>
<td>4 items developed by McColl-Kennedy and Anderson (2002)</td>
</tr>
<tr>
<td>Gumusluoglu and Ilsev (2009)</td>
<td>TFL drives followers creativity which in turn drives organisational innovation</td>
<td>The style of leadership that raises the performance expectations of their followers and seek to transform followers’ personal values and self-concepts, and move them to higher level of needs and aspirations</td>
<td>Turkish entrepreneurial software development companies</td>
<td>Multiple employees</td>
<td>20 items (MLQ-5X) developed by Bass and Avolio (1995)</td>
</tr>
<tr>
<td>Jansen, George, Van den Bosch and Volberda (2008)</td>
<td>TFL as a moderator of Team shared vision, social integration, contingency reward – organisational ambidexterity relationship</td>
<td>The style of leadership that exhibits idealized influence, arouses inspirational motivation, provides intellectual stimulation, and treats followers with individualized consideration</td>
<td>Dutch branches of a large European financial services firm with a broad range of financial service providers in various countries</td>
<td>Multiple senior team members</td>
<td>20 items (MLQ-5X) developed by Bass and Avolio (1995)</td>
</tr>
<tr>
<td>Authors</td>
<td>TFL as an antecedent of</td>
<td>Style of leadership</td>
<td>Industry/Region</td>
<td>Data Sources</td>
<td></td>
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<td>-------------------------------</td>
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<tr>
<td>Jung, Chow, and Wu (2003)</td>
<td>organisational innovation</td>
<td>The style of leadership that emphasizes longer-term and vision-based motivational processes</td>
<td>Taiwanese electronics and telecommunications Industry.</td>
<td>Single information – manager who closely interacts with his/her CEO 20 items (MLQ-5X) developed by Bass and Avolio (1997)</td>
<td></td>
</tr>
<tr>
<td>Matzler, Schwarz, Deutinger and Rainer Harms (2008)</td>
<td>as an antecedent of product innovation, firm profitability, and firm growth</td>
<td>The style of leadership that addresses the intrinsic motivation of the employees and enables them to live up to their full potential</td>
<td>Austrian Carinthian SMEs</td>
<td>Single informant - CEO 4 items drawn from Visser, de Coning and Smit (2005)</td>
<td></td>
</tr>
<tr>
<td>Noruzy et al. (2013)</td>
<td>as an antecedent of organisational innovation</td>
<td>The style of leadership that seeks to inspire employees by charismatic speech, motivation, and intellectual stimulation</td>
<td>Manufacturing firms in Iran</td>
<td>Multiple informants - managers 5 items drawn from Podsakoff et al. (1996)</td>
<td></td>
</tr>
<tr>
<td>Vaccaro, Jansen, Van Den Bosch and Volberda (2012)</td>
<td>as an antecedent of management innovation</td>
<td>The style of leadership that exhibits idealized influence, inspirational motivation, intellectual stimulation, and individual consideration</td>
<td>Dutch firms from various industries</td>
<td>Single informant – manager who closely interacts with his/her CEO 20 items (MLQ-5X) developed by Bass and Avolio (1995)</td>
<td></td>
</tr>
</tbody>
</table>
2.8 CONCLUSION

As discussed in Section 1.2, identifying a mechanism that links product innovation capability and the dual outcomes of customer value creation and firm value appropriation is critical. Yet, the specific process through which product innovation capability contributes to the achievement of the dual outcomes of value creation and firm value appropriation remains unclear. The review of the literature on brand equity indicates that brand equity has a double edge benefits – it does not only attribute to customer satisfaction but also their willingness to pay a premium price, thus satisfying the firms. This review provides a setting to examine the role of brand equity as the key mechanism that can link product innovation capability and the dual outcomes. In addition, the theoretical underpinning of market orientation – product innovation – performance framework suggests that market orientation influences product innovation which in turn influences performance. However, as the review presented in this chapter indicates, brand orientation has a potential to complement market orientation in helping firms to develop the products that are appealing to customers. This review also offers an insight to examine the interaction between market orientation and brand orientation as an antecedent of product innovation capability. The review in this chapter also indicates that transformational leadership plays an important role in fostering innovation. This review offers another setting to investigate the potential moderating effect of transformational leadership in enhancing product innovation capability – brand equity relationship. Building on the foundation that this chapter offers, further theoretical development is undertaken in Chapter Three to establish the role of market orientation, brand orientation, product innovation
capability, brand equity, and transformational leadership to determine how they interrelate and translate into achieving the dual outcomes of customer value creation and firm value appropriation.
CHAPTER 3

THEORY AND HYPOTHESES DEVELOPMENT

3.1 INTRODUCTION

The literature review presented in Chapter Two provides the backdrop to develop the theoretical model for this study. As argued by Wacker (1998) and Ketchen and Hult (2011), a robust literature search of academic journal articles, book chapters and conference papers that have been peer-reviewed and published is critical to develop the theory and hypotheses. Relying on published academic works allows the researcher to establish a strong theoretical rationale why and how the relationships between the constructs of interest are logically tied; consequently, the theory provides specific predictions. The key purpose of this chapter is two-fold. The chapter starts by drawing upon the literature discussed in Chapter Two, presenting the four-stage model development process resulting in the development of the theoretical model. The chapter then develops specific hypotheses.

3.2 MODEL AND HYPOTHESES DEVELOPMENT

3.2.1 Introduction

Chapter Two discussed the key issues drawn from the literature concerning value, branding, leadership, and the resource-based view (RBV) theory which provide the basis for the development of the hypotheses in this chapter. These hypotheses
are represented in the theoretical framework outlined in Figure 3.1 below. Underpinned by the market orientation – product innovation – performance framework (e.g., Han et al., 1998), the yellow dashed area in Figure 3.1 represents the underlying component that outlines the role of brand equity as a key lock-in mechanism in mediating the relationship between the firm’s product innovation capability and the dual outcomes of customer value creation and firm value appropriation (RQ1). The red dashed area in Figure 3.1 represents the antecedents that represent the interaction role of market orientation and brand orientation in driving the firm’s product innovation capability (RQ2). The blue dashed area represents the moderating component that articulates the role of transformational leadership in facilitating the relationship between the firm’s product innovation capability and brand equity (RQ3).

In the following sections, attention is given to unpacking this theoretical framework by discussing how and why the focal constructs of interest embedded in each stage of the model development are logically tied, resulting in the development of an integrated research framework.
Figure 3.1 Theoretical Model

Source: Developed for this study
3.2.2 Model Development

As discussed in Section 1.2 of Chapter One and Section 2.2 of Chapter Two, achieving simultaneously customer value creation\(^3\) and firm value appropriation is seen as critical for the success of firms. Drawing on the premise that customers base their judgments of overall value on the perceptions of what is given and what is received (Bowman & Ambrosini, 2000), customer value creation is conceptualised in this study as the customers’ assessment of what value they have received in comparison to what was expected based on their own personal experience with the product received (O’Cass & Sok, 2013). It is a relativistic and subjective assessment of customers. Firm value appropriation is conceptualised in this study as the manager’s assessment of what value the firm has received in terms profitability, return on investment, and return on sales from the product offering (see also Durand et al., 2008; McNamara et al., 2013).

While the dual emphasis on customer value creation and firm value appropriation is promising for long-term success, it is difficult to achieve and may cause tension in the firm. As discussed in Section 1.2, firms require continuous investment in product innovation capability to develop products that are of value to customers. While satisfying customers is a source of the firms’ long-term success, it may disappoint owners as fewer dividends may be available to them (investment in product innovation may mean less dividend or profits for owners).

\(^3\) Two approaches have been adopted by researchers to empirically examine customer value creation. The first approach focuses on the strategic role of customer value from the firm’s perspective and is often called “value offering”. The second approach focuses on the customers’ assessment of value from the customers’ perspective and is often called “customers’ perceived value”. This study adopted the latter perspective of customer value creation. Therefore, when the term “customer value creation” or “creating value for customers” is used, it is referred to “customers’ perceived value”. The detailed discussion on this aspect appears in Section 2.2 (Chapter 2).
On the contrary, if the firm allocates a large proportion of profits into dividend sharing with owners, fewer funds will be available for further investment in product innovation to provide better value to customers (allocating the large amount of profit to owners may mean less funding available for product innovation).

As further highlighted in Section 1.2, product innovation research has long dealt with how well innovative firms are able to protect and appropriate their product innovation by preventing the economic value they generate from slipping to competitors (Teece, 1986; Cockburn & Griliches, 1988; Harabi, 1995; Winter, 2006). Yet, prior studies in this space have largely focused on examining the legal mechanisms (i.e. trademarks, patents, trade secrets, speed of getting a patent granted) (e.g., Levin et al., 1987; Harabi, 1995; Shapiro, 2001; Reitzig & Puranam, 2009) to protect and appropriate value back from innovation or prevent the value from slipping to competitors. This approach, while beneficial, possesses two weaknesses.

First, it is built on the assumption that once the product is built and protected by legal mechanisms such as a patent or trademark, it will be successful when launched into the market because no competitors offer the exact same product. This approach, however, discounts the customers’ perception in accepting or rejecting the product. This is problematic as there is no guarantee that customers will buy the product even if it is the only one available in the market and disregards the fact that there might be similar product types available in the market. Prior literature supports the view that customers are the ones who have a final say in accepting or rejecting a new product introduced into the market (Lisboa et al., 2011). Consumers will buy a product only if they perceive the
product offers value (e.g., Franke et al., 2009; Ngo & O’Cass, 2009; O’Cass & Sok, 2013). As such, although the product may be protected by legal mechanisms, customers will not buy it if they do not perceive it offers value.

Second, while legal mechanisms has proven to be useful in industries such as pharmaceuticals which is characterised by strong appropriability (Reitzig & Puranam, 2009), it might not be the case for consumer goods industries given the lower/weaker patent rights and ease with which competitors can imitate (Reitzig & Puranam, 2009). Further, while these legal mechanisms have also proven useful for industries characterized by weaker appropriability such as mobile phones compared to pharmaceuticals (Reitzig & Puranam, 2009), the rapid development of technology has weakened the value of the legal regimes such as patents as competitors can still develop a similar technology surrounding the patents characteristics. As such, the major concern of many firms is that the rapid diffusion of innovation coupled with hyper technological advancement threatens the value generated from product innovation slipping to their competitors despite the use of protection mechanisms (Teece, 1986; Liebeskind, 1996). Therefore, a critical challenge for marketing scholars is to identify mechanisms that help mediate the link between the firm’s product innovation capability and the dual outcomes of customer value creation and firm value appropriation. The following section examines the underlying process through which product innovation capability contributes to the achievement of both customer value creation – firm value appropriation.
3.2.2.1 The Role of Brand Equity as a Mediator between Product Innovation Capability and Customer Value Creation – Firm Value Appropriation

Because of resource constraints, firms may be forced to prioritise between investing in customer value creation or firm value appropriation based on their strategic foci. This choice is seen as the relative emphasis a firm places on customer value creation relative to firm value appropriation (Mizik & Jacobson, 2003). A firm may choose to compete primarily on the basis of customer value creation, for example, by constantly moving ahead of its competitors and develop new products to satisfy the customers’ needs regardless of the cost and the profit achieved from innovations. This approach may not be viable in the long term as firms will have no funds for further innovation if they do not profit from their previous ones. Alternatively, a firm can choose not to constantly develop new products to satisfy their customers’ needs, but fiercely defend existing products or position in the market against competitors by erecting barriers through brand-based advertising (Mizik & Jacobson, 2003) or legal barriers such as patents or trademarks (Levin et al., 1987; Harabi, 1995; Shapiro, 2001; Reitzig & Puranam, 2009). This approach may also not be viable in the long term as the firm’s innovation may become obsolete and fails to live up to customers’ constant changing needs. Both alternatives present the threat of either investing too much in customer value creation, thus satisfying customers but dissatisfying owners, or investing too much in firm value appropriation, thus satisfying owners but dissatisfying customers. As such, it is imperative that customer value creation and firm value appropriation be achieved simultaneously.

The analogy is used here that customer value creation is akin to the size of a pie and firm value appropriation is akin to the size of a slice. Given that
customer value creation is seen as the size of a pie, and firm value appropriation is the size of a slice, creating more value for customers may increase the size of the value pie; however, it will not automatically increase the size of the slice or benefits a firm can capture (Gulati & Wang, 2003). Gulati and Wang (2003) further argue that while the customer value created by the firm establishes the size of the pie, firm value appropriation determines the share of the pie. For example, if customer value creation is compared to the value pie and firm value appropriation is the value slice, firms that want to obtain a bigger slice can either increase the value pie (customer value creation) or increase the value slice (firm value appropriation). Even though firms can try to appropriate 100% through their product offerings, the value appropriated will not be much if the value created is small. Also, even if the value firms create is substantial, they will not benefit if they are unable to appropriate value from their product offerings. As such, customer value creation and firm value appropriation represent two sides of the same coin and firms must strive to achieve both for long term success (e.g., Wagner et al., 2010).

Achieving both customer value creation and firm value appropriation simultaneously requires the possession of specific capabilities (Mizik & Jacobson, 2003), including product innovation capability, which is conceptualised in this study as the firm’s ability to introduce new products to the market (Nakata et al., 2011). While product innovation capability has been identified as playing an important role in creating customer value (e.g., Ngo & O’Cass, 2009) firms do not automatically profit from the product developed (Reitzig & Puranam, 2009). Value generated from product innovation capability, however, may slip to their competitors through imitation (e.g., Teece, 1986; Liebeskind, 1997; Makadok &
Consequently, it is imperative that firms identify a mechanism that prevents the migration of value or limits the value slippage to other stakeholders to ensure appropriating the majority of the value they create (Lepak et al., 2007).

As identified in Figure 3.1 above, this study hypothesises that brand equity is a key mechanism that can transform the firm’s product innovation capability into achieving both customer value creation and firm value appropriation simultaneously. Brand equity is conceptualised in this study as the difference in consumer choice in terms of brand awareness, brand reputation, and brand loyalty between the focal branded product and an unbranded product given the same level of product features (Yoo et al., 2000). Teece (1986) argues that it is quite common for competitors/imitators to profit more from the innovation than the innovators – firms that are first to commercialise a new product in the market. This phenomenon is perplexing if not troubling as it is largely acknowledged that being first to the market is a source of strategic advantage for firms (Teece, 1986). The implication of Teece’s (1986) work suggests that innovators with new products that offer value to consumers need to establish a barrier to protect the product such as access to complementary assets, market entry, and legal regime (i.e. patents, trademarks) so that they can obtain economic return from their innovations.

Building on the determinants of profiting from innovation (Teece, 1986), some researchers have examined mechanisms such as trade secrets, patents, speed of patents granted (e.g., Levin et al., 1987; Harabi, 1995; Shapiro, 2001; Reitzig & Puranam, 2009; Wang & Chen, 2010) to support the firm’s efforts to appropriate value. Advancing these prior studies, this study argues that brand equity is a key mechanism in linking product innovation capability and the dual
outcomes of customer value creation and firm value appropriation. Prior studies have suggested that the key to building a strong brand and setting it apart from competing brands is contingent on the firm’s abilities to act innovatively and develop unique ways of delivering superior value to customers (Weerawardena et al., 2006; Wong & Merrilees, 2008). Particularly, it is argued that through innovation, firms enjoy a competitive edge that is required to exceed customer expectations and generate great customer surprise and delight through the creation of products with strong brand equity that can help uplift customers’ experiences (see also Menguc & Auh, 2006; Wong & Merrilees, 2008). In addition, Doyle (1989) suggests that a successful brand reflects “getting there first” with the development of new technology, new positioning concepts, new market segments, and new distribution channels. Consequently, by being there first, innovative firms are capable of generating brand awareness, establish strong brand reputation, and build superior customer loyalty (e.g., Weerawardena et al., 2006; O’Cass & Ngo, 2007). In other words, innovation is seen as a critical avenue through which firms continuously differentiate their brands and build strong brand equity (e.g., Wong & Merrilees, 2008).

Brand equity is an outcome that can be uniquely attributed to a brand – implying that certain outcomes result from a product because of its brand name that would not occur if the same product did not have that name (Keller, 1993). This implies that firms that can develop (through their product innovation capability) products with strong brand equity are endowed with an increased utility that allows them to achieve great profits (Christodoulides & de Chernatony, 2010). From the customers’ perspective, brand equity is obtained when customers are familiar with the brand and hold favourable, strong, and unique brand
associations in memory (Keller & Lehmann, 2006). Specifically, brand equity does not only have the potential to communicate meaning via brand associations (Hankinson, 2002), and arouse emotions in consumers (Yoo & MacInnis, 2005), but also build consumer attachment to the brand (Aaker, 1999; Swaminathan et al., 2009). From the firm’s perspective, brand equity has a positive effect on profitability as it provides bargaining power vis-à-vis customers (Madden et al., 2006) and as such firms can capture more profit relative to competitors of weaker brands (Mizik & Jacobson, 2003; Jacobide et al., 2006; Teece, 2006; Wang & Chen, 2010). Products with strong brand equity require less advertising investment than products with weak brand equity to improve their image (Keller & Lehmann, 2006), thus providing opportunities not to only increase cash flow (Simon & Sullivan, 1993), but also establish their distinction from other brands via non-price competition (Aaker, 1991).

Brands can build attachment through brand associations, and brand equity can enhance the value created by increasing the perceived consumer benefit attached to the products (Webster, 2000), while simultaneously allowing higher prices to be charged, thus enabling firms to increase share price (Mizik & Jacobson, 2003; Madden et al., 2006; Lai et al., 2010). For example, a study by Hutton (1997) on professional buyers in the personal computer, floppy disk, and fax machine industries concluded that there was a brand equity ‘halo’ effect’ transferring brand evaluation from one category to another, resulting in buyers willing to pay a premium price as well as prepared to buy and recommend products with the same brand name to others. In this sense, brand equity has the ability to not only assist firms embed higher customer value in their product, thus satisfying customers, but also to induce customers to pay a price premium for
their product, thus satisfying the firms. Consequently, brand equity is conducive in linking the firm’s product innovation capability and the dual outcomes of customer value creation and firm value appropriation.

Further, the differentiation between the brand’s associations and those of other brands in consumers’ memory can reduce brand substitution and therefore, further prevent customer value creation from slipping to competitors (e.g., Mela et al., 1997; McAlister et al., 2007). In addition, products with higher levels of brand equity are associated with lower consumer price sensitivity – a precursor to enhance the customers’ loyalty as they will be less susceptible to price-based appeals from rival brands (e.g., Allenby & Rossi, 1991; Ailawadi et al., 2003). Lower price sensitivity among consumers should also protect cash flows from the risks of supply and operational changes that raise the costs (e.g., Sivakumar & Raj, 1997).

