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W.P. No. 2013-05-08
May 2013

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Abstract

A firm's 'competitive advantage' is considered to arise from certain 'factors internal to the firm as postulated by the resource based view' or from 'external sources and industry structure.' However, it remains unclear as to "how" these factors result in competitive advantage, since the literature has largely focused on establishing that the presence of these factors results in the manifestation of competitive advantage. Since firms serve customers, in this paper, we explore how both internal and external factors influence the organization-customer interface which, in turn, results in competitive advantage for the firm, i.e., we examine the process of manifestation of competitive advantage. We advance propositions to elucidate how internal and external factors influence different stages of organization's interaction with the customer in terms of an increase or decrease in search, evaluation, and purchase transaction costs and a change in the consumption experience, as applicable. Competitive advantage is a function of these interactions. We also consider the role of three moderating variables – product involvement, frequency of purchase and cognitive vs. affect based evaluation – that are germane to the outcomes at the organization – customer interface.

Key Words:

Marketing Strategy, Resource based view, Competitive advantage, organization-customer interface, search cost, evaluation cost, transaction cost, consumption experience,

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Introduction

'Competitive advantage,' (CA) has been looked upon as resulting from *intrinsic processes* of an organization or from *external sources* and *industry structure* (Barney 1991; Bain 1956). Internal factors and processes within the organization that lead to CA include technological capability, market orientation, organizational learning, human capital, inter-organizational alliances market based assets, etc. (Barney 1991; Hult and Ketchen 2001; Srivastava, Fahey and Christensen 2001; Vorhies and Morgan 2005); these flow from the resource based view (RBV). CA may also result from external sources such as level of competition, entry barriers from, say, economies of scale, knowledge cluster membership, etc (e.g., Tallman et. al. 2003). Moreover, possession of a better "industry position" would result in CA and, hence, better profits (Porter 1980).

However, the process of obtaining CA has received little attention in the literature.[1] All, "for profit" organizations, deal with customers and CA results, at least in part, from the firm's interaction with, and the actions of, customers (Day & Wensley 1988). Customers interact with seller organizations (firms) through search, evaluation, purchase transaction and post-purchase consumption / use (Fournier 1998; Moorthy, Ratchford and Talukdar 1997, p.265; Petty and Caccioppo 1983; Tyagi 2004; Stigler 1961). These customer interface processes are influenced by the levels of customer involvement with the product (e.g., Richins and Bloch 1986), by the frequency of product purchase (e.g., Ji and Wood 2007) and by the mix of cognition and affect relating to the search, evaluation, purchase and consumption of the product (e.g., Drolet and Aaker 2002). Customer reaction to, a changes in search, evaluation or transaction costs and in

[1] Rindova and Frombrum (1999) and Woodruff (1997) are significant exceptions; yet their approach does not encompass the organization customer interface

the consumption experience, and to the context, determines future patronage of a firm's offerings (e.g., Moorthy, Ratchford and Talukdar 1997), and therefore, the firm's CA.

In this paper, we discuss how the antecedent variables (internal and external factors) that the literature suggests lead to CA, do so through the interaction of the organization with its customers - by influencing customer purchase and consumption processes. The relative lack of research in this area is surprising given that (a) firms are collections of resources (Penrose 1959, p.24) and (b) *use* of those resources and capabilities through suitable conceptualization and successful execution of marketing actions (at the firm-customer interface) are expected to lead to positive outcomes like customer satisfaction, market share, profitability and, therefore, CA (e.g., Lurie and Kohli 2002; Slotegraaf, Moorman and Inman 2003) and (c) CA has been represented through customer judgments and actions on points of superiority in the marketplace (Day and Nedungadi 1994, p.32). Yet, *how the organization customer interaction* creates CA for the firm has received little attention. We examine the process of creation of CA in terms of the consequences of interaction with the customer. Hence, in this paper we argue that the possession of better "internal" variables of organization or influence of better industry structure variables that are likely to result in CA, does so through *customer interface processes*.