The discussion above suggests that product innovation capability enables firms to develop strong brand equity, which in turn drives the dual outcomes of customer value creation and firm value appropriation. Based on this discussion, this study hypothesises that:

_Hypothesis 1: Brand equity mediates the relationship between product innovation capability and the dual outcomes of customer value creation and firm value appropriation._
3.2.2.2 The Interaction between Market and Brand Orientation as a Driver of Product Innovation Capability

As discussed in Section 2.4 of Chapter Two, market orientation has been viewed either from the cultural perspective or behavioural perspective. For the purpose of this study, market orientation from a cultural perspective is adopted and conceptualised as “the set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise” (Deshpande et al., 1993; p. 27). As also discussed in Section 2.4 of Chapter Two, market orientation from a cultural perspective is a resource which provides the knowledge structure that allows the firms to more fully understand and respond to the market. It provides a basis for developing the required capabilities to develop the product that the market is seeking (Ngo & O’Cass, 2012). Further, Ngo and O’Cass (2012) assert that firms with a strong market orientation are capable of bridging the gap between what customers expect from the firms’ offerings and what offerings to deliver to the market.

Firms with a high level of market orientation often place greater emphasis on understanding both the expressed and latent needs of their customers (Jaworski & Kohli, 1993; Slater & Narver, 1999). To fulfil these needs some scholars have identified product innovation as a key capability and specifically investigated the relationship between market orientation and product innovation capability (e.g., Han et al. 1998; Hurley & Hult, 1998; Hult et al., 2004; Ngo & O’Cass, 2012). Scholars researching market orientation see market orientation as the antecedent governing the capabilities that assist a firm to offer products that meet customer needs (e.g., Narvar & Slater, 1990; Jaworski & Kohli, 1993). Some scholars (e.g.,
Urde, 1999; Gromark & Melin, 2013; Urde et al., 2013), however, argue that if a firm is only market oriented, it focuses only on products and markets. They also suggest that firms that are only market-oriented are potentially looking at a short-term outcome. They further argue that firms will need to move to an additional degree of sophistication, which is being brand oriented, if they are to develop products that are appealing to customers and survive and prosper in an increasingly competitive market. Some scholars have later supported Urde’s (1999) contention that a product with strong brand cannot be developed without sufficient knowledge of customers’ preferences and needs (Gromark & Melin, 2013; Urde et al., 2013) because a strong brand, over time, cannot isolate itself from the constantly changing and evolving customers’ needs (Urde et al., 2013).

Brand orientation is conceptualised in this study as “the mindset of an organization, placing the brand at the core of the business strategy and serving as an initiator for brand identity development” (Hirvenen & Laukkanen, 2013; p. 5).

This study raises the contention that market orientation and brand orientation will have more value and exhibit greater rarity and inimitability when the firm develops and manages them in a complementary manner. This study views complementarity as the degree to which the value of market orientation is dependent on brand orientation and vice versa (c.f. O’Cass et al., 2015 who discussed complementarity between marketing resource and marketing capability). In this instance, complementarity means “doing more of one thing increases the returns to doing ore of another” (Milgrom & Roberts, 1995; p. 181). Therefore, the complementarity between market orientation and band orientation occurs when the returns associated with brand orientation increase in the presence of market orientation and vice versa.
Market orientation and brand orientation are fundamentally based on the same underlying principle – developing products that satisfy customers’ needs and wants. Yet, market orientation is primarily concerned with putting all effort into developing new products to meet customers’ needs and wants, while brand orientation is primarily also concerned with putting all efforts into developing new products to meet customers’ needs and wants but such products must fall within the boundary of the brand’s core values (see also Baumgarth et al., 2013; Urde et al., 2013).

Market-oriented firms place the highest priority on understanding customers’ needs and demands, and do everything in their power to develop products that address those needs and demands (Narver & Slater, 1990; Jaworski & Kohli, 1993). However, such a focus may consequently affect the brand (i.e. identity) (e.g., Gromark & Melin, 2013; Urde et al., 2013) and the firms’ differentiated position in the marketplace (Huang & Tsai, 2013). Some scholars researching brand orientation (e.g., Urde, 1999; Baumgarth, 2010) propose that a firm starts from its brand and regards the brand as a strategic resource, using it as a starting point to formulate a strategy and develop specific capabilities such as product innovation capability. Brand-oriented firms are argued to respond to customer demand or untapped markets by introducing new products to the markets only if the demand or opportunities fall within the boundary of their brand, so as to not lose brand identity (e.g., Hirvonen et al., 2013; Nedergaard & Gyrd-Jones, 2013; Urde et al., 2013). Such firms, according to some, tend to focus on monitoring consumers’ brand perceptions, identify whether brand attitudes confer with their own brand vision and instigate strategies that reinforce positive brand beliefs or change negative perceptions (Ewing & Napoli, 2005).
These activities enable a more effective integration of the brand in developing specific capabilities such as product innovation capability that focus on building brands, enabling the creation of stronger brands with higher brand equity (Reid et al., 2005; Wong & Merrillees, 2007).

Noticeably, firms cannot be purely brand-oriented when they attempt to develop new products, as they also need to take into account what customers need or are looking for because customers hold the power to either reject or accept new products they introduce (Napoli, 2006; Lisboa et al., 2011). Urde (1999) and Gromark and Melin (2013) argue that it is impossible for firms to be only brand-oriented as they need to develop a product that not only complies with the firm’s brand core value, but must also meets customers’ needs and wants. Particularly, by being market-oriented in addition to brand-oriented, firms are able to generate market knowledge that is critical for the development of product innovation capability and introduce new products that are responsive to the constant changes in customers’ demands and potential competitors’ threats, yet still within the boundary of their brand value (see also Urde et al., 2013). In addition, firms with a high level of market orientation and brand orientation are likely to encourage the acquisition of capabilities that can facilitate linkages between what is to be delivered to customers in marketplace offerings and what customers expect from those offerings. In this sense, managerial decisions and actions are oriented toward the development of a key capability because of the overarching market orientation and brand orientation that unifies and guides activities such as product innovation capability (see also Ngo & O’Cass, 2012 for a similar discussion). Building on this argument, this study hypothesises that:
**Hypothesis 2:** The interaction between market orientation and brand orientation is positively related to the firm’s product innovation capability.

### 3.2.2.3 The Mediation Effect of Product Innovation Capability and Brand Equity

Following an approach adopted by Gong et al. (2012) and taking into account RQ1 (hypothesis 1) and RQ2 (hypothesis 2), the theoretical framework suggests that the interaction between market orientation and brand orientation enhances the dual outcomes of customer value creation and firm value appropriation through product innovation capability and then brand equity (see Figure 3.1 above). This relationship is possible because firms that are highly market and brand oriented take actions directed toward future goals which are both customer value creation and firm value appropriation.

The RBV literature (e.g., Ketchen et al., 2007; Vorhies et al., 2009; Ngo & O’Cass, 2012) contends that resources have only potential value and it is the firm’s capabilities to capitalise on resources that drive performance outcomes. In this sense, the interaction between market orientation and brand orientation is seen as a “know-what” resource, in which its effect on performance outcome needs to be realised through the mediational role of firm’s capabilities, which are deemed “know-how” deployment activities, such as product innovation capability.

Drawing from above theoretical underpinning, this study argues that while market orientation and brand orientation are imperative, they are not sufficient for achieving the dual outcomes of customer value creation and firm value appropriation. Customers are attracted and are loyal to the firms only if they are able to act on knowledge about customer needs and serve them better (Hult et al.,
As such, the unique contribution of market orientation and brand orientation as a rare, valuable, and inimitable knowledge resource might be diminished in the absence of certain capabilities (see also Menguc & Auh, 2006 and Morgan et al., 2009 for a similar discussion) such as product innovation capability. Consequently, in this study, product innovation capability is argued to be an action to transform the firms’ resources (the interaction between market orientation and brand orientation) for developing strong brand equity. Brand equity is the key mechanism to achieve the dual outcomes of customer value creation and firm value appropriation. Conceptually, by being market- and brand-oriented, firms should not automatically achieve strong brand equity. Brand equity cannot be developed from a vacuum; it is likely to be the result of foresighted actions such as product innovation capability. Therefore,

*Hypothesis 3: The effect of the interaction of market orientation and brand orientation on customer value creation and firm value appropriation is mediated by product innovation capability and brand equity.*

3.2.2.4 The Moderating Effect of Transformational Leadership on the Relationship between the Firm’s Product Innovation Capability and Brand Equity

Ohlott et al. (2003) argue that issues stemming from globalisation, outsourcing, downsizing, restructuring, advances in technology, and preoccupation with short-term results have placed greater demands on managers to manage and foster firm’s innovation. Leaders as such, must be highly skilled and possess specific characteristics to foster innovation and succeed in this increasingly dynamic
environment. As discussed in Section 2.6 of Chapter Two, three types of leadership have been identified in the literature – transformational, transactional, and laissez-faire (e.g., Eagly et al., 2003). This study focuses on transformational leadership (hereinafter TFL) because of its ability to encourage employees to engage more proactively in innovation which other leadership styles lack (e.g., Jung et al., 2003; García-Morales et al., 2008; 2012; Gumusluoglu & Ilsev, 2009). TFL is conceptualised in this study as the style of leadership that exhibits idealized influence, arouses inspirational motivation, provides intellectual stimulation, and treats followers with individualized consideration (Jansen et al., 2008).

This study contends that while product innovation capability provides the direction for firms to develop strong brand equity, effective implementation of product innovation capability requires transformational leadership behaviours on the part of top management. It is because employees play a critical role in new product development (Amabile, 1988; Bharadwaj & Menon, 2000) and the management ability to create an environment that is conducive to innovative activities underpins the firm’s ability to innovate (García-Morales et al., 2008; Sok & O’Cass, 2015) to build strong brand equity. In addition, transformational behaviours are critical in promoting the firm’s product innovation effort to build strong brand equity because such behaviours create an environment that “followers feel trust and respects towards the leader and are motivated to do more than what they are expected to do” (Yukl, 1989; p. 272). This environment is critical since product innovation effort may fail when the firm do not offer an environment that encourages creative ideas which are integral parts of developing products with strong brand equity because employees tend to resist new initiatives.
that require them to shift from one set of operating routines to another (see also Monsen & Boss, 2009).

In addition, transformational behaviours also encourage harmonious relationships among members with potential conflicting interests (Jansen et al., 2008), promote collective sense of mission (Bass & Avolio, 1995), and foster self-sacrifice for the sake of the group (MacKenzie et al., 2001). Such behaviours are critical in promoting the firm’s product innovation effort to build strong brand equity. For example, without sharing the same goals, the marketing and R&D teams may have completely different views of the value of the product brands introduced to the market. Having different goals may also hinder each other’s activities, resulting in potential negative effect on the firm’s effort to develop products with high levels of brand equity. Having common goals, on the contrary, serve as guideposts in enhancing the firm’s effort to develop products with high levels of brand equity, resulting in strengthened product innovation capability – brand equity relationship. Moreover, transformational behaviours also create protective culture (Bass & Avolio, 1995) and promote compelling reasons why things are being done (Podsakoff et al., 1990), all of which are conducive in enhancing employees’ commitment and effective implementation of the firm’s strategic activities (Bass & Avolio, 1995) such as the firm’s effort to develop products with strong brand equity. For instance, if employees do not comprehend the direction their leaders want to take the firm and why things are being done the way they are, employees are less likely to perform the necessary tasks in timely and effective manner than they are capable of if they do understand (see also Monsen & Boss, 2009), resulting in potential negative effect on the firm’s effort to develop products with high levels of brand equity. Drawing from these
theoretical underpinnings, this study further proposes transformational leadership as a key contingency enhancing the relationship between product innovation capability and brand equity.

Hypothesis 4: Transformational leadership moderates the relationship between product innovation capability and brand equity.

3.3 CONCLUSION

The proposed model as shown in Figure 3.1 above is the result of a stepwise approach in developing an integrated research model which incorporates the direct effect, moderation effect, and mediation effect that enable the firms to achieve the dual outcomes of customer value creation and firm value appropriation. To do so, an examination of the dual outcomes of customer value creation and firm value appropriation is established. In addition, the components that can help firms develop superior product innovation capability and the key mechanisms that can help transform the firm’s product innovation capability to achieve the dual outcomes are discussed. The model depicts relationships between focal constructs such as market orientation, brand orientation, product innovation capability, brand equity, transformational leadership, customer value creation, and firm value appropriation and has provided an effective platform for the development of four hypotheses generated to empirically test the proposed model. These hypotheses will be used as a guide in making methodological decision concerning research design which will be discussed in Chapter Four. The
theoretical framework also provides the means to proceed with the ensuing analysis in Chapter Five and present the results.
CHAPTER FOUR

RESEARCH DESIGN

4.1 INTRODUCTION

The research design is “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings” (Burns & Grove, 2003; p. 195). It is also “a plan that describes how, when, and where data are to be collected and analysed” (Parahoo, 1997; p. 142), and “the researcher’s overall design for answering the research question or testing the research hypothesis” (Polit et al., 2001, p. 167). It is suggested that researchers give serious attention to the design of a research study; otherwise, they will likely end up with a mess (Robson, 2011). Bono and McNamara (2011) further highlight the importance of linking the research objectives and questions of the study to its research design. Bono and McNamara (2011) argue that to develop a good research design for a particular study, researchers must match their design to their research questions, carefully specify their model, and ensure the definition of the construct is consistent with its corresponding operationalisation. They also should choose samples and procedures that are deemed suitable to their unique research question (Bono & McNamara, 2011).

 Chapters One to Four covered the first stage of the research design, including the initial planning stage. Chapter One underpinned the research objectives and questions. Chapter Two provided a detailed discussion of the literature review related to the focal constructs underpinning the theory as
presented in Chapter Three. To design the empirical side of the study the model of
the research planning process recommended by Aaker et al. (2004) (Figure 4.1) is
adopted. This chapter begins with a discussion outlining the specific research
paradigm adopted in the study. The chapter then discusses the research
methodology and the rationale for adopting a quantitative research method. The
chapter continues with a discussion of the design used in this study including
instruments, and data collection and analysis methods. The purpose of developing
this Chapter is to demonstrate that appropriate steps have been taken to design
and implement the study, assuring the success of the proposed study (Robson,
2011).

4.2 RESEARCH PLANNING

Many tasks and decisions are connected when planning a research project
(Blaikie, 2000). Similarly, Aaker et al. (2004) argue that the decisions made and
the tasks undertaken in relation to the research project are likely to interact and
sometimes occur simultaneously because they are encapsulated in an ongoing
planning process that drives and influences the research. This study adopted the
research design process proposed by Aaker et al. (2004) as shown in Figure 4.1
below. Aaker et al.’s (2004) research design process offers guidelines for the
design, collection and analysis of data, and consists of three primary stages: the
preliminary planning stage, the research design stage, and the research
implementation stage. The focus of this chapter is on the research design stage
because it is a critical link between the problem (what the problem is) and its
solution (how the problem is solved). Therefore, the research design stage is an
important element that is built on the study’s research questions and hypotheses in order to guide the strategies and processes through which the data are gathered, and analysis is executed, and the findings are subsequently derived.
Figure 4.1 Research Design Framework

Stage I
Preliminary Planning

Research Initiatives
- Research objectives
- Research questions
- Review of literature
- Hypotheses development

Stage II
Research Design

Research Paradigm
- Research approach
  - Positivism
  - Descriptive research approach

Research Tactics
- Design of sampling plan
  - Sampling frame
  - Participating respondent
- Data collection method
  - Self-administered survey
  - Mail and drop-and-collect
- Development of measures of constructs
  - Draft survey
  - Pre-test
  - Final survey
- Anticipated data analysis

Stage III
Implementation

Data Collection and Analysis
- Field work and data processing
- Statistical analysis and interpretation

Implications and Conclusions

Source: Adapted from Aaker et al. (2004)
4.3 PRELIMINARY PLANNING STAGE

In the preliminary planning stage, key tasks including identifying the research problem, developing the research questions and hypotheses, and articulating the justification and contribution of the study are accomplished. The research objectives and justification have been presented in Chapter One, while in Chapter Two the literature drawn from relevant research domains has been reviewed. These tasks have been undertaken to provide a foundation for the theoretical model presented in Figure 3.1, and Hypotheses 1 to 4, which are the foundation on which this research rests.

4.4 RESEARCH DESIGN STAGE

Adopting the procedures recommended by scholars such as Hair et al. (2003) and Aaker et al. (2004), the research design stage provides the guidelines to design the sampling plan, to select the method for data collection, to develop the measures, and to anticipate the data analysis techniques. As demonstrated in Figure 4.1, the research design stage – Stage Two – consists of two important elements, the research paradigm, which is related to the approach adopted for any given research; and research tactics, which are related to specific strategies in designing the sampling process, collecting data, developing measures, and analysing data.
4.4.1 Research Paradigm

It is argued that placing research within an appropriate paradigm is a critical first step in the successful development and implementation of the research project (Punch, 2005). It is further argued that adopting a methodology that is aligned with the theoretical model of the research paradigm is critical because the research paradigm guides the implementation of the research (e.g., Grace & O’Cass, 2002). In the marketing domain, two main methodologies associated with the data collection process have been discussed and adopted – qualitative and quantitative (e.g., Neuman, 1997; Cavana et al., 2001; Aaker et al., 2004; O’Cass et al., 2014; Troilo et al., 2014; Sok & O’Cass, 2015).

A qualitative methodology which is generally driven by the phenomenological research paradigm is argued to be a more subjective and inductive approach. It is an approach that predominantly focuses on verbal analysis or observations to search for themes and patterns rather than using statistical analysis of numerical data (Szmigin & Foxall, 2000; Shankar & Goulding, 2001). On the other hand, a quantitative methodology which is often driven by the positivistic paradigm is argued to be a more objective and hypothetico-deductive approach. It predominantly focuses on using questions with pre-determined response options that have been structured to answer the research questions (Burns & Bush, 2000). A quantitative methodology is associated with employing data collection methods that require the use of statistics (Ali & Birley, 1999; Scandura & Williams, 2000; Cavana et al., 2001).

The review of the literature presented in Chapter Two identifies a number of studies that have adopted a quantitative methods, covering topics related to product innovation (Ngo & O’Cass, 2012; Troilo et al., 2014), brand equity
(Baumgarth & Schmidt, 2010; Lai et al., 2010), brand orientation (Hult et al., 2004; Ngo & O’Cass, 2012), and transformational leadership style (Gumusluoglu & Ilsev, 2009; Gong et al., 2009). These studies and others within a broad range of areas such as marketing and management, have adopted quantitative methods using questionnaires to investigate relationships between constructs and test hypotheses. For this reason, together with the fact that this research aims to examine a set of pre-specified hypotheses which involve a number of relationships among the constructs (as shown in Figure 3.1), the positivist paradigm using a quantitative method is adopted.

Once the research paradigm has been selected, the next important step is to select an appropriate research approach, which according to Aaker et al. (2004) is one of the most important elements of the research design as it determines how the information is to be obtained. It is further argued that the choice of the research approach is strongly influenced by the research objectives and purpose and the precision of the hypotheses proposed in the research (Aaker et al., 2004). A research approach, according to some scholars, is categorised into three types: exploratory, descriptive, and casual (e.g., Burns & Bush, 2000; Cavana et al., 2001; McDaniel & Gates, 2001; Aaker et al., 2004). As this study falls within the parameter of positivism paradigm using survey instruments, descriptive and causal research approaches are argued to be the most applicable (Aaker et al., 2004; Burns & Bush, 2006).

Causal research is the investigation of the cause-and-effect relationships (Cavana et al., 2001; Aaker et al., 2004; Malhotra, 2006). To determine causality, it is important to observe variation in the variable(s) that is assumed to cause the change in other variable(s), and then measure the changes in the other variables(s)
Causal research is argued to be suitable with research that attempts to examine the reason(s) why certain market phenomena happen as they do (Hair et al., 1998). Descriptive research, on the other hand, is research that aims to address the research hypotheses by using scientific procedures to collect primary data which describe the existing characteristics of a defined population (Churchill & Iacobucci, 2005). Many studies within marketing (e.g., Shannahan et al., 2013; Troilo et al., 2014; Sok & O’Cass, 2015) adopt this approach. Based on the discussion above, descriptive research is argued to be more suitable with the current research given the proposed hypotheses and theoretical framework developed in Chapter Three which seeks to examine relationships among the focal constructs as shown in Figure 3.1.

4.4.2 Research Tactics

Appropriate research tactics need to be established to guide the data collection process once an applicable research paradigm and approach have been developed. As shown in Figure 4.1 – Stage Two – research tactics address issues related to (1) the design of sampling plan; (2) the data collection method; (3) the development of measures of constructs, and (4) the anticipated data analysis. The following sections provide the details of the tactics employed in this study.

4.4.2.1 Sampling Plan

As specified in Section 4.4, a positivistic, descriptive approach was adopted to address the research objectives and provide data to answer the research questions discussed in Chapter One and test the hypotheses presented in Chapter Three. According to many scholars, such as Hussey and Hussey (1997) and Cavana et al.
(2001), issues such as (1) determining the population from which the sample is drawn; (2) developing the sampling frame; and (3) identifying key informants need to be addressed carefully so as to conduct robust research and yield reliable results. Specifically, the development of a sampling plan involves the selection of respondent profiles and research setting that matches the theoretical emphasis and overarching questions that the research aims to address (Cavana et al., 2001).

4.4.2.1 Sampling Frame

The sampling frame is the representation of the elements of the target population (Malhotra, 2006). Once the sampling frame is identified, the next critical step is to select an empirical setting that is suitable for the theoretical emphasis of the proposed study (Cavana et al., 2001). Considering the purpose of the study is to examine the extent to which product innovation capability influences the achievement of both customer value creation and firm value appropriation through brand equity, this study focuses on medium and large manufacturing firms. The decision to emphasise medium and large manufacturing firms is driven by the fact that these firms tend to have a clearer organisational structure that consists of separate functional areas such as marketing and R&D departments, as compared with micro or small firms.

The census list of all firms was obtained from the government agency that uses two criteria, namely, the number of employees and annual total revenue, to assess firm size. According to the criteria set out by the government agency, any firm that has a total number of employees between 51 and 100 is considered medium in size. Any firm that has a total number of employees of over 100 is considered large in size. The use of number of employees to determine firm size
is also consistent with prior studies (Salomo et al., 2008; Dul & Ceylan, 2014; Troilo et al., 2014). This census list was used as a sampling frame in this study.

This study adopted a systematic sampling technique. The sample was drawn by selecting a random starting point and then choosing every 5\textsuperscript{th} element in succession from the list. For instance, if the random starting point was 5, the sample consisted of the elements 5, 10, 15, 20, and so on (Maholtra, 2006). This approach is frequently employed when a sampling frame is available (Johnson, 1999). Each time a sample firm was drawn, an initial contact by telephone was made to the senior executive or her/his delegate or representative in that firm, to ask for her/his agreement to participate in the study.

The senior executives were offered an explanation of the study, how their contact details were obtained, and the purpose of the call. Given the purpose of the study was to examine the role of product innovation capability in achieving both customer value creation and firm value appropriation through brand equity among medium and large firms, senior executives were asked specific questions related to screening criterion such as the firm’s total number of employees and whether the firms had launched a new product brand within the previous three years (from the data collection month). They were also informed that by agreeing to participate in the study, they would allow the researcher to contact the R&D manager, marketing manager, employees, and the customers of their firms. The random selection procedure was repeated starting from a different point in the list three times, upon which 390 firms agreed to participate in the study.
4.4.2.1.2 Participating Respondents

As shown in Figure 4.1 – Stage Two – identifying appropriate respondents who can provide the best responses to the focal constructs is critical once the appropriate sampling frame is determined. As elaborated by Stock et al. (2013), selecting appropriate informants is critical for the reliability and validity of the study given that an object’s ratings cannot be separated from its perceiver. Consequently, selecting the most knowledgeable informants with the most relevant expertise to respond to each construct is critical (Stock et al., 2013).

As shown in Figure 3.1 in Chapter Three, the theoretical model of this study comprises seven key constructs, namely: product innovation capability, brand orientation, market orientation, brand equity, transformational leadership, customer value creation, and firm value appropriation, all of which are best reported on by different respondents. Consequently, following a similar approach to Zhou et al. (2008), this study employed a multiple informant design using five key informants comprising senior executive, R&D manager, marketing manager, employees, and customers.

The senior executive is best placed to respond to items pertaining to firm value appropriation as they have full knowledge of the firm’s profitability, return on investment, and return on sales; the R&D or project manager is best placed to respond to items pertaining to a firm’s product innovation capability, and the marketing manager is best placed to respond to items pertaining to the firm’s marketing and branding activities. The literature also strongly supports the tenet that senior managers’ perceptions of the firm level variables is the most reliable and accurate one (e.g., Newbert, 2008; Morgan et al., 2009; Ngo & O’Cass, 2009). Further, employees are best placed to respond to items pertaining to
transformational leadership. This view is also widely supported in the literature (e.g., Liao & Chuang, 2007; Gumusluoglu & Ilsev, 2009; Wang & Rode, 2010; Shannahan et al., 2013). Finally, customers are best placed to respond to items pertaining to customer value creation. The literature supports the view that customers are the final arbiter of value (Ulaga & Eggert, 2006; Priem, 2007; Chi & Gursoy, 2009; Claycomb & Frankwick, 2010; O’Cass & Sok, 2013), and as such their responses are reliable and representative of what value they have actually received from the firms. The use of the multiple informant approach in collecting data can help rule out a possible common method bias (e.g., Zhou et al., 2008; Morgan et al., 2009; Raub & Liao, 2012), and the use of managers, employees and customers as informants is common within the marketing and strategy fields (e.g., Liao & Chuang, 2007; Liao & Subramony, 2008; Zhou et al., 2008).

Consequently, five surveys were developed. The surveys were labelled as Survey A, B, C, D, and E with survey A being completed by a senior executive in the firm, B being the marketing manager in the firm, C being the R&D manager in the firm, D being the employees in the firm, and E being customers of the firm.

**4.4.2.2 Data Collection Methods**

Once the sampling frame and participating respondents have been identified, the next key task is to select a suitable data collection method (Aaker et al., 2004) (see Stage Two of Figure 4.1). As previously discussed, the positivistic and descriptive nature of the current study, and the need to test the hypotheses highlighted in Chapter Three, requires the use of primary data. Within the marketing domain, four common approaches – namely surveys, observation,
interview, and experiments – can be identified (Burn & Bush, 2000; Groves et al. 2011). Given the popularity and extensive use of surveys among researchers in the areas being studied (e.g., Gong et al., 2009; Gumusluoglu & Ilsev, 2009; Baumgarth & Schmidt, 2010; Lai et al., 2010; Ngo & O’Cass 2012; Troilo et al., 2014), a survey approach was adopted in this study.

The use of surveys as a vehicle to gather primary data can be undertaken using three approaches: computer-administered, person-administered, and self-administered (see also Neuman, 1997; Burns & Bush, 2006; Groves et al., 2011). For the computer-administered and self-administered approaches, the presence of the researcher(s) is not required; while the person-administered approach requires the presence of both the researcher(s) and respondent(s) (Groves et al., 2011). Each approach has its advantages and disadvantages. For example, the computer-administered approach allows the researcher to improve the speed of administration and reduce interview bias; yet it causes issues such as high set-up costs and confidentiality problems (Neuman, 1997; Moutinho & Chien, 2007). In a similar vein, the person-administered approach allows the researcher to achieve a high response rate and obtain rich feedback; yet it can be very costly and time consuming as well as increase the possibility of interviewer bias (Kaplan et al., 1997; Hair et al., 2003). Similarly, the self-administered approach allows the researcher to obtain large amounts of data without introducing interviewer bias and with minimal costs compared with computer-administered and person-administered approaches; yet it can affect the response rate, especially for long surveys (McBurney, 1994; Kaplan et al., 1997).

Having carefully considered the identified benefits and challenges of the three approaches outlined above, a self-administered approach was adopted. This
approach was adopted because of its identified benefits, including (1) accommodating long surveys; (2) having the potential to gain large samples; (3) having the potential to reduce the interviewer bias, and (4) cost effectiveness. Further, this approach has also been extensively adopted in the literature relevant to this study (e.g., Gong et al., 2009; Gumusluoglu & Ilsev 2009; Baumgarth & Schmidt, 2010; Lai et al., 2010; Ngo & O’Cass, 2012; Troilo et al., 2014).

The self-administered approach can be undertaken in different ways, including drop-and-collect and mail, the commonly used methods in the literature (e.g., Baumgarth & Schmidt, 2010; Lai et al., 2010; Sok & O’Cass, 2011; Vorhies et al., 2011; Ngo & O’Cass, 2012; Troilo et al., 2014). Drop-and-collect approach, in particular, is argued to achieve a higher response rate compared to mail given the interpersonal interaction between the research assistants or researchers and the respondents during the distribution and collection of the survey (Ibeh et al., 2004; Sok & O’Cass, 2011; O’Cass & Sok, 2013). The mail survey, on the other hand, administers data collection through the use of postal systems which allows a wider reach at a relatively low cost (Ibeh et al., 2004; Malhotra, 2006) compared to drop-and-collect approach.

Given its research context, this study adopted the drop-and-collect approach instead of mail approach, for many reasons. First of all, this approach is deemed suitable for research conducted in developing countries (Ibeh et al., 2004) such as Cambodia (Sok & O’Cass, 2011; O’Cass & Sok, 2013) where this study was conducted. In addition, issues related to respondents’ lack of experience with mail surveys, and the unreliable nature of postal systems in developing countries such as Cambodia have been identified (Sok & O’Cass, 2011; O’Cass & Sok, 2013). Consequently, the drop-and-collect approach was deemed appropriate.
Importantly, the drop-and-collect approach is also argued to be suitable in contexts where personal interaction is critical for information exchange (Hofstede, 1980) such as Cambodia (Sok & O’Cass, 2011; O’Cass & Sok, 2013). The drop-and-collect approach is also argued to yield a higher response rate than other impersonal delivery systems (Ibeh et al., 2004); where many indicate a 40% to 90% response rate can be achieved through this approach (Balabanis & Diamantopoulos, 2004).

As mentioned in Section 4.4.2.1.1, 390 firms agreed to participate. Given that the drop-and-collect approach is labour intensive, a number of research assistants were employed. The researcher and/or trained research assistant dropped the survey package containing Survey A, B, and C to the firm site. The senior executive who was responsible for responding to survey A forwarded survey B and C to the marketing and R&D manager within the firm. A telephone number was provided to the respondents so that the researcher and/or trained research assistant could come to collect the completed questionnaire.

Using the employee and customer lists obtained from the firms, the researcher also randomly selected the employees and customers. The same procedure used to seek participation from the senior executive was used to seek participation from the employees and customers. Upon receiving their consent, the researcher and/or trained research assistant made an appointment with them to drop off and then collect the completed surveys. In total, the researcher managed to gather 130 completed sets in which each set consists of one chief executive, one marketing manager, one R&D manager, seven employees, and five customers, resulting in a 33% response rate.
4.4.2.3 Development of Measures of Constructs

Once the data collection method and the sampling plan were determined, as shown in Figure 4.1 Stage Two, and discussed in Sections 4.4.2.1 and 4.4.2.2, the next key task is to develop sound measurements that capture the focal constructs of the study (e.g., Rogelberg et al., 2001; Maholtra, 2006). As presented in Figure 4.2, measurement development procedures involve two key stages – item generation and item refinement. Stage one – items generation – consists of three steps: (step 1) generating items from the literature; (step 2) selecting the scale poles and formation, and (step 3) producing a draft survey. Stage two – item refinement – consists of three specific steps: (step 4) conducting expert judgement of face validity that allows the researcher to refine and delete some items from the item pool; (step 5) conducting pre-tests that allow the researcher to make any adjustments needed to improve the readability and the content of the questionnaire, and (step 6) producing the final questionnaire.

4.4.2.3.1 Stage One - Item Generation

Step 1: Generating Items

The procedure recommended by Churchill (1979), which involves either researcher expertise-based item generation and/or literature-based item generation, was adopted in this study as the means to generate the survey items. The discussion and review of the literature undertaken in Chapter Two, and the definitions undertaken in Chapter Three, provides a foundation to develop measures of the focal constructs of the study (market orientation, brand orientation, product innovation capability, brand equity, transformational leadership, customer value creation, and firm value appropriation).
Figure 4.2 Measurement Development Procedures

STAGE ONE
ITEM
GENERATION

Step 1
Generating items

Guidelines for item generation and item modification

Step 2
Format and scale poles

Likert scale

Step 3
Draft survey

STAGE TWO
ITEM
REFINEMENT

Step 4
Expert-Judges of Face Validity

Expert judges

Step 5
Pre-test

Survey

Step 6
Final survey

Source: Adapted from Churchill (1979)
Measuring Market Orientation

In accordance with the literature on market orientation discussed in Section 2.4, 8 items measuring market orientation adopted from Zhou et al. (2008) were placed into an initial item pool. Some example items of this scale are:

**MO1**: Our business objectives are driven primarily by customer satisfaction.

**MO2**: Our strategies are driven by beliefs about how we can create greater value for customers.

**MO3**: We emphasize constant commitment to serving customer needs.

**MO4**: We regularly communicate information on customer needs across all business functions.

Measuring Brand Orientation

In accordance with literature on brand orientation discussed in Section 2.5, 11 items measuring brand orientation adapted and refined from Reid et al. (2005) and Gromark and Melin (2010) were placed in an initial item pool. Some example items of this scale are:

**BO1**: Branding is central to corporate decisions and the corporate mission.

**BO2**: Creating, developing, and/or protecting the brand is/are understood by everyone to be top priorities for our business.

**BO3**: Developing a strong brand is regarded as an integral part of our business model.

**BO4**: The ability to develop a brand is regarded as a core competence.
Measuring Product Innovation Capability

In accordance with literature product innovation capability discussed in Section 2.4, 5 items measuring product innovation capability adopted from Hurley and Hult (1998) and Nakata et al. (2011) were placed in initial item pool. Some example items of this scale are:

**PIC1**: This firm invests a great percentage of its revenue in research & development.

**PIC2**: Other firms (competitors) in the industry see this product brand as highly innovative.

**PIC3**: This firm incorporates cutting edge managerial and technological innovations in its operations when developing this product brand.

**PIC4**: This firm introduces this product brand to the market before any of its competitors who produce similar product types.

Measuring Brand Equity

In accordance with literature on brand equity discussed in Section 2.5, 3 items measuring brand equity adapted and refined from Keller (1993) and Build et al. (2013) were placed in initial item pool. Some example items of this scale are:

**BE1**: We have built strong brand awareness in the target market.

**BE2**: We have built a solid brand reputation.

**BE3**: We have built strong customer brand loyalty.
Measuring Transformational Leadership

In accordance with literature on leadership discussed in Section 2.7, transformational leadership was operationalised as a multi-dimensional construct consisting of intellectual stimulation, idealised influence (attributed and behaviour), inspirational motivation, and individualised consideration. 20 items measuring transformational leadership adopted from Bass (1985) were placed in initial item pool. Some example items of this scale are:

**Intellectual Stimulation**

TFL1: Re-examines critical assumptions to question whether they are appropriate.

TFL2: Seeks differing perspectives when solving problems.

**Idealised Influence (attributed)**

TFL3: Instils pride in others for being associated with him/her.

TFL4: Goes beyond self-interest for the good of the group.

**Idealised Influence (Behaviour)**

TFL5: Talks about his/her most important values and beliefs.

TFL6: Specifies the importance of having a strong sense of purpose.

**Inspirational Motivation**

TFL7: Talks enthusiastically about what needs to be accomplished.

TFL8: Articulates a compelling vision of the future.

**Individualised Consideration**

TFL9: Spends time teaching and coaching.

TFL10: Considers each individual as having different needs, abilities and aspirations from others.
Measuring Customer Value Creation

In accordance with literature on value discussed in Section 2.2, customer value creation was operationalised as a multi-dimensional construct consisting of performance value, pricing value, relationship building value, and co-creation value. 21 items measuring customer value creation adopted from O’Cass and Ngo (2011) were placed in initial item pool. Some example items of this scale are:

**Performance Value**

CVC1: Ensures my firm’s personal preferences are satisfied.

CVC2: Delivers quality product.

**Pricing Value**

CVC3: Provides my firm with price policies that are consistent and accurate.

CVC4: Provides my firm more beneficial price policies compared to that of other suppliers of the same product.

**Relationship Building Value**

CVC5: Has committed to ensure that my firm has easy access to their business at any time.

CVC6: Has committed to ensure rapid response standards to deal with any of my firm’s enquiry.

**Co-creation Value**

CVC7: Works together with my firm to produce offerings that mobilize my firm.

CVC8: Interacts with my firm to design offerings that meet our unique and changing needs.
Measuring Firm Value Appropriation

In accordance with literature on value discussed in Section 2.2, 4 items measuring firm value appropriation adapted and refined from Durand et al. (2008) and McNamara et al. (2013) were placed in initial item pool. Some example items of this scale are:

FVA1: Profitability is
FVA2: Return on investment is
FVA3: Return on sales is

Step 2: Scale Poles

As identified in Figure 4.2 above, upon identifying the pool of measurement items, the next step is to consider the scaling and formatting of the focal constructs to ensure that the items and their corresponding formatting and scaling are aligned. Relevant literature supports the contention that determining the scale that best suits the intended measurement is critical (Kumar et al., 1999; Malhotra, 2006). According to some scholars, the use of a particular scaling method largely depends on the information required for the study, the characteristics of the potential respondents, and the intended data administration technique (e.g., Tull & Hawkins, 1990; Cavana et al., 2001; Malhotra, 2006).

In social science research fields such as marketing and management, different scaling techniques – the Semantic Differential Scale, the Likert Scale, the Thurstone Scale, and the Guttman Scale – have been widely adopted. Among them, the Likert Scale and the Semantic Differential Scale methods have been widely used and considered suitable in marketing literature (Blaikie, 2000; Aaker et al., 2004). A Likert Scale contains complete statements (Burns & Bush, 2006).
The Likert Scale is primarily adopted when research attempts to gather respondents’ opinions on a particular topic/issue by measuring the direction and intensity of their attitude (Wiid & Diggins, 2009). A Semantic Differential Scale pertains to the attitude object (Burns & Bush, 2006).

The Likert Scale and Semantic Differential Scale were used in this study. Given the importance of aligning the measurement items and the corresponding scaling, this study adopted the same scale poles as in the original sources which have been shown strong reliability. As shown in Table 4.1 below, market orientation, brand orientation, brand equity, product innovation capability, customer value creation and transformational leadership were measured via a seven-point Likert scale with scale poles ranging from 1 “strongly agree” to 7 “strongly disagree”. Firm value appropriation was measured via a seven-point Likert scale ranging from 1 “much better than targeted performance outcome” to 7 “much worse than targeted performance outcome”. The use of different scale instruction in the survey was also deemed important for reducing the potential threat of common method bias (e.g., Podsakoff et al., 2003).

Table 4.1: Scale Poles of Focal Constructs

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firm Value Appropriation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much better than targeted performance outcome</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>
**Step 3: Draft Survey**

As identified in Figure 4.2 above, a draft survey is developed upon completion of measurement item generation and establishing appropriate format and scale poles.

As identified in Table 4.2 below, the draft survey contained 73 items drawn from existing literature, and which have been shown as valid and reliable measures. These 73 items represented all the seven focal constructs in this study – market orientation, brand orientation, product innovation capability, brand equity, transformational leadership, customer value creation, and firm value appropriation.

Since this study adopted a multiple-informant approach consisting of five different respondents – senior executive, marketing manager, R&D manager, employees, and customers, this initial item pool was then placed in five surveys (Survey A: senior executive; Survey B: marketing manager, Survey C: R&D manager, Survey D: employees; Survey E: customers).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Items</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Orientation</td>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td>Brand Orientation</td>
<td>11</td>
<td>B</td>
</tr>
<tr>
<td>Product Innovation Capability</td>
<td>5</td>
<td>C</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>4</td>
<td>B</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>20</td>
<td>D</td>
</tr>
<tr>
<td>Customer Value Creation</td>
<td>21</td>
<td>E</td>
</tr>
<tr>
<td>Firm Value Appropriation</td>
<td>4</td>
<td>A</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>73</strong></td>
<td></td>
</tr>
</tbody>
</table>


4.4.2.3.2 Survey Development – Stage Two

Step 4: Expert-Judges of Face Validity

As identified in Figure 4.2 above, the face validity of the survey is then assessed by judges who possess expertise in the field of research being conducted. Face validity is the extent to which a measure, item, or indicator reflects what it is meant to measure (e.g., Rubio et al., 2003).

The assessment of face validity was conducted through the employment of five senior academic staff and four PhD candidates who were in the last stage of their candidature. These expert judges within the marketing discipline were given a short description of the study. They were also given the conceptual definitions of the focal constructs and the items measuring those constructs, as well as a set of instructions for making their judgement (see also Ngo & O’Cass, 2009). They were asked to comment on the consistencies between the measurement of the focal constructs and their respective definitions, as well as their relevance for the purpose of the study. They were asked to rate each item as either “not representative,” “somewhat representative,” or “very representative” in regards to the construct definition (see also Ngo & O’Cass, 2012). The decision about which items to be removed or retained were made on the basis of a three-stage procedure that synthesised the sum-score (e.g., Lichtenstein et al., 1990) and complete (e.g., Obermiller & Spangenberg, 1998) approaches, upon obtaining the feedbacks from the expert judges. Six items were removed from the item pool upon considering the feedback obtained from the expert judges. Therefore, 67 items remained in the refined item pool (See Table 4.3 below).
**Step 5: Pre-test**

As shown in Figure 4.2 above, at the conclusion of the expert judgement process, the next key task is to organise the survey in preparation for pre-testing. One item pertaining to the brand name of the product selected to be the focus of the survey was included in Survey A. The researcher then noted this product brand in Survey B, C, D and E to ensure that all the respondents referred to the same product brand when answering the survey items. In addition, the respondents’ demographic characteristics were included in survey A, B, C and D: 1) designated position or title; (2) age; (3) education background; (4) gender; (5) years of experiences in the current position; (6) years of experience in the industry, and (7) industry type. Age and gender were included in Survey E.

To ensure the integrity and reliability of the responses obtained in this study, following the approach recommended by Vorhies et al. (2009), two specific questions to assess respondents’ knowledge and confidence in their abilities to accurately answer all the questions in all surveys were developed. The firm respondents were asked to rate their knowledge about the firm’s business operation, business process, business environment (at the beginning of the survey), and their confidence level in answering all the questions in the survey (at the end of the survey). These questions used a 7-point Likert scale ranging from 1 “not at all” to 7 “very much so”. The business customers were asked to rate their knowledge about the product named in the survey (at the beginning of the survey), and their confidence in answering all the questions in the survey.

Upon finalising the survey items, the next key task is to ensure that issues pertaining to the layout of the survey, opening instructions, and question sequences are properly addressed (see also Aaker et al., 2004). Following the
conventional approach recommended by Burns and Bush (1995), demographic questions were placed at the end of the survey. In addition, to reduce potential ambiguities and bias, special attention was paid to ensuring that instructions were clear (with no ambiguities), simple, and easy to comprehend.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Items</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Orientation</td>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td>Brand Orientation</td>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td>Product Innovation Capability</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>3</td>
<td>B</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>20</td>
<td>D</td>
</tr>
<tr>
<td>Customer Value Creation</td>
<td>21</td>
<td>E</td>
</tr>
<tr>
<td>Firm Value Appropriation</td>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>67</strong></td>
<td></td>
</tr>
</tbody>
</table>

Once the assessment of face validity is completed, so as to purify the measures further, preliminary pre-test needs to be conducted prior to launching a survey instrument (Churchill, 1979; Krueger & Casey, 2000). This pre-test is crucial as it can reveal what areas are unclear to the respondents, and as such adjustment can be made to improve the readability of the survey (Denzin & Lincoln, 1998; Seidman, 1998). Pre-testing has historically been undertaken via either a quantitative or a qualitative approach (Churchill, 1979; Czaja, 1998; Presser et al., 2004; Atuahene-Gima, 2005; Ngo & O’Cass, 2012; Troilo et al., 2014).

Consistent with prior studies in this field (Atuahene-Gima, 2005; Zhou et al., 2005; Vorhies et al., 2011; Ngo & O’Cass, 2009, 2012; Troilo et al., 2014), a
qualitative approach was undertaken in this study. There were 15 senior managers, 50 employees, and 50 customers who were invited to take part in the pre-test, all of whom were drawn from the original sampling frame. These informants were subsequently not included in the list when the final survey was launched. The informants were initially contacted via phone and a detailed explanation of the purpose of the study was given to them. Interviews were conducted with 10 senior managers, 15 employees, and 18 customers who agreed to participate in the pre-test. Following the approach adopted by Ngo and O’Cass (2012), and others, the informants were asked to complete the draft surveys and provide their opinions as to whether they could think of more than one way to interpret what each item was asking. They were also asked to provide their opinions on the survey format, question sequence, and item duplication. Following examination of the feedback, all items in the draft surveys were retained for final surveys – only a few issues related to wording were raised which were addressed prior to finalising the surveys. The number of items per construct in the final refined item pool, which also includes the demographic items, is presented in Table 4.4 below.

**Step 6: Final Survey**

As shown in Figure 4.2 and discussed above, the important steps undertaken to improve the readability and reliability of the draft survey at the pre-test stage resulted in the development of the final survey instrument that was used for data collection. In addition, this study employed a multiple informant design in order to reduce the potential threat of common method bias. The items retained in the refined item pool were placed in separate surveys. Items pertaining to firm value appropriation were placed in survey A for senior executives; items pertaining to
product innovation capability were placed in survey C for R&D managers; items pertaining to market orientation, brand orientation, and brand equity were placed in survey B for marketing managers; items pertaining transformational leadership were placed in survey D for employees, and items pertaining customer value creation were placed in survey E for customers.

Table 4.4: Final Refined Item Pool and Demographic Items

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Items</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Orientation</td>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td>Brand Orientation</td>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td>Product Innovation Capability</td>
<td>4</td>
<td>C</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>3</td>
<td>B</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>20</td>
<td>D</td>
</tr>
<tr>
<td>Customer Value Creation</td>
<td>21</td>
<td>E</td>
</tr>
<tr>
<td>Firm Value Appropriation</td>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td>Demographic questions</td>
<td>10</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>B &amp; C</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>E</td>
</tr>
</tbody>
</table>

4.4.3 Anticipated Data Analysis Techniques

As shown in Figure 4.1 – Stage Two – and discussed above, the next step upon completing the development of the final surveys is to identify the appropriate data analysis technique. It is argued that the choice of techniques to analyse the data is contingent on whether the data is qualitatively or quantitatively collected (Hussey & Hussey, 1997). Given that this study adopted a positivistic, descriptive

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4 Data were also gathered on other constructs in each survey but did not form part of the study.
approach using surveys to collect empirical data for hypothesis testing, a quantitative data analysis method was adopted in this study. Following prior research (e.g., Ngo & O’Cass, 2012; Troilo et al., 2014), preliminary analyses are undertaken before hypothesis testing.

In particular, following Anderson and Gerbing’s (1988) approach, all measures and constructs are subjected to a purification process involving a series of reliability and validity assessment prior to hypothesis testing. In line with prior research (e.g., Atuahene-Gima, 2005; Tsia & Hsu, 2014), a hierarchical regression analysis is used to test for the main and mediation effects. The study further tests for mediation effects following the procedures recommended by Baron and Kenny (1986) before supplementing this analysis with the bootstrapping technique recommended by Preacher and Hayes (2004, 2007). In addition, the moderation effect is examined by creating the interaction terms. Given that adopting a moderated regression analysis, multicollinearity can pose a serious problem as one factor may have high correlations with other factors that may lead to inflated standard errors (Zhu & Sarkis, 2004), the interaction variables are mean-centred prior to creating product term (Aiken & West, 1991).

4.5 CONCLUSION

Building on the work discussed in previous chapters, Chapter Four has detailed the research design underpinning the implementation of the empirical stage of the study. The implementation stage includes entering and analysing data as well as presenting the conclusions and recommendations of the study. Following prior studies, a quantitative survey-based research approach was
adopted to gather the data from multiple sources involving senior executives, R&D or project managers, marketing directors, employees, and customers. Self-administered surveys using a drop-and-collect approach were used for data collection. Survey refinement was carried out so as to produce psychometrically sound measures of the focal constructs in the design stage of the survey.
CHAPTER FIVE

DATA ANALYSIS AND FINDINGS

5.1 INTRODUCTION

Chapter Four outlined the methodology and research design and presented the discussions of the measurement instrument, the data collection method, and the administration procedures. The purpose of this Chapter is (1) to discuss the statistical methods used to examine the data and (2) to discuss the results of the preliminary analysis and the hypotheses testing. The purpose of a results section is to answer the research questions that have been posed and provide empirical evidence for the hypotheses. De Vos and Fouche (1998) also suggest that the purpose of data analysis is to break down data into constituent parts to obtain answers to research questions and to test hypotheses. As such, interpreting the data is critical so that the relationships proposed in the model can be studied and tested and conclusion drawn (De Vos & Fouche, 1998).

5.2 PRELIMINARY DATA ANALYSIS

The field work was conducted in Cambodia using the drop-and-collect technique. The data was obtained from multiple informants including: (1) one senior manager, (2) one R&D, (3) one marketing manager, (4) seven employees, and (5) five customers. In total, this study gathered 130 complete sets for a response rate of 33% (which is considered satisfactory, see Balabanis &
Once the data were collected the next step focused on conducting preliminary analyses, followed by hypotheses testing.

5.2.1 Sample Characteristics

Participating firms were business-to-business (B2B) medium and large manufacturing firms that have introduced a new product brand within the last three years. Among the informants who completed Survey A (senior managers), 106 (81.5%) were males and 24 (18.5%) were females. They had on average worked in the industry for 13.2 years, and had been in their current position for an average of 6 years. In regard to their education level, 75 (57.7%) held a Master Degree or higher, 47 (36.2%) held a Bachelor Degree, 2 (1.5%) held an Associate Degree, and 6 (4.6%) held a General Education Degree or lower.

Among the informants who completed Survey B (marketing managers), 85 (65.5%) were males and 45 (34.5%) were females. They had on average worked in the industry for 9.4 years, and had had in their current position for an average of 4.8 years. In regard to their education level, 72 (55.4%) held a Master Degree or higher and 58 (44.6%) held a Bachelor Degree.

Among the informants who completed Survey C (R&D managers), 100 (77%) were males and 30 (23%) were females. They had on average worked in the industry for 9.9 years, and had had in their current position for an average of 6 years. In regard to their education level, 87 (67%) held a Master Degree or higher, 37 (28.5%) held a Bachelor Degree, and 6 (5%) held an Associate Degree.

Among the informants who completed Survey D (employees), 692 (76%) were males and 218 (24%) were females. They had on average worked in the industry for 2.5 year, and had had in their current position for an average of just
over a year. In regard to their education level, 125 (14%) held a Master Degree or higher, 540 (59%) held a Bachelor Degree, and 245 (27%) held an Associate Degree.

Among the informants who completed Survey E (business customers), 474 (73%) were males and 176 (27%) were females. They had on average engaged in the industry for 4.8 years, and had had in their current position for an average of 2.6 years. In regards to their education level 323 (49.6%) held a Master Degree or higher and 327 (50.4%) held a Bachelor Degree.

In relation to firm size, 75 (57.6%) firms had between 51 and 100 employees and 55 (42.4%) firms had over 100 employees. That means 57.6% of the sample are medium sized firms, and 42.4% are large sized firms. In addition, 61 (47%) were from the foods and beverages sector, 24 (18.5%) were from the furniture/office supplies sector, 28 (21.5%) were from the gifts/handicrafts sector, and 17 (13%) were from the garments/shoes sector.

5.2.2 Non-Response Bias

Late respondents may resemble non-respondents more closely than do early respondents and as such late respondents are potential representatives of non-respondents. Following procedures outlined in previous studies (e.g., Armstrong & Overton, 1977; Schilke et al., 2009; Brinckmann et al., 2011; Vorhies et al., 2011; Ho & Ganesan, 2013), this study examined the potential for non-response bias by comparing the average values of the study’s variables between early (the first 10% of responses) and late respondents (the last 10% of responses). The t-test results shown in Table 5.1 below showed no significant difference between
the early and late respondents of the five informant groups showing that non-
response was not a serious threat in the current study.

Table 5.1: Means of the First 10% and Last 10% and t-test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (early respondents)</th>
<th>Mean (late respondents)</th>
<th>Mean differences</th>
<th>Sig. difference (t-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market orientation</td>
<td>2.88</td>
<td>2.94</td>
<td>0.06</td>
<td>P &gt; .05</td>
</tr>
<tr>
<td>Brand orientation</td>
<td>2.97</td>
<td>2.83</td>
<td>0.14</td>
<td>P &gt; .05</td>
</tr>
<tr>
<td>Product innovation</td>
<td>2.65</td>
<td>2.73</td>
<td>0.08</td>
<td>P &gt; .05</td>
</tr>
<tr>
<td>Brand equity</td>
<td>3.04</td>
<td>2.88</td>
<td>0.16</td>
<td>P &gt; .05</td>
</tr>
<tr>
<td>Customer value creation</td>
<td>3.25</td>
<td>2.95</td>
<td>0.30</td>
<td>P &gt; .05</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>3.36</td>
<td>3.10</td>
<td>0.26</td>
<td>P &gt; .05</td>
</tr>
<tr>
<td>Firm value appropriation</td>
<td>3.19</td>
<td>3.00</td>
<td>0.19</td>
<td>P &gt; .05</td>
</tr>
</tbody>
</table>

5.2.3 Interrater Agreement

Because respondents’ individual scores on customer value creation and transformational leadership were aggregated to calculate the mean scores for a firm, it is imperative that this study shows the interrater agreement for this measure. The Spearman-Brown test of interclass correlation (ICC) was used to examine the reliability of aggregated perceptions (James, 1982). It was found that ICC(1) of customer value creation 0.33 and transformational leadership 0.37, well above the .10 benchmark, and ICC(2) of customer value creation 0.71 and transformational leadership 0.76, well above the 0.60 benchmark. Hence, the interrater agreement for this aggregated measure was satisfactory. In further confirmation, the rwg(j) score was computed, finding the median rwg(j) value was .97 for customer value creation and 0.98 for transformational leadership, well above the conventional accepted value of .70. In addition, ICC values and rwg(j)
were computed for each of the four sub-scores of customer value creation and transformational leadership. ICC(1) values ranged from 0.27 to 0.33 for customer value creation and 0.31 to 0.37 for transformational leadership and ICC(2) values ranged from 0.65 to 0.71 for customer value creation and 0.68 to 0.76 for transformational leadership. The median rwg(j) values ranged from 0.93 to 0.97 for customer value creation and 0.94 to 0.98 for transformational leadership. For this reason, it was concluded that aggregation is justified for these variables.

5.2.4 Measure Assessment: Descriptive Results

As discussed in Section 4.4.2.3.1, the focal constructs captured in this study include market orientation, brand orientation, product innovation capability, brand equity, transformational leadership, customer value creation, and firm value appropriation. Adopting a two-step analytical procedure (Hair et al., 1998; Hulland, 1999), the psychometric properties of the measurement model and purified measures were first assessed and validated, after which the structural model was then assessed. SPSS was used to generate the descriptive statistical results including, means, skewness, kurtosis, and standard deviations. Then, Partial Least Square was used to generate factor loading for the items in each construct, the composite reliability (CR), and average variance extracted (AVE).

Market Orientation

The conceptualisation of market orientation follows the Type I second-order factor model as outlined by Jarvis et al. (2003). Market orientation was measured using eight items adopted from Zhou et al. (2008), labelled as MOC1 to MOC8. It is conceived as a second-order construct with three first-order factors including
customer orientation, competitor orientation, and interfunctional coordination. These first-order factors are reflective indicators, each of which consists of multiple reflective indicators (see the procedure outlined by Ngo and O’Cass, 2009). As shown in Table 5.2, the item means range from 2.04 to 3.88 and standard deviations range from 1.11 to 1.66. The results also show that all items demonstrate normality as evidenced by scores on skewness (between 0.10 and 1.28) and kurtosis (between -1.16 and 1.61), which are within the acceptable range of -2.00 and 2.00 (DeVellis, 1991).

The examination of market orientation was also undertaken via factor loadings, composite reliabilities (CR), and average variance extracted (AVE). The factor loadings of all items range from 0.59 to 0.81, greater than the recommended level of 0.50 (Hulland, 1999). Moreover, the composite reliability 0.86 (the composite reliability of the first order factors range from 0.70 to 0.89), meeting the minimum level of 0.70 (Nunnally, 1978). Average variance extracted for the market orientation construct is 0.51, which is greater than the level of 0.50 recommended by Bagozzi and Yi (1988).
Table 5.2: Preliminary Data Analysis Results for Market Orientation

<table>
<thead>
<tr>
<th>CR</th>
<th>AVE</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
<th>Kurt.</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer orientation: first order factor; CR=.89</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOC1: our business objectives are driven primarily by customer satisfaction.</td>
<td>.86</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>MOC2: our strategies are driven by beliefs about how we can create greater value for customers.</td>
<td>.86</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>MOC3: we emphasize constant commitment to serving customer needs.</td>
<td>.86</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td><strong>Competitor orientation: first order factor; CR=.70</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOC4: we regularly share information concerning competitors’ strategies.</td>
<td>.70</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>MOC5: we emphasize the fast response to competitive actions that threaten us.</td>
<td>.70</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td><strong>Interfunctional Coordination: first order factor; CR=.83</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOC6: we regularly communicate information on customer needs across all business functions.</td>
<td>.83</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>MOC7: we frequently discuss market trends across all business functions.</td>
<td>.83</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>MOC8: all of our business functions are integrated in serving the needs of our target markets.</td>
<td>.83</td>
<td>.51</td>
<td>.64</td>
<td>.73</td>
<td>.89</td>
<td></td>
</tr>
</tbody>
</table>

Note: Seven-point Likert Scale: 1 “strongly agree” to 7 “strongly disagree”

Brand Orientation

The conceptualisation of brand orientation follows the Type I second-order factor model as outlined by Jarvis et al. Brand orientation was measured using eight items adapted and refined from Reid et al. (2005) and Gromark and Melin (2010), labelled as BOC1 to BOC8. It is conceived as a second-order construct with three first-order factors including creation, development, and protection. As shown in Table 5.3, the item means range from 2.21 to 3.65 and standard deviations range from 1.20 to 1.80. The skewness scores (from 0.30 to 1.24) and the kurtosis scores (from -1.12 to 1.26) fall within the acceptable range of -2.00 and 2.00 (DeVellis, 1991), indicating that all items demonstrate normality.

The examination of the brand orientation construct was also undertaken via factor loadings, composite reliabilities (CR), and average variance extracted
(AVE). The factor loadings of all items (from 0.62 to 0.83) exceed the minimum recommended level of 0.50 (Hulland, 1999). The composite reliability is 0.90 (the composition reliability of the first order factor ranges from 0.83 to 0.87), greater than the recommended level of 0.70 (Nunnally, 1978). Average variance extracted is 0.61, which is also greater than the minimum recommended level of 0.50 (Bagozzi & Yi, 1988).

Table 5.3: Preliminary Data Analysis Results for Brand Orientation

<table>
<thead>
<tr>
<th>CR .90; AVE .61</th>
<th>Mean</th>
<th>SD</th>
<th>Skew.</th>
<th>Kurt.</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation: first order factor; CR=.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOC1: branding is central to corporate decisions and the corporate mission.</td>
<td>2.51</td>
<td>1.20</td>
<td>0.89</td>
<td>0.51</td>
<td>0.79</td>
</tr>
<tr>
<td>BOC2: creating, developing and/or protecting the brand is/are understood by everyone to be top priorities for our business.</td>
<td>2.49</td>
<td>1.22</td>
<td>0.82</td>
<td>0.56</td>
<td>0.81</td>
</tr>
<tr>
<td>Development: first order factor; CR=.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOC3: developing a strong brand is regarded as an integral part of our business model.</td>
<td>3.05</td>
<td>1.60</td>
<td>0.88</td>
<td>-0.04</td>
<td>0.83</td>
</tr>
<tr>
<td>BOC4: the ability to develop a brand is regarded as a core competence.</td>
<td>3.57</td>
<td>1.80</td>
<td>0.30</td>
<td>-1.12</td>
<td>0.82</td>
</tr>
<tr>
<td>BOC5: developing our brand is regarded as the strategic starting point in all of our marketing activities.</td>
<td>3.65</td>
<td>1.70</td>
<td>0.31</td>
<td>-1.05</td>
<td>0.82</td>
</tr>
<tr>
<td>BOC6: developing our brand is regarded as the strategic starting point in all of our innovation activities.</td>
<td>3.52</td>
<td>1.62</td>
<td>0.41</td>
<td>-0.88</td>
<td>0.81</td>
</tr>
<tr>
<td>BOC7: developing a strong brand is recognized to be closely tied to increased profitability.</td>
<td>2.21</td>
<td>1.30</td>
<td>1.24</td>
<td>1.26</td>
<td>0.62</td>
</tr>
<tr>
<td>Protection: first order factor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOC8: protecting our brand is of paramount importance to us.</td>
<td>2.42</td>
<td>1.27</td>
<td>0.91</td>
<td>0.59</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Note: Seven-point Likert Scale: 1 “strongly agree” to 7 “strongly disagree”

Product Innovation Capability

Product innovation capability was measured using four items adapted and refined from Hurley and Hult (1998) and Nakata et al. (2011), labelled as PIC1 to PIC4. As indicated in Table 5.4, the item means range from 2.58 to 2.79 and standard
deviations range from 1.11 to 1.27. The results also show that all items demonstrate normality as evidenced by scores on skewness (between 1.01 and 1.38) and kurtosis (between 0.47 and 1.92), which fall within the acceptable range of -2.00 and 2.00 (DeVellis, 1991).

The examination of the product innovation capability construct was also undertaken via factor loadings, composite reliabilities (CR), and average variance extracted (AVE). All items in the measurement model of the product innovation capability construct show acceptable factor loadings ranging from 0.91 to 0.94, which are greater than the recommended level of 0.50 (Hulland, 1999). Moreover, the composite reliability is 0.94, greater than the recommended level of 0.70 (Nunnally, 1978). Average variance extracted for the product innovation capability construct is 0.85, which is greater than the level of 0.50 recommended by Bagozzi and Yi (1988).

Table 5.4: Preliminary Data Analysis Results for Product Innovation Capability

<table>
<thead>
<tr>
<th>CR .94; AVE .85</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
<th>Kurt.</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC1: this firm invests a great percentage of its revenue in research &amp; development for this product brand.</td>
<td>2.79</td>
<td>1.11</td>
<td>1.21</td>
<td>1.13</td>
<td>0.94</td>
</tr>
<tr>
<td>PIC2: other firms (competitors) in the industry see this product brand as highly innovative.</td>
<td>2.58</td>
<td>1.25</td>
<td>1.38</td>
<td>1.92</td>
<td>0.91</td>
</tr>
<tr>
<td>PIC3: this firm incorporates cutting edge managerial and technological innovations in its operations when developing this product brand.</td>
<td>2.68</td>
<td>1.24</td>
<td>1.13</td>
<td>0.97</td>
<td>0.91</td>
</tr>
<tr>
<td>PIC4: this firm introduces this product brand to the market before any of its competitors who product similar product types.</td>
<td>2.75</td>
<td>1.27</td>
<td>1.01</td>
<td>0.46</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Note: Seven-point Likert Scale: 1 "strongly agree" to 7 "strongly disagree"
Brand Equity

Brand equity was measured using three items adapted and refined from Keller (1993) and Build et al. (2013), labelled as BE1 to BE3. The descriptive statistics as demonstrated in Table 5.5 show that the item means range from 2.85 to 3.02 and standard deviations range from 1.11 to 1.13. The skewness scores (from 0.76 to 0.92) and kurtosis (-0.05 to 0.37) fall within the acceptable range of -2.00 and 2.00 (DeVellis, 1991), indicating that all items demonstrate normality.

Table 5.5 also shows that the factor loadings of all items (from 0.93 to 0.96) exceed the minimum recommended level of 0.50 (Hulland, 1999). In addition, the composite reliability is 0.95, greater than the recommended level of 0.70 (Nunnally, 1978). Average variance extracted is 0.88, which is greater than the level of 0.50 recommended by Bagozzi and Yi (1988).

<table>
<thead>
<tr>
<th>Brand equity</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
<th>Kurt.</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE1: we have built strong brand awareness in the target market.</td>
<td>2.85</td>
<td>1.13</td>
<td>0.92</td>
<td>0.37</td>
<td>0.96</td>
</tr>
<tr>
<td>BE2: we have built a solid brand reputation.</td>
<td>2.88</td>
<td>1.13</td>
<td>0.76</td>
<td>0.25</td>
<td>0.95</td>
</tr>
<tr>
<td>BE3: we have built strong customer brand loyalty.</td>
<td>3.02</td>
<td>1.11</td>
<td>0.82</td>
<td>-0.05</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Note: Seven-point Likert Scale: 1 “strongly agree” to 7 “strongly disagree”

Firm Value Appropriation

Firm value appropriation was measured using three items adapted and refined from Durand et al. (2008) and McNamara et al. (2013), labelled as FVA1 to FVA3. As demonstrated in Table 5.6, the item means range from 2.94 to 3.18 and standard deviations range from 1.23 to 1.32. The results also show that all items demonstrate normality as evidenced by scores on skewness (between 0.66 and
The factor loadings of all items (from 0.90 to 0.93) exceed the minimum recommended level of 0.50 (Hulland, 1999). Moreover, the composite reliability is 0.91, greater than the recommended level of 0.70 (Nunnally, 1978). Average variance extracted for the firm value appropriation construct is 0.85, which is greater than the level of 0.50 recommended by Bagozzi and Yi (1988).

Table 5.6: Preliminary Data Analysis Results for Firm Value Appropriation

<table>
<thead>
<tr>
<th>FVA1: profitability is …</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
<th>Kurt.</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.08</td>
<td>1.25</td>
<td>0.71</td>
<td>0.55</td>
<td>0.93</td>
</tr>
<tr>
<td>FVA2: return on investment is …</td>
<td>3.18</td>
<td>1.32</td>
<td>0.66</td>
<td>0.10</td>
<td>0.93</td>
</tr>
<tr>
<td>FVA3: return on sales is …</td>
<td>2.94</td>
<td>1.23</td>
<td>0.74</td>
<td>1.92</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Note: Seven-point Likert Scale: 1 “much better than our targeted performance outcome” to 7 “much worse than our targeted performance outcome”

Customer Value Creation

The conceptualisation of customer value creation follows the Type I second-order factor model as outlined by Jarvis et al. (2003). Customer value creation was measured using 21 items adopted from O’Cass and Ngo (2011), labelled as CVC1 to CVC21. It is conceived as a second-order construct with four first-order factors including performance value, pricing value, relationship building value, and co-creation value. These first-order factors are reflective indicators, each of which consists of multiple reflective indicators (see the procedure outlined by Ngo and O’Cass, 2009). As demonstrated in Table 5.7, the item means range from 2.92 to 3.12 and standard deviations range from 0.73 to 0.90. The results also show that all items demonstrate normality as evidenced by scores on skewness (between 0.74) and kurtosis (between 0.10 and 1.92), which are within the acceptable range of -2.00 and 2.00 (DeVellis, 1991).
0.57 and 0.98) and kurtosis (between -1.00 and 1.08), which are within the acceptable range of -2.00 and 2.00 (DeVellis, 1991).

The factor loadings of all items (from 0.91 to 0.96) exceed the minimum recommended level of 0.50 (Hulland, 1999). Moreover, the composite reliability is 0.98 (the composition reliability of the first order factor ranges from 0.96 to 0.97), greater than the recommended level of 0.70 (Nunnally, 1978). Average variance extracted for the customer value creation construct is 0.84, which is greater than the level of 0.50 recommended by Bagozzi and Yi (1988).
Table 5.7: Preliminary Data Analysis Results for Customer Value Creation

<table>
<thead>
<tr>
<th>CR .98; AVE .84</th>
<th>Mean</th>
<th>SD</th>
<th>Skew.</th>
<th>Kurt.</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance value: first order factor; CR=.97</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVC1: ensures my firm’s personal preferences are satisfied.</td>
<td>2.92</td>
<td>0.80</td>
<td>0.89</td>
<td>0.46</td>
<td>0.93</td>
</tr>
<tr>
<td>CVC2: delivers quality product.</td>
<td>2.98</td>
<td>0.83</td>
<td>0.91</td>
<td>0.32</td>
<td>0.95</td>
</tr>
<tr>
<td>CVC3: delivers the product that is exactly what my firm wants.</td>
<td>3.02</td>
<td>0.82</td>
<td>0.90</td>
<td>0.81</td>
<td>0.95</td>
</tr>
<tr>
<td>CVC4: delivers the product that exceeds my firm’s expectations.</td>
<td>3.05</td>
<td>0.85</td>
<td>0.92</td>
<td>0.37</td>
<td>0.95</td>
</tr>
<tr>
<td>CVC5: delivers the product with innovative performance features.</td>
<td>2.98</td>
<td>0.79</td>
<td>0.82</td>
<td>0.27</td>
<td>0.96</td>
</tr>
<tr>
<td><strong>Pricing value: first order factor; CR=.96</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVC6: provides my firm with fair price policies.</td>
<td>2.99</td>
<td>0.78</td>
<td>0.73</td>
<td>-1.00</td>
<td>0.93</td>
</tr>
<tr>
<td>CVC7: provides my firm with price policies that are consistent and accurate.</td>
<td>3.02</td>
<td>0.73</td>
<td>0.61</td>
<td>0.27</td>
<td>0.94</td>
</tr>
<tr>
<td>CVC8: provides my firm more beneficial price policies compared to that of other suppliers of the same product.</td>
<td>3.00</td>
<td>0.75</td>
<td>0.94</td>
<td>1.08</td>
<td>0.91</td>
</tr>
<tr>
<td>CVC9: prices its product according to how valuable my firm perceives it to be.</td>
<td>3.02</td>
<td>0.75</td>
<td>0.66</td>
<td>0.19</td>
<td>0.93</td>
</tr>
<tr>
<td>CVC10: delivers quality product which is priced right.</td>
<td>3.04</td>
<td>0.77</td>
<td>0.72</td>
<td>0.23</td>
<td>0.93</td>
</tr>
<tr>
<td><strong>Relationship building value: first order factor; CR=.96</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVC11: has committed to ensure that my firm has easy access to their business at any time.</td>
<td>3.03</td>
<td>0.73</td>
<td>0.79</td>
<td>0.48</td>
<td>0.93</td>
</tr>
<tr>
<td>CVC12: ensures rapid response standards to deal with any of my firm’s enquiry.</td>
<td>3.07</td>
<td>0.74</td>
<td>0.57</td>
<td>-0.44</td>
<td>0.91</td>
</tr>
<tr>
<td>CVC13: has committed to ensure continuing relationships with my firm.</td>
<td>3.07</td>
<td>0.80</td>
<td>0.98</td>
<td>1.00</td>
<td>0.92</td>
</tr>
<tr>
<td>CVC14: has committed to deliver add-on values (special offers, status recognition) to ensure my firm stays with them.</td>
<td>3.04</td>
<td>0.78</td>
<td>0.89</td>
<td>1.02</td>
<td>0.92</td>
</tr>
<tr>
<td>CVC15: has committed to maintain long-term relationships with my firm.</td>
<td>3.07</td>
<td>0.79</td>
<td>0.94</td>
<td>0.27</td>
<td>0.93</td>
</tr>
<tr>
<td><strong>Co-creation value: first order factor; CR=.97</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVC16: interacts with my firm to serve us better.</td>
<td>3.10</td>
<td>0.77</td>
<td>0.90</td>
<td>0.57</td>
<td>0.91</td>
</tr>
<tr>
<td>CVC17: works together with my firm to produce offerings that mobilize my firm.</td>
<td>3.11</td>
<td>0.77</td>
<td>0.81</td>
<td>0.77</td>
<td>0.92</td>
</tr>
<tr>
<td>CVC18: interacts with my firm to design offerings that meet our unique and changing needs.</td>
<td>3.10</td>
<td>0.86</td>
<td>0.83</td>
<td>0.54</td>
<td>0.94</td>
</tr>
<tr>
<td>CVC19: provides product for and in conjunction with my firm.</td>
<td>3.11</td>
<td>0.82</td>
<td>0.80</td>
<td>0.36</td>
<td>0.94</td>
</tr>
<tr>
<td>CVC20: co-opts my firm involvement in providing product for us.</td>
<td>3.12</td>
<td>0.84</td>
<td>0.81</td>
<td>0.18</td>
<td>0.94</td>
</tr>
<tr>
<td>CVC21: provides my firm with supporting systems to help us get more value.</td>
<td>3.10</td>
<td>0.90</td>
<td>0.89</td>
<td>0.70</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Note: Seven-point Likert Scale: 1 "strongly agree" to 7 "strongly disagree"
Transformational Leadership

The conceptualisation of transformational leadership follows the Type I second-order factor model as outlined by Jarvis et al. (2003). Transformational leadership was measured using 20 items adopted from Bass (1985), labelled as TFL1 to TFL20. It is conceived as a second-order construct with five first-order factors including idealized influence (attributed), idealized influence (behaviour), inspirational motivation, intellectual stimulation, and individualized consideration. As demonstrated in Table 5.8, the item means range from 2.87 to 3.12 and standard deviations range from 0.68 to 0.88. The results also show that all items demonstrate normality as evidenced by scores on skewness (between -1.02 and -0.54) and kurtosis (between -0.22 and 1.95), which are within the acceptable range of -2.00 and 2.00 (DeVellis, 1991).

The factor loadings of all items (range from 0.75 to 0.86) exceed the minimum recommended level of 0.50 (Hulland, 1999). Moreover, the composite reliability is 0.95 (the composition reliability of the first order factor ranges from 0.82 to 0.90), greater than the recommended level of 0.70 (Nunnally, 1978). Average variance extracted is 0.57, which is greater than the level of 0.50 recommended by Bagozzi and Yi (1988).
### Table 5.8: Preliminary Data Analysis for Transformational Leadership

<table>
<thead>
<tr>
<th>Transformational leadership</th>
<th>CR</th>
<th>CR</th>
<th>AVE</th>
<th>Mean</th>
<th>SD</th>
<th>Skew.</th>
<th>Kurt.</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized influence (attributed): first order factor; CR=0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL1: instils pride in others for being associated with him/her.</td>
<td>2.90</td>
<td>0.88</td>
<td>-0.61</td>
<td>-0.22</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL2: goes beyond self-interest for the good of the group.</td>
<td>3.11</td>
<td>0.86</td>
<td>-0.72</td>
<td>0.12</td>
<td>0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL3: acts in ways that build others’ respect for him/her.</td>
<td>3.04</td>
<td>0.78</td>
<td>-0.57</td>
<td>0.49</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL4: displays a sense of power and confidence.</td>
<td>2.87</td>
<td>0.76</td>
<td>-0.96</td>
<td>1.71</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idealized influence (behaviour): first order factor; CR=0.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL5: talks about his/her most important values and beliefs.</td>
<td>2.91</td>
<td>0.76</td>
<td>-0.68</td>
<td>0.56</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL6: specifies the importance of having a strong sense of purpose.</td>
<td>2.95</td>
<td>0.84</td>
<td>-0.54</td>
<td>-0.20</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL7: considers the moral and ethical consequences of decisions.</td>
<td>3.01</td>
<td>0.80</td>
<td>-0.68</td>
<td>0.21</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL8: emphasizes the importance of having a collective sense of mission.</td>
<td>2.98</td>
<td>0.80</td>
<td>-0.71</td>
<td>0.36</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspirational motivation: first order factor; CR=0.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL9: talks optimistically about the future.</td>
<td>2.89</td>
<td>0.85</td>
<td>-0.63</td>
<td>0.34</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL10: talks enthusiastically about what needs to be accomplished.</td>
<td>2.93</td>
<td>0.68</td>
<td>-0.80</td>
<td>1.31</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL11: articulates a compelling vision of the future.</td>
<td>2.99</td>
<td>0.75</td>
<td>-0.54</td>
<td>0.20</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL12: expresses confidence that goals will be achieved.</td>
<td>2.95</td>
<td>0.85</td>
<td>-0.67</td>
<td>-0.01</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual stimulation: first order factor; CR=0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL13: re-examines critical assumptions to question whether they are appropriate.</td>
<td>2.96</td>
<td>0.84</td>
<td>-0.63</td>
<td>-0.02</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL14: seeks differing perspectives when solving problems.</td>
<td>2.96</td>
<td>0.79</td>
<td>-0.96</td>
<td>1.49</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL15: gets others to look at problems from many different angles.</td>
<td>3.09</td>
<td>0.70</td>
<td>-0.69</td>
<td>0.84</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL16: suggests new ways of looking at how to complete assignments.</td>
<td>3.01</td>
<td>0.76</td>
<td>-0.67</td>
<td>0.48</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualized consideration: first order factor; CR=0.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL17: spends time teaching and coaching</td>
<td>3.00</td>
<td>0.80</td>
<td>-0.54</td>
<td>-0.07</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL18: treats others as individuals rather than just as a member of the group</td>
<td>3.02</td>
<td>0.79</td>
<td>-0.77</td>
<td>1.02</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL19: considers each individual as having different needs, abilities and aspirations from others</td>
<td>3.09</td>
<td>0.81</td>
<td>-0.89</td>
<td>1.02</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFL20: helps others to develop their strengths</td>
<td>3.12</td>
<td>0.75</td>
<td>-1.02</td>
<td>1.95</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Seven-point Scale: 1 “Not at all” to 7 “Frequently”
5.2.5 Convergent Validity

Convergent validity refers to the extent to which each indicator is associated with its intended construct (Hulland, 1999). Convergent validity can be assessed by examining the composite reliability and the average variance extracted (AVE) for all constructs (Bagozzi & Yi, 1988). If the composite reliability of all constructs exceeds the recommended benchmark of 0.70 and the AVE exceeds the recommended benchmark of 0.50, there is enough evidence to support convergence validity (Bagozzi & Yi, 1988). As shown in Table 5.9 below, all AVEs exceeded the recommended benchmark of 0.50, with values ranging from 0.51 (market orientation) to 0.88 (brand equity). All composite reliabilities meet the minimum recommended benchmark of 0.70, with values ranging from 0.86 (market orientation) to 0.98 (customer value creation).

5.2.6 Discriminant Validity

According to scholars (e.g., Sok & O’Cass, 2015), discriminant validity of the constructs can be assessed via two approaches. First, by using the value of AVE, discriminant validity is demonstrated if the square root of the AVE is greater than all corresponding correlations (Fornell & Larcker, 1981; Sok & O’Cass, 2011). Second, by using composite reliability, discriminant validity is demonstrated if the correlation between two composite constructs (the off-diagonal entries) is not higher than their respective reliability estimates (Gaski & Nevin, 1985; Sok & O’Cass, 2015). As shown in Table 5.9, the values of the square roots of the AVEs (bolded diagonal values) are consistently greater than the off-diagonal correlations. In addition, no individual correlations are higher than their
respective reliabilities. This evidence supports the satisfactory discriminant validity of all the constructs in this study.

5.2.7 Multicollinearity

This study further tested for multicollinearity using the variance inflation factor (VIF) index. The value of VIF for each individual construct in the proposed model range from 1.08 to 3.54, well below the typical threshold value for VIF index of 6 (Hair et al., 1998), providing support for the model as satisfactorily free of multicollinearity.

Table 5.9: Evidence of Discriminant Validity for Constructs

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>AVE</th>
<th>MO</th>
<th>BO</th>
<th>PIC</th>
<th>TFL</th>
<th>BE</th>
<th>CVC</th>
<th>FVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market orientation (MO)</td>
<td>.86</td>
<td>.51</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand orientation (BO)</td>
<td>.90</td>
<td>.61</td>
<td>.60**</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product innovation capability (PIC)</td>
<td>.94</td>
<td>.85</td>
<td>.42**</td>
<td>.39**</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational leadership (TFL)</td>
<td>.95</td>
<td>.57</td>
<td>.01</td>
<td>-.03</td>
<td>.02</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand equity (BE)</td>
<td>.95</td>
<td>.88</td>
<td>.54**</td>
<td>.43**</td>
<td>.44**</td>
<td>-.04</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer value creation (CVC)</td>
<td>.98</td>
<td>.84</td>
<td>-.04</td>
<td>-.07</td>
<td>.01</td>
<td>.06</td>
<td>.03</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>Firm value appropriation (FVA)</td>
<td>.91</td>
<td>.85</td>
<td>.40**</td>
<td>.35**</td>
<td>.44**</td>
<td>.03</td>
<td>.52**</td>
<td>.11</td>
<td>.92</td>
</tr>
</tbody>
</table>

Bolded diagonal entries are square root of AVE; others are correlation coefficients
CR = Composite Reliability
AVE = Average Variance Extracted

5.2.8 Common Method Bias

It is widely acknowledged that common method variance may pose a serious threat to the studies whose data is collected from a single respondent or through a single method (e.g., Podsakoff et al., 2003). Common method variance can also contribute to measurement error which may affect structural parameter estimates and the statistical significance of hypothesis testing (Podsakoff et al., 2003). To
reduce the potential problems attributable to common method variance, several approaches were adopted in this study.

First, this study employed a multiple informant design which comprised one senior executive, one R&D manager, one marketing manager, seven employees, and five customers. The use of multiple informants can help rule out or minimise common method bias (e.g., Liao & Chuang, 2007; Zhou et al., 2008; Liao & Subramony, 2008; Morgan et al., 2009). This approach ensured data for independent variables and dependent variables were obtained from different sources – an approach recommended by scholars to reduce the threat of common method bias (Podsakoff et al., 2003; Atuahene-Gima, 2005).

Second, following the recommendations of scholars such as Podsakoff et al. (2003), different scale instructions, endpoints, and formats were used for the focal constructs in order to reduce the potential bias that is commonly associated with the use of the same scale poles and anchors throughout the survey.

Third, following Verhoef and Lee (2009) a factor analysis was conducted. A factor analysis of all items resulted in eight factors which accounted for a total variance of 77.9%, with the first factor accounting for 28%. The results indicate that the largest first factor did not account for the majority of the total variance explained, thus indicating that common method variance is not a major issue.

Finally, since interaction and mediation effects represent the majority of the hypotheses, the model overall is less likely to suffer from potential bias. In fact, analytical derivations and simulation studies demonstrated that common method bias reduces the probability to find significant interaction and mediation effects (Evans, 1985; Siemsen et al., 2010).
5.3 HYPOTHESES TESTING

After having determined that the construct measures used in this study were psychometrically sound, emphasis now moves to empirically testing the hypotheses presented in Chapter Three. Following the theoretical structure discussed in Chapter Three, and consistent with previous studies, this study adopted the variance partitioning procedures recommended by Jaccard et al. (1990), and used individual hierarchical moderated regression analyses, undertaken in steps.

Following Zhou’s et al. (2008) approach, during data analysis, this study included firm age, size, and ownership as controls. Firm age was measured by the logarithm of the number of years the firm has been in operation and firm size was measured by the logarithm of number of employees. This study coded the firm product brand ownership as a dummy variable: 1 = domestic brand and 0 = foreign-owned brand. Because multicollinearity can cause a problem when analysing moderating effects, the predictor variable and the moderator variable were mean-centered to reduce any potential multicollinearity (Aiken & West, 1991).

**Hypothesis 1**

Hypothesis 1 stated that brand equity mediates the relationship between product innovation capability and the firms’ ability to achieve both customer value creation and firm value appropriation. To test for mediation, this study adopted the approach suggested by James et al. (2006), Siren et al. (2012), and Hayes (2013), in which a direct relationship between the independent variable and
dependent variable is not expected. Therefore, full mediation is supported if (1) there is a non-significant relationship between the independent variable and dependent variable; (2) there is a significant relationship between independent variable and the mediator variable; and (3) there is a significant relationship between the mediator variable and the dependent variable.

As shown in Table 5.10, Model 1 (step 2), the independent variable (product innovation capability) is not significantly related to the dependent variable (customer value creation * firm value appropriation) (b = .08, p > .10), thus meeting the first requirement. In addition, as also shown in Table 5.10, Model 2 (step 2), the independent variable (product innovation capability) is significantly related to the mediator (brand equity) (b = .49, p < .01), thus meeting the second requirement. Furthermore, as shown in Table 5.11 (step 2), the mediator (brand equity) is significantly related to the dependent variable (customer value creation * firm value appropriation) (b = .19, p < .05), thus meeting the third requirement. These results support full mediation of the relationship between product innovation capability and the dual outcomes of customer value creation and firm value appropriation through brand equity.

**Table 5.10: The Effects of PIC on BE and CVC*FVA**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1: CVC*FVA</th>
<th>Model 2: BE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Firm size</td>
<td>.11 (1.28)</td>
<td>.08 (0.98)</td>
</tr>
<tr>
<td>Firm age</td>
<td>.12 (1.33)</td>
<td>.12 (1.36)</td>
</tr>
<tr>
<td>Ownership</td>
<td>.13 (1.46)</td>
<td>.11 (1.33)</td>
</tr>
<tr>
<td>Product innovation capability</td>
<td>---</td>
<td>.08 (0.92)</td>
</tr>
<tr>
<td>R-square</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>.02</td>
<td>.03</td>
</tr>
</tbody>
</table>

***p<.01, **p<.05, *p<.10 (one-tailed test for hypothesised relationships; two-tailed test for controls).

Note: BE = Brand Equity; CVC = Customer Value Creation; FVA = Firm Value Appropriation
Hypothesis 2

Hypothesis 2 stated the interaction between market orientation and brand orientation is positively related to the firm’s product innovation capability. As shown in Table 5.12, step 3, this hypothesis is supported with the effect size of .19 and significant level is lower than .05 ($b=.19, p<.05$).

Table 5.11: The Effects of BE on CVC*FVA

<table>
<thead>
<tr>
<th>Variable</th>
<th>CVC*FVA</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>.11 (1.28)</td>
<td>.07 (0.80)</td>
<td></td>
</tr>
<tr>
<td>Firm age</td>
<td>.12 (1.33)</td>
<td>.13 (1.55)</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>.13 (1.46)</td>
<td>.08 (0.87)</td>
<td></td>
</tr>
<tr>
<td>Brand equity (BE)</td>
<td>---</td>
<td>.19** (2.02)</td>
<td></td>
</tr>
<tr>
<td>R-square</td>
<td>.04</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>.02</td>
<td>.05</td>
<td></td>
</tr>
</tbody>
</table>

***$p<.01$, **$p<.05$, *$p<.10$ (one-tailed test for hypothesised relationships; two-tailed test for controls).
Note: CVC = Customer Value Creation; FVA = Firm Value Appropriation

Table 5.12: The Effects of MO*BO on Product Innovation Capability

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 3</td>
</tr>
<tr>
<td>Firm size</td>
<td>.26** (3.10)</td>
<td>.12 (1.64)</td>
<td>.14* (1.84)</td>
</tr>
<tr>
<td>Firm age</td>
<td>.03 (0.35)</td>
<td>.07 (0.96)</td>
<td>.07 (0.97)</td>
</tr>
<tr>
<td>Ownership</td>
<td>.11 (1.39)</td>
<td>.08 (0.97)</td>
<td>.03 (0.35)</td>
</tr>
<tr>
<td>Market orientation (MO)</td>
<td>---</td>
<td>.33** (3.22)</td>
<td>.30** (2.84)</td>
</tr>
<tr>
<td>Brand orientation (BO)</td>
<td>---</td>
<td>.26** (2.55)</td>
<td>.18* (1.73)</td>
</tr>
<tr>
<td>MO*BO</td>
<td>---</td>
<td>---</td>
<td>.19** (2.18)</td>
</tr>
<tr>
<td>R-square</td>
<td>.08</td>
<td>.33</td>
<td>.36</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>.06</td>
<td>.30</td>
<td>.33</td>
</tr>
</tbody>
</table>

***$p<.01$, **$p<.05$, *$p<.10$ (one-tailed test for hypothesised relationships; two-tailed test for controls).
Hypothesis 3

Hypothesis 3 stated that the relationship between the interaction of market orientation and brand orientation and the dual outcomes of customer value creation and firm value appropriation is mediated by product innovation capability and brand equity. Following the approach of Gong et al. (2012), to test this hypothesis this study adopted the bootstrapping procedures recommended by Preacher and Hayes (2008).

Table 5.13: Results of Mediation (MO*BO – Product Innovation Capability – Brand Equity – CVC*FVA)

<table>
<thead>
<tr>
<th>Indirect effect(s) of MO<em>BO on CVC</em>FVA</th>
<th>Effect</th>
<th>Boot SE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>.0502</td>
<td>.0345</td>
<td>-.0151</td>
<td>.1266</td>
</tr>
<tr>
<td>Indirect 1</td>
<td>.0035</td>
<td>.0305</td>
<td>-.0497</td>
<td>.0728</td>
</tr>
<tr>
<td>Indirect 2</td>
<td>.0242</td>
<td>.0173</td>
<td>.0003</td>
<td>.0758</td>
</tr>
<tr>
<td>Indirect 3</td>
<td>.0225</td>
<td>.0195</td>
<td>-.0042</td>
<td>.0739</td>
</tr>
</tbody>
</table>

Indirect effect key

Indirect 1: MO*BO → Product innovation → CVC*FVA
Indirect 2: MO*BO → Product innovation → Brand equity → VCV*FVA
Indirect 3: MO*BO → Brand equity → VCV*FVA

Level of confidence for all confidence intervals in output: 95.00
Note: BootLLCI = Lower confident interval; BootULCI = Upper confident interval

As shown in Table 5.13 (indirect 1), the indirect effect from MO*BO to CVC*FVA through product innovation capability is non-significant (LLCI = -.0497; ULCI = .0728, confidence level = 95%) because the changes between LLCI and ULCI contain zero. Further, the indirect effect from MO*BO to CVC*FVA through brand equity is also non-significant (indirect 3) (LLCI = -.0042; ULCI = .0739, confidence level = 95%) because the changes between LLCI and ULCI also contain zero. However, the indirect effect from MO*BO to
CVC*FVA through product innovation capability and then through brand equity (indirect 2) is significant (LLCI = .0003, ULCI = .0758, confidence level = 95%) because the changes between LLCI and ULCI does not contain zero. Thus, hypothesis 3 is supported. These results indicate that neither product innovation capability nor brand equity mediates the relationship between MO*BO and the dual outcomes. The relationship between MO*BO and CVC*FVA is mediated through product innovation capability and then through brand equity.

To further support whether the relationship between the interaction of market orientation and brand orientation and the dual outcomes of customer value creation and firm value appropriation can be mediated by brand equity and then product innovation capability, this study adopted the bootstrapping procedures recommended by Preacher and Hayes (2008).

As shown in Table 5.14, all the indirect effects (indirect 1, indirect 2, and indirect 3) are non-significant because the changes between LLCI and ULCI within the three indirect effects contain zero. These results indicate that the link between the interaction of market orientation and brand orientation and the dual outcomes of customer value creation and firm value appropriation cannot be connected through brand equity and then product innovation capability, further confirming hypothesis 3.
Table 5.14: Results of Mediation Test through Bootstrapping (MO*BO – Brand Equity – Product Innovation Capability – CVC*FVA)

<table>
<thead>
<tr>
<th>Indirect effect(s) of MO<em>BO on CVC</em>FVA</th>
<th>Effect</th>
<th>Boot SE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total:</td>
<td>.0502</td>
<td>.0345</td>
<td>-.0151</td>
<td>.1266</td>
</tr>
<tr>
<td>Indirect 1</td>
<td>.0467</td>
<td>.0301</td>
<td>-.0018</td>
<td>.1218</td>
</tr>
<tr>
<td>Indirect 2</td>
<td>.0015</td>
<td>.0136</td>
<td>-.0206</td>
<td>.0365</td>
</tr>
<tr>
<td>Indirect 3</td>
<td>.0019</td>
<td>.0181</td>
<td>-.0284</td>
<td>.0466</td>
</tr>
</tbody>
</table>

Indirect effect key
Indirect 1 MO*BO ➔ Brand equity ➔ CVC*FVA
Indirect 2 MO*BO ➔ Brand equity ➔ Product innovation ➔ CVC*FVA
Indirect 3 MO*BO ➔ Product innovation ➔ CVC*FVA

Level of confidence for all confidence intervals in output: 95.00

Hypothesis 4

Hypothesis 4 stated that transformational leadership moderates the product innovation capability – brand equity relationship. As shown in Table 5.15, Step 3, this relationship is supported with the effect size of .24 and the significant level is lower than .05 (b=.24, p<.05).

Table 5.15: The Moderating Effect of TFL on Product Innovation Capability – Brand Equity Relationship

<table>
<thead>
<tr>
<th>Variable</th>
<th>Brand equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
</tr>
<tr>
<td>Firm size</td>
<td>.21** (2.60)</td>
</tr>
<tr>
<td>Firm age</td>
<td>.09 (1.16)</td>
</tr>
<tr>
<td>Ownership</td>
<td>.26** (3.18)</td>
</tr>
<tr>
<td>Product innovation capability (PIC)</td>
<td>---</td>
</tr>
<tr>
<td>Transformational leadership (TFL)</td>
<td>---</td>
</tr>
<tr>
<td>PIC*TFL</td>
<td>---</td>
</tr>
<tr>
<td>R-square</td>
<td>.13</td>
</tr>
<tr>
<td>Adjusted R-square</td>
<td>.11</td>
</tr>
</tbody>
</table>

***p<.01, **p<.05, *p<.10 (one-tailed test for hypothesised relationships; two-tailed test for controls).
5.4 SUMMARY OF RESULTS

As shown in Table 5.16, the findings indicate that all hypotheses are supported.

Table 5.16: Results of Hypotheses Testing

<table>
<thead>
<tr>
<th>No</th>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Brand equity mediates the relationship between product innovation capability and the dual outcomes of customer value creation and firm value appropriation.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>The interaction between market orientation and brand orientation is positively related to the firm’s product innovation capability.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>The relationship between the interaction of market orientation and brand orientation and the dual outcomes of customer value creation and firm value appropriation is mediated by product innovation and brand equity in sequence.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>Transformational leadership moderates the product innovation capability – brand equity relationship.</td>
<td>Supported</td>
</tr>
</tbody>
</table>

5.5 CONCLUSION

Following the research design and methodology discussed and presented in Chapter Four, empirical data were collected for addressing the research questions discussed and presented in Chapter One and hypotheses discussed and presented in Chapter Three. In this Chapter, the data collected were analysed and the findings were presented. This Chapter also presented the preliminary assessment of sample composition, the descriptive statistics of all items, assessments of non-response bias and common method variance. Then, measurement reliability and validity were examined (i.e. factor loadings, composite reliability, average variance extracted, discriminant and convergent validity). Once the adequacy of the measurement model pertaining to the proposed constructs was affirmed, this study examined the hypotheses using
individual hierarchical moderation regression analyses conducted in steps and the SPSS Macro recommended by Preacher and Hayes (2008). The results presented in this chapter will be used for the development of insightful discussion and implications in the next chapter (Chapter Six).
CHAPER SIX

DISCUSSION AND CONCLUSION

6.1 INTRODUCTION

The primary objective of this study focused on investigating the role of brand equity in transforming product innovation capability into achieving customer value creation and firm value appropriation simultaneously. The secondary objective focused on investigating the roles market orientation and brand orientation play in the development of product innovation capability. The third objective focused on investigating the role of transformational leadership in enhancing the relationship between product innovation capability and brand equity. Building on these objectives, the purpose of this chapter is to discuss the findings in an endeavour to address the theoretical and practical implications as well as contributions of the study. The purpose of this chapter is also to answer the research questions raised in Chapter One. The chapter concludes with a discussion of the limitations of the study and future directions for further research.

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5 Two approaches have been adopted by researchers to empirically examine customer value creation. The first approach focuses on the strategic role of customer value from the firm’s perspective and is often called “value offering”. The second approach focuses on the customers’ assessment of value from the customers’ perspective and is often called “customers’ perceived value”. This study adopted the latter perspective of customer value creation. Therefore, when the term “customer value creation” or “creating value for customers” is used, it is referred to “customers’ perceived value”. The detailed discussion on this aspect appears in Section 2.2 (Chapter Two).
6.2. DISCUSSION OF RESULTS AND THEORETICAL IMPLICATIONS

As discussed in Chapter One, there has been ongoing interest from both marketing researchers and practitioners in the creation of value for customers (e.g., Woodruff, 1997; Eggert & Ulaga, 2002; Ulaga & Eggert, 2006; Ulaga et al., 2006; Ngo & O’Cass, 2009; O’Cass & Ngo, 2011; O’Cass & Sok, 2013; Leroi-Werelds et al., 2014). However, customer value creation alone is insufficient to ensure success because firms may have little incentive to engage in creating customer value in the absence of opportunities to appropriate the economic return (i.e. profit) from their customer value creation efforts (Raggio & Leone, 2009). As such it is critical that firms can also appropriate value from their offerings (e.g., McDougall & Levesque, 2000; Madden et al., 2006). Three specific research questions were posed in an attempt to investigate the process through which firms achieve customer value creation and firm value appropriation simultaneously.

Research Question 1: To what extent does brand equity mediate the influence of product innovation capability on the dual outcomes of customer value creation and firm value appropriation?

Research Question 2: To what extent does the interaction between market orientation and brand orientation contribute to product innovation capability in the pursuit of the dual outcomes of customer value creation and firm value appropriation?
Research Question 3: To what extent does transformational leadership enhance the effect of product innovation capability on brand equity?

These research questions were rooted in the review of the literature focusing on the resource based view theory, particularly, the market orientation – product innovation – performance framework, leadership theory, and the literature pertaining to value. Based on the discussion of the literature in Chapter Two, Chapter Three synthesised and incorporated the key constructs into the theoretical framework underpinning this study as outlined originally in Figure 3.1 underpinned by four hypotheses. Chapter Four then discussed the research paradigm and the justifications outlining the research design. Then, the preliminary data analysis and hypotheses testing were discussed and presented in Chapter Five. This chapter discusses the theoretical and managerial implications, followed by the discussion of the limitations of the study and directions for future research.

To help in the discussion, the research model is presented in Figure 6.1. It contains three key areas highlighted in different colours relating to the three research questions. The yellow box relates to Research Question 1 and shows the meditational role of brand equity in linking the firm’s product innovation capability to achieve the dual outcomes of customer value creation and firm value appropriation. The red box relates to Research Question 2 and shows the interaction between market orientation and brand orientation in driving the firm’s product innovation capability. The blue box relates to Research Question 3 and shows the moderating role of transformational leadership in enhancing the relationship between the firm’s product innovation capability and brand equity.
Figure 6.1 Theoretical Model

Source: Developed for this study
6.2.1 Discussion of the Findings for Research Question 1

Research question 1 focused on the role of brand equity in transforming the firm’s product innovation capability in achieving the dual outcomes of customer value creation and firm value appropriation. Hypothesis 1 was developed to address this question. The following discussion is based upon this hypothesis, as shown in the theoretical model in Figure 6.1 (Yellow Box).

Hypothesis 1 stated that brand equity mediates the relationship between product innovation capability and the dual outcomes of customer value creation and firm value appropriation. As shown in Section 5.3, following the approach of James et al. (2006) and Siren et al. (2012) in testing the mediation relationship, this hypothesis is supported. These results suggest that the firm’s product innovation capability has the potential to drive customer value creation with customers perceiving higher levels of value and firm value appropriation in the form of profitability, return on sales and return on investment in isolation. Yet, achieving both customer value creation and firm value appropriation simultaneously requires a specific mechanism that can encourage customers to not only pay a price premium for the product they are buying, but also be happy to pay price premium for that particular product.

These findings contribute significantly to the current literature. Prior research has examined innovation output such as patents, patenting frequencies, speed to obtain patents, and trademarks as the mechanism to protect the firm’s value appropriation ability (e.g., Levin et al., 1987; Harabi, 1995; Shapiro, 2001; Reitzig & Puranam, 2009; Wang & Chen, 2010). While research in this domain has offered important insights and is informative, the emphasis on these so-called legal regimes and their emphasis only on firm value appropriation may have
produced a limited perspective. As discussed in Section 1.1 it is critical that research investigates mechanisms that enable firms to create value for customers (satisfying customers) and appropriate value back (satisfying firm needs) simultaneously. Integrating the branding and innovation literature, as discussed in Section 1.2 this study argues that innovative assets such as patents maybe prone to imitation by rival firms. Instead, strong brand equity created and managed through highly firm-specific and socially complex processes which are not fully mobile are less likely to fall victim to such threats of imitation.

This research diverges from prior research (such as that by Levin et al., 1987; Harabi, 1995; Shapiro, 2001; Reitzig & Puranam, 2009; Wang & Chen, 2010) by analysing brand equity as the mechanism to transform the firm’s product innovation capability into achieving the dual outcomes of customer value creation and firm value appropriation. Developing strong brand equity is an important indicator for not only achieving customer value creation but also firm value appropriation in industries where legal mechanisms are less important for protecting or appropriating firm value. The emphasis of this research changes the focus from studying the determinants of patent productivity (i.e., how many patents the firm obtains) and the success at obtaining rapid patent protection (i.e., quick grant conditional on filing a patent), to developing products with strong brand equity in achieving the dual outcomes of customer value creation and firm value appropriation. As discussed in Section 1.2 brand equity adds value to the product endowed by that brand (Keller, 1993). A brand (and its equity) is created and managed overtime through highly firm-specific, legally protected, and socially complex processes in which a positional barrier is generated (Wernerfelt, 1984; Slotegraaf & Pauwels, 2008). As such, brand equity has a multifaceted
benefit— it does not only appeal to customers (Keller & Lehmann, 2006), but also provides the firms bargaining power vis-à-vis customers (Madden et al., 2006). Therefore, brand equity will not only protect the firm value from slipping to competitors, but will also help create and add value for customers. As noted by Reid et al. (2005), while many products share the same or similar functionalities, it is the distinctiveness of the brand that differentiates the products in the customers’ mind.

6.2.2 Discussion of Findings for Research Question 2

Research question 2 focused on the role of market orientation and brand orientation in driving the firm’s product innovation capability in their pursuit of achieving the dual outcomes of customer value creation and firm value appropriation. The focus of this research question was on the relationship between market orientation, brand orientation, and product innovation. Hypothesis 2 was developed to address this research question. The following discussion is based upon this hypothesis, as presented in the theoretical model in Figure 6.1 (Red Box).

Hypothesis 2 stated that the interaction between market orientation and brand orientation is positively related to product innovation capability. As discussed in Section 5.3, to test this hypothesis the variance partitioning procedures recommended by Jaccard et al. (1990) were undertaken. As shown in Table 5.12, Model 3, the effect of the interaction between market orientation and brand orientation on product innovation capability is positive and significant, thus supporting hypothesis 2.
This finding addresses the concern raised in Section 1.2 that there has been no research to-date investigating the antecedent(s) of product innovation capability that allows firms to develop the right product which is not only well liked by customers in terms of its features or quality but also its brand. In particular, at present there is a lack of empirical investigation pertaining to the interaction between market orientation and brand orientation as an antecedent in driving the firm’s product innovation capability, especially in relation to achieving the dual outcomes of customer value creation and firm value appropriation.

This finding contributes significantly to the current literature. Research into market orientation has shown that while possessing strong market orientation may lead to firm performance (Jaworski & Kohli, 1993; Han et al., 1998; Hurley & Hult, 1998; Hult et al., 2004; Menguc & Auh, 2006), there is limited understanding of the ‘action’ components that facilitate the implementation of market orientation. As part of the overall advancement toward understanding the ‘action’ component that transforms a firm’s market orientation into the ability to achieve performance, prior research has examined product innovation capability as a key action component to transform the firm’s market orientation into financial-related performance (e.g., Hurley & Hult, 1998; Sandvik & Sandvik, 2003; Hult et al., 2004), innovation-related performance or customer-related performance (Ngo & O’Cass, 2012). While prior research has provided important insight and is informative, its failure to account for the dual outcomes of customer value creation and firm value appropriation has resulted in a limited perspective. Together, customers and owners are the ones who ultimately determine the success and failure of any firm (McDougall & Levesque, 2000; Madden et al.,
Thus the emphasis on the dual outcomes of customer value creation and firm value appropriation is imperative.

This research diverges from existing research by analysing the interaction between market orientation and brand orientation as the driver of the firm’s product innovation. Urde (1999) and Urde et al. (2013) argue that with increasing competition in the market, market orientation is becoming short-term and firms need to move to an additional degree of sophistication, which is being brand oriented. While recent studies still conceptualise market orientation as an antecedent of firm’s product innovation capability, no effort has been taken to study the interaction between market orientation and brand orientation as an antecedent of firm’s product innovation capability. Urde (1999) and Urde et al. (2013) assert that if a firm is only market oriented, then it evolves only around products and markets. This research changes the theoretical focus from studying market orientation as a singular determinant of a firm’s product innovation capability to studying the interaction between a firm’s market orientation and brand orientation as determinant of product innovation capability.

Hypothesis 3 stated that the interaction between market orientation and brand orientation enhances the firm’s ability to achieve higher levels of both customer value creation and firm value appropriation through improvements or superiority in product innovation capability and brand equity. As shown in Section 5.3, this study adopted the bootstrapping procedures recommended by Preacher and Hayes (2008) to test Hypothesis 3. As shown in Table 5.13 (indirect 1), the indirect effect from the market orientation/brand orientation interaction to the dual outcomes of customer value creation and firm value appropriation through product innovation capability was non-significant. Further, the indirect
effect from the market orientation/brand orientation interaction to the dual outcomes of customer value creation and firm value appropriation through brand equity was also non-significant (indirect 3). Of particular interest, the indirect effect from the market orientation/brand orientation interaction to the dual outcomes of customer value creation and firm value appropriation through product innovation capability, and then through brand equity (in sequence) (indirect 2), was significant. Thus, hypothesis 3 is supported. These results indicate that neither product innovation nor brand equity is the mediator linking the relationship between the market orientation/brand orientation interaction and the dual outcomes of customer value creation and firm value appropriation. Rather, it is a sequence in which the relationship between the market orientation/brand orientation interaction and the dual outcomes of customer value creation and firm value appropriation is linked through product innovation capability and then through brand equity.

To further support the relationship between the interaction between market orientation and brand orientation and the dual outcomes of customer value creation and firm value appropriation, as mediated by brand equity and then product innovation capability (instead of product innovation capability and brand equity as proven above), the bootstrapping procedure (Preacher & Hayes, 2008) was adopted. As shown in Table 5.14, all the indirect effects (indirect 1, indirect 2, and indirect 3) were non-significant. These results indicate that the link between market orientation/brand orientation interaction and the dual outcomes of customer value creation and firm value appropriation cannot be connected through brand equity and then product innovation capability, further supporting hypothesis 3.
This relationship hypothesised in hypothesis 3 is plausible because firms with high levels of both market orientation and brand orientation take actions directed toward future goals, which are the dual outcomes of customer value creation and firm value appropriation. Product innovation capability is an action to transform the firms’ resources (the interaction between market orientation and brand orientation) to develop strong brand equity, which is the key mechanism to achieve the dual outcomes. Conceptually, by being market- and brand-oriented, firms should not automatically achieve strong brand equity. Brand equity cannot be developed from a vacuum; it is likely to be the result of foresighted actions such as product innovation capability.

These findings extend existing work on market orientation – product innovation capability – performance (e.g., Hurley & Hult, 1998; Hult et al., 2004; Ngo & O’Cass, 2012). These findings support the conceptual development and empirical testing of the more comprehensive model in which the interaction between market orientation and brand orientation facilitates the firm’s product innovation capability which leads to brand equity and its subsequent effect on the dual outcomes of customer value creation and firm value appropriation. This proposed new framework, in some way, also provides a more comprehensive understanding compared with that of Ketchen’s et al. (2007) in that: (1) it argues that firm performance should be the dual outcomes of customer value creation and firm value appropriation; (2) it further proposes brand equity as the key mechanism in transforming the firm’s capability (product innovation) into achieving the dual outcomes; (3) it proposes the interaction between market orientation and brand orientation as representing the firm’s strategic resources which facilitates the development of the right products with a strong brand, and
(4) it empirically demonstrates the sequence in which the interaction between market orientation and brand orientation can lead to the dual outcomes through specific mechanisms.

6.2.3 Discussion of the Findings for Research Question 3

Research question 3 focused on the moderating effect of transformational leadership on the relationship between product innovation capability and brand equity. Hypothesis 4 was developed to offer insight into this question and the relationship outlined within. The following discussion is based upon this hypothesis, as presented in the theoretical model in Figure 6.1 (Blue Box).

Hypothesis 4 stated that transformational leadership moderates the relationship between product innovation capability and brand equity. As discussed in Section 5.3, individual hierarchical moderated regression analyses, undertaken in steps, were adopted to test the moderation effect. As shown in Table 5.15, Step 3, the moderating effect of transformational leadership on the relationship between product innovation capability and brand equity is positive and significant, thus supporting Hypothesis 4.

This finding addresses the concern raised in Section 1.2 that, while understanding the role of product innovation capability in achieving the dual outcomes of customer value creation and firm value appropriation through brand equity is important, it is also equally important to examine the contingency factors that focus on the role of leadership in enhancing this effect. This is because the ability of leaders to create an environment that is conducive to innovative activities underpins the firm’s ability to innovate (Jung et al., 2003; Matzler et al., 2008). Three types of leadership have been identified in the literature –
transformational, transactional and laissez-faire (Eagly et al., 2003). Transformational leadership is widely used in the literature given its ability to encourage employees which other leadership styles lack (Jung et al., 2003; Gumusluoglu & Ilsev, 2009; O’Cass & Sok, 2013).

The approach in this study departs from existing studies that have hypothesised transformational leadership as a key predictor of innovation (e.g., Jung et al., 2003; Matzler et al., 2008; Gumusluoglu & Ilsev, 2009). Instead, this study adopts the view that employees play a very important role in new product development process (Amabile, 1988; Bharadwaj & Menon, 2000), and firms are increasingly relying on their employees who may possess various skills, knowledge, and perspectives to deal with the complexity of new technologies and information to successfully innovate (Lovelace et al., 2001). Particularly, people often work in teams and individual employee creative thinking and activities are often enacted in this context (see also Shalley et al., 2004). Since the theoretical underpinning of transformation leadership is that leaders motivate employees within teams to be more cooperative and enthusiastic in producing common goals (Jung et al., 2003), transformational leadership does not really have a direct influence on the firm’s product innovation capability.

This study takes the view that transformational leadership plays an important role in shaping the relationship between a firm’s product innovation capability and its ability to build a product with a strong brand (brand equity). Therefore, this study hypothesised transformational leadership as an important contingency variable and demonstrated a significant moderating effect of transformational leadership on the relationship between product innovation capability and brand equity. This finding extends the current understanding of
leadership theory by providing additional insight into the effects of a manager’s leadership characteristics and behaviours in enhancing product innovation capability in its effort to build products with strong brands that appeal to customers. This finding also supports the contention that the ability of management to create an environment that is conducive to innovative activities underpins the firm’s ability to innovate and such abilities rests in transformational leaders (Jung et al., 2003; Matzler et al., 2008).

Particularly, this thesis contributes to organizational research by empirically proposing and validating a cross-level framework that links the micro and macro facets of organizational phenomena. The majority of existing studies often adopts either a micro (i.e. individual/group) or macro (i.e. organization) orientation even such phenomena are in fact inherently integrated and interrelated (see Kozlowski & Klein, 2000; Pearce, 2003; Zhou et al., 2008 for detailed discussion). This thesis cross-level model; however, connects organizational-level cultures and capabilities to employee-level perceived transformational leadership, and customer-level outcome (customer value creation) and organizational-level outcome (firm value appropriation). In addition, this thesis’s sampling technique also helps reduce measurement error and generates more accurate results, because the use of multiple sources eliminates systematic errors such as common method bias. Further, the use of multiple informants also helps alleviate random error. This thesis’s consideration of subsequent outcome (the dual outcome of customer value creation and firm value appropriation) also addresses the causality issue in the proposed model.
6.3 MANAGERIAL IMPLICATIONS

This research provides insight into the role of product innovation capability in achieving customer value creation and firm value appropriation. This has implications for the fields of strategic marketing, product innovation, and branding. The key issues elicited by the findings highlight the critical role of brand equity in transforming the firm’s product innovation capability to achieve the dual outcomes of customer value creation and firm value appropriation. It also highlights the role of the interaction between market orientation and brand orientation in driving the firm’s product innovation capability as well as the contingency effect of transformational leadership on the relationship between the firm’s product innovation capability and brand equity.

Given that theoretical implications have already been discussed and embedded within the discussion of the results of each hypothesis, this section will draw on the research findings and provide managerial insights to managers who want to tap the full potential of achieving the dual outcomes of customer value creation and firm value appropriation. Trying to achieve these has put immense pressure on managers and they sometimes face a strategic dilemma. On the one hand, managers need to make a strategic decision to constantly invest in a firm’s product innovation to satisfy customers’ needs as customers are always looking for new products with new features and better quality. But by doing so, managers may run the risk of upsetting owners as the more money is invested in product innovation, the less profit a firm can generate for the owners. On the other hand, managers may make a strategic decision to invest less in product innovation and maintain the large proportion of profits for the owners. By doing so, however,
Managers may run the risk of upsetting customers and may indeed lose customers as they may look for alternatives (competitors’ products). As such, the finding that brand equity is a key mechanism in transforming the firm’s product innovation capability to achieve customer value creation and firm value appropriation provides managers with practical guidelines in the quest for satisfying both customers and shareholders.

This is more easily said than done; developing a product with a strong brand that appeals to customers is not an easy task. This is the reason why the new product failure rate keeps increasing despite the effort that has been devoted by scholars in examining the antecedents of new product success. The finding in this study that the interaction between market orientation and brand orientation is a key driver of product innovation provides an insightful avenue for managers to consider if they are to develop products that have strong appeals to customers. Managers are advised not to rely on only its core brand philosophy and neglect the customers’ input when developing new products. They need to remember that customers are the final arbiters of value and they are eventually the ones who have significant influences on the survival and success of the firms. As such, firms need to also take into account customers’ inputs and demands. The failure of Kodak is an example of a firm that failed to take into account customers’ demands (digital technology) and kept relying on its core brand when developing the products. The firm eventually disappeared from the market.

While listening to customers is critical for developing products that are appealing to them, managers are also advised not to listen only to customers and ignore the firm’s core brand identity. Different customers may demand different features and therefore firms will not be able to customize the products to satisfy
every customer’s unique needs. Developing products that are aligned with the firm’s brand emphasis (what the brand is known for) is, therefore, also critical. The success of Apple is an exemplar. Although its success is partly attributed to listening to the customers’ inputs and demands, Apple is also very much brand oriented and develops products that relate to its core brand philosophy. These discussions suggest that firms must be simultaneously brand and market oriented if they are to develop the products that are appealing to customers.

In addition, the finding in this study that transformational leadership moderates the relationship between product innovation capability and brand equity suggests that investment in developing superior product innovation capability is maximised if managers (1) foster employees’ creativity (intellectual stimulation); (2) encourage respect and pride in employees and emphasises the importance of having a collective sense of mission (idealized influence); (3) articulate a compelling vision of the future that is not only appealing but also inspiring to employees (inspirational motivation); and (4) pay great attention to the develop and mentoring of employees and attend to their individual needs (individualized consideration). The results of this study provide practical guidelines to managers that transformational leadership is a critical type of leadership that helps a firm’s product innovation capability in achieving superior brand equity.

A firm may also consider developing supervisor-training programs and within this supervisor-training program there should be a ‘transformational leadership’-related courses that provide managers guidance to address such matters as the behavioural dimensions, characteristics, and importance of transformational leadership as well as how to pursue or practice transformational
leadership. Prior literature has suggested that appropriate transformational leadership training can significantly enhance a manager’s leadership and may result in significant effects on employees’ organizational commitment (Jung et al., 2003). In the case of recruiting new managers, firms should consider recruiting managers who have potential to undertake transformational leadership. For example, those managers who possess high levels of extraversion are likely to pursue transformational leadership style successfully (Bono & Judge, 2004). These training and recruitment practices would help firms ensure that managers are willing to share work experiences with and coach their employees.

6.4 LIMITATIONS AND FUTURE RESEARCH

Although this study makes a significant contribution to the literature, it is not without limitations, some of which also highlight opportunities for further research. First, the sample in this study is cross-sectional which may lead to greater considerations being given to causal inferences. While cross-sectional data has been widely used in prior research, further research using longitudinal data would be beneficial.

Second, the results of this study were drawn from measures obtained using the perceptions of multiple sources (e.g., managers, employees, and customers). While perceptual data is widely adopted in prior studies in the areas aligned with this study, the shortcomings associated with perceptual data should not be ruled out. Although the multiple sources, multiple informants approach helps minimize potential common method bias related to perceptual data, it would be still worth
for future studies to replicate or adopt the approach taken in this study using objective data, or a blended mode of subjective and objective data.

Third, although research adopting a survey-based approach (questionnaire) and multiple variables has the inherent limitation of measurement error, every attempt has been made to ensure the reliability and validity of all the focal constructs in this study. Finally, the sample of this study is limited to firms operating in Cambodia. Although emerging economies may share similar features in their markets, they vary remarkably in the stages of their economic development (for example, the differences between the development stage between Cambodia and Thailand, Malaysia or China). As such, future research would benefit by replicating this study in other emerging economies, or developed economies, to help validate the model being investigated in this study.

This study also offers a number of opportunities for future research. For instance, a promising avenue for future research is to examine another form of moderating effects beyond transformational leadership on the relationship between product innovation and brand equity. This study has shown that transformational leadership positively enhances the effect of product innovation on brand equity. It is then critical for both theoretical and practical purposes to understand different types of moderators which may have effects on the firm’s innovation efforts to develop superior brand such as employee empowerment (Yu et al., 213), perceived organisational support (e.g., Liao & Chuang, 2007), and innovation climate (e.g., Wang & Rode, 2010). Further, in addition to the antecedent variables of product innovation examined in this study, product innovation may be influenced by various other factors, suggesting another promising avenue for future research. Employees play a very important role in
product innovation (Amabile, 1988; Bharadwaj & Menon, 2000) and firms are increasingly relying on individual employee who possesses specific skills and knowledge and deal with the complexity of new technologies and information (Lovelace et al, 2001) to successfully innovate. Since individual’s underlying psychological motivation is significantly related to perform work tasks (Sok et al., 2015), future studies will benefit by examining employee’s motivation (i.e. proactive motivation) as the key antecedent of product innovation.

6.5 CONCLUSION

The proposed theoretical model suggests that brand equity transforms a firm’s product innovation capability to achieve the dual outcomes of customer value creation and firm value appropriation. It further advocates that the interaction between market orientation and brand orientation drives the firm’s product innovation capability. It also indicates that transformational leadership moderates the relationship between product innovation capability and brand equity. The empirical findings supported this theoretical model.

The advancement of these important findings extends current knowledge and theory by shedding light on the specific process through which customer value creation and firm value appropriation can be achieved simultaneously. The branding literature allows a better understanding of how product innovation capability enables firms to achieve customer value creation and firm value appropriation simultaneously through brand equity. The findings of this study also provide an alternate perspective on how to develop a product that is appealing to customers. To develop a product that is really appealing to customers, firms must
not only be market oriented, but also brand oriented. Customers pay the premium price for the brand, not necessarily the product itself. In addition, this study has also extended current understanding of the role of transformational leadership in contributing to the success of the firm’s product innovation capability. Given that innovation involves employees, and that transformational leaders play a critical role in encouraging employees to work harder for the good of the whole organisation, transformational leadership style plays a critical role in enhancing the relationship between product innovation capability and brand equity.
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APPENDIX

QUESTIONNAIRES
SURVEY A
Chief Executive Officer
To be completed by the CEO or General Director

We realize you are very busy, but ask for your valuable time to help us complete this survey identified as Survey A. Please do not rush, as your experience and knowledge are very important and your accurate responses ensure your time is well served. Your responses are completely anonymous and confidential. We guarantee your responses cannot be identified.

NOW, please read and complete the survey. This survey will be collected from you at a later date and time convenient to you within the next week. Once you have completed the survey, please phone the telephone number: 09283 5427 to make an appointment for the researcher to collect the survey back.

A1 – The brand name of the product that I select to be the focus of this survey (Survey A) and Survey B, C, and E is: ________________________________.

(Please refer to Survey B, C & Survey E and provide the same brand name (i.e, answer) you provided here in B1 of Survey B, C1 of Survey C & D1 of Survey E)

A2 – The industry type that my firm mainly competes in is:

- □ Manufacturing industry (i.e., rice, garments, shoes, tobaccos, wood products, cements, food, beverage, etc.)
- □ Services industry (i.e., tourism and hospitality, telecommunication, banking, etc.)
- □ Other (e.g., mining industry, agricultural industry) __________________________

Think about your own understanding and knowledge of your firms’ strategies and business operations. Please circle the number below that best reflects your views.

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<th>5</th>
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<tr>
<td>A3</td>
<td>I am knowledgeable about my firms’ business operations, strategies, characteristics, business processes, performance, and its business environment (competitors, regulations, and the like).</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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Please evaluate how well your business unit has achieved the following outcomes from the offering of the above named product compared to your targeted performance outcome.

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<tr>
<td>FVA1 Profitability is ....</td>
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<td>FVA2 Return on investment is ....</td>
<td>1 2 3 4 5 6 7</td>
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<td>FVA3 Return on sales is ....</td>
<td>1 2 3 4 5 6 7</td>
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Please provide some general information about yourself by writing in the space provided below:

A4 – My current position is: ________________________________

A5 – My year of birth is: _____________

A6 – My highest education level is:

- General education or lower □
- Associate Degree □
- Bachelor Degree □
- Master’s Degree or higher □

A7 – My gender is: Male □ or Female □

A8 – Length of time I have been in this position is: ________________________________

A9 – Length of time I have worked in this industry is: ________________________________

Please circle the appropriate number below.

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<th>Not At All</th>
<th>Very Much So</th>
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<td>A10 I am confident I had the necessary knowledge to complete the statements asked throughout the questionnaire.</td>
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THANK YOU FOR YOUR PARTICIPATION
We realize you are very busy, but ask for your valuable time to help us complete this survey identified as Survey A. Please do not rush, as your experience and knowledge are very important and your accurate responses ensure your time is well served. Your responses are completely anonymous and confidential. We guarantee your responses cannot be identified.

NOW, please read and complete the survey. This survey will be collected from you at a later date and time convenient to you within the next week. Once you have completed the survey, please phone the telephone number: 09283 5427 to make an appointment for the researcher to collect the survey back.

(B1 is TO BE COMPLETED BY the CEO or DIRECTOR completing survey A)

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<tr>
<th>B1</th>
<th>Please write the brand name of the product that you wrote in question A1 of your SURVEY A below.</th>
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<td>Brand name of Product:  Adamantine Products</td>
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</tbody>
</table>

Think about your own understanding and knowledge of your firms’ strategies and business operations, please circle the number below that best reflects your views (1 = not at all; 7 = very much so)

<table>
<thead>
<tr>
<th>Not At All</th>
<th>Very Much So</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
**Please indicate the extent to which you agree or disagree with the following statements.**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOC1</td>
<td>branding is central to corporate decisions and the corporate mission</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BOC2</td>
<td>creating, developing and/or protecting the brand is/are understood by everyone to be top priorities for our business</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BOC3</td>
<td>developing a strong brand is regarded as an integral part of our business model</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BOC4</td>
<td>the ability to develop a brand is regarded as a core competence</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BOC5</td>
<td>developing our brand is regarded as the strategic starting point in all of our marketing activities</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BOC6</td>
<td>developing our brand is regarded as the strategic starting point in all of our innovation activities</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BOC7</td>
<td>developing a strong brand is recognized to be closely tied to increased profitability</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BOC8</td>
<td>protecting our brand is of paramount importance to us</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC1</td>
<td>our business objectives are driven primarily by customer satisfaction</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC2</td>
<td>our strategies are driven by beliefs about how we can create greater value for customers</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC3</td>
<td>we emphasize constant commitment to serving customer needs</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC4</td>
<td>we regularly share information concerning competitors’ strategies</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC5</td>
<td>we emphasize the fast response to competitive actions that threaten us</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC6</td>
<td>we regularly communicate information on customer needs across all business functions</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC7</td>
<td>we frequently discuss market trends across all business functions</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MOC8</td>
<td>all of our business functions are integrated in serving the needs of our target markets</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
In terms of the brand performance for the above named product, I think

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE1</td>
<td>we have built strong brand awareness in the target market</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BE2</td>
<td>we have built a solid brand reputation</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>BE3</td>
<td>we have built strong customer brand loyalty</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

Please provide some general information about yourself by writing in the space provided below:

B3 – My current position is: ____________________________

B4 – My year of birth is: ______________

B5 – My highest education level is:
   - General education or lower □
   - Associate Degree □
   - Bachelor Degree □
   - Master’s Degree or higher □

B6 – My gender is: Male □ or Female □

B7 – Length of time I have been in this position is: ____________________________

B8 – Length of time I have worked in this industry is: ____________________________

Please circle the appropriate number below.

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Very Much So</th>
</tr>
</thead>
<tbody>
<tr>
<td>B9</td>
<td>I am confident I had the necessary knowledge to complete the statements asked throughout the questionnaire.</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>

THANK YOU FOR YOUR PARTICIPATION
We realize you are very busy, but ask for your valuable time to help us complete this survey identified as Survey A. Please do not rush, as your experience and knowledge are very important and your accurate responses ensure your time is well served. Your responses are completely anonymous and confidential. We guarantee your responses cannot be identified.

NOW, please read and complete the survey. This survey will be collected from you at a later date and time convenient to you within the next week. Once you have completed the survey, please phone the telephone number: 09283 5427 to make an appointment for the researcher to collect the survey back.

(C1 is TO BE COMPLETED BY the CEO or DIRECTOR completing survey A)

C1 – Please write the brand name of the product that you wrote in question A1 of your SURVEY A below.

Brand name of Product: ______________________________________

Think about your own understanding and knowledge of your firms’ strategies and business operations, please circle the number below that best reflects your views (1 = not at all; 7 = very much so)

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Very Much So</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>I am knowledgeable about my firms’ business operations, strategies, characteristics, business processes, performance, and its business environment (competitors, regulations, and the like).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Please indicate the extent to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC1 this firm invests a great percentage of its revenue in research &amp;</td>
<td>1  2  3  4  5</td>
<td>6  7</td>
</tr>
<tr>
<td>development for this product brand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIC2 other firms (competitors) in the industry see this product brand as</td>
<td>1  2  3  4  5</td>
<td>6  7</td>
</tr>
<tr>
<td>highly innovative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIC3 this firm incorporates cutting edge managerial and technological</td>
<td>1  2  3  4  5</td>
<td>6  7</td>
</tr>
<tr>
<td>innovations in its operations when developing this product brand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIC4 this firm introduces this product brand to the market before any of</td>
<td>1  2  3  4  5</td>
<td>6  7</td>
</tr>
<tr>
<td>its competitors who product similar product types</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please provide some general information about yourself by writing in the space provided below:

C3 – My current position is: ________________________________________________

C4 – My year of birth is: __________

C5 – My highest education level is:

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   - Associate Degree □
   - Bachelor Degree □
   - Master’s Degree or higher □

C6 – My gender is: Male □ or Female □

C7 – Length of time I have been in this position is: ________________________

C8 – Length of time I have worked in this industry is: ______________________

Please circle the appropriate number below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not At All</th>
<th>Very Much So</th>
</tr>
</thead>
<tbody>
<tr>
<td>C9 I am confident I had the necessary knowledge to complete the statements</td>
<td>1  2  3  4</td>
<td>5  6  7</td>
</tr>
<tr>
<td>asked throughout the questionnaire.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>In relation to my most immediate manager, he/she:</th>
<th>Not at all</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFL1 instills pride in others for being associated with him/her</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL2 goes beyond self-interest for the good of the group</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL3 acts in ways that build others’ respect for him/her</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL4 displays a sense of power and confidence</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL5 talks about his/her most important values and beliefs</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL6 specifies the importance of having a strong sense of purpose</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL7 considers the moral and ethical consequences of decisions</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL8 emphasizes the importance of having a collective sense of mission</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL9 talks optimistically about the future</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL10 talks enthusiastically about what needs to be accomplished</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL11 articulates a compelling vision of the future</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>TFL12 expresses confidence that goals will be achieved</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
In relation to my most immediate manager, he/she:

<table>
<thead>
<tr>
<th>TFL13</th>
<th>re-examines critical assumptions to question whether they are appropriate</th>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFL14</td>
<td>seeks differing perspectives when solving problems</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>TFL15</td>
<td>gets others to look at problems from many different angles</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>TFL16</td>
<td>suggests new ways of looking at how to complete assignments</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>TFL17</td>
<td>spends time teaching and coaching</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>TFL18</td>
<td>treats others as individuals rather than just as a member of the group</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>TFL19</td>
<td>considers each individual as having different needs, abilities and aspirations from others</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>TFL20</td>
<td>helps others to develop their strengths</td>
<td>Not at all</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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Please provide some general information about yourself by writing in the space provided below:

D1 - My current position is: ______________________________
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- Associate Degree □
- Bachelor Degree □
- Master’s Degree or higher □
D4 - My gender is: Male □ or Female □
D5 - Length of time I have been in this position is: ________________
D6 - Length of time I have worked in this industry is: ________________

Please circle the appropriate number below.

| D7 | I am confident I had the necessary knowledge to complete the statements asked throughout the questionnaire. | Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

THANK YOU FOR YOUR PARTICIPATION
SURVEY E
CUSTOMERS
To be completed by the customers

We realize you are very busy, but ask for your valuable time to help us complete this survey identified as Survey A. Please do not rush, as your experience and knowledge are very important and your accurate responses ensure your time is well served. Your responses are completely anonymous and confidential. We guarantee your responses cannot be identified.

NOW, please read and complete the survey. This survey will be collected from you at a later date and time convenient to you **within the next week**. Once you have completed the survey, please phone the telephone number: 09283 5427 to make an appointment for the researcher to collect the survey back.

(E1 is TO BE COMPLETED BY the CEO or DIRECTOR completing survey A)

**E1** – Please write the brand name of the product that you wrote in question **A1** of your **SURVEY A** below.

Brand name of Product: __________________________

**E2** – Is the product name identified in **E1** the product your firm has purchased from the supplier (the one who provided this survey to you)? Please answer “Yes” or “No” by ticking the box below:

☐ YES or ☐ NO

*Please indicate the extent to which you agree or disagree with the following statements.*

<table>
<thead>
<tr>
<th>This supplier/seller/provider for the above product</th>
<th>Strongly Agree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVC1 ensures my firm’s personal preferences are satisfied</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC2 delivers quality product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC3 delivers the product that is exactly what my firm wants</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC4 delivers the product that exceeds my firm’s expectations</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>This supplier/seller/provider for the above product</td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>CVC5 delivers the product with innovative performance features</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC6 provides my firm with fair price policies</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC7 provides my firm with price policies that are consistent and accurate</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC8 provides my firm more beneficial price policies compared to that of other suppliers of the same product</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC9 prices its product according to how valuable my firm perceives it to be</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC10 delivers quality product which is priced right</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC11 has committed to ensure that my firm has easy access to their business at any time</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC12 ensures rapid response standards to deal with any of my firm’s enquiry</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC13 has committed to ensure continuing relationships with my firm</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC14 has committed to deliver add-on values (special offers, status recognition) to ensure my firm stays with them</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC15 has committed to maintain long-term relationships with my firm</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC16 interacts with my firm to serve us better</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC17 works together with my firm to produce offerings that mobilize my firm</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC18 interacts with my firm to design offerings that meet our unique and changing needs</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC19 provides product for and in conjunction with my firm</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC20 co-opts my firm involvement in providing product for us</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>CVC21 provides my firm with supporting systems to help us get more value</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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Please provide some general information about yourself by writing in the space provided below:

E3 – My year of birth is: ____________

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