Literature Review of Competitive Advantage

Present research on CA has one of three approaches. The first treats all firms as being autonomous agents and explains differential performance on the basis of industry factors and external bases of competition (Porter 1985). This approach draws from structure-conduct-performance paradigm that highlights external market conditions, such as the number of buyers and sellers, entry barriers, scale economies, knowledge cluster membership and other cost

structures, as well as the firm's diversification as determinants of market power (Bain 1956; Porter 1985; Tallman et. al. 2003). Industrial economists point to factors in a firm's product market such as product differentiation or market concentration (Scherer and Ross 1990). In this view, CA is a result of differential market power allowing dominant firms to control prices and earn monopoly rents; CA results from factors *external* to the firm (Spanos and Lioukas 2001).

The second approach draws principally on the work by Wernerfelt (1984) and Barney (1991) -- Resource Based View (RBV), wherein inter-firm differences in performance were attributed to the possession and use of internal resources and capabilities (Day and Wensley 1988). RBV attributes advantage in an industry, to a firm's control over bundles of unique material, human, organizational, and locational resources and skills that enable unique value-creating strategies (Barney 1991). According to Barney, firm resources possessed play a crucial role for the firm gaining CA. Resources must be "valuable," "rare," "imperfectly imitable" and should not have "strategically equivalent substitutes." Resource-based theories emphasize the importance of the internal domain – firm specific capabilities and knowledge in creating CA (Penrose 1959).

Heterogeneous resources create distinct strategic options for a firm that, over time, enable its managers to exploit higher economic rent (Peteraf 1993). A firm's resources are said to be a source of CA to the degree that they are scarce, specialized, appropriable (Amit and Schoemaker 1993), valuable, rare, difficult to imitate or substitute (Barney 1991) or are a result of collective learning in the organization (Khanna, Gulati and Nohria 1998). The management's task is to determine how best to improve and exploit these firm-specific resources through business processes (Ray, Barney and Muhanna 2004; Srivastava, Shervani and Fahey 1999), although in times of turbulence, the challenge of developing new capabilities comes to the fore (Barney

1991; Wernerfelt 1984) and management capability can be a useful resource to improve a firm's prospects (Holcomb, Holmes and Connelly 2009). CA in this approach, thus, results from factors *internal* to the firm.

The third approach has sought to portray CA as going beyond the neo-classical paradigm through comparative and resource advantage vis a vis other firms (Hunt and Morgan 1995 (p.5-7); 1997); this approach may be considered to be a close cousin of the second approach in one aspect; it also considers the firm resources as a source of advantage (Hunt and Madhavaram 2006).[2] In addition, in this view, industry demand is significantly heterogeneous and dynamic (Dickson 1992), i.e., consumers' tastes and preferences within a generic product class, for example, footwear, not only differ greatly as to desired product features and characteristics, but they are always changing. Second, consumers and firms have imperfect information concerning products that match their different tastes and preferences (Dickson and Ginter 1987, p.2., p.5), and obtaining such information is often costly in terms of both time and money (Stigler 1961).

These three approaches have worked largely independent of one another. In this paper, we draw from the three approaches and relate the impact of external factors and firm resources to the activities at the organization customer interface and, therefore, to the resultant impact on CA. This is line with work of scholars who have begun to look at the *proces*s of gaining CA (e.g., Rindova and Fombrun 1999). Woodruff (1997, p.143-146) has argued that it was needed to think externally, i.e. from customer's perspective rather than internally (i.e. organization perspective) to examine how firms gained CA. According to Woodruff, "customer value" i.e. the customer's perceived product preference in terms of product attributes, attributes performance and

[2] Hunt and Madhavaram's (2006, p. 100) define a firm resource as any tangible or intangible entity available to the firm that enables it to produce efficiently and/or effectively a market offering that has value for some market segment(s)."

consequences of purchase determined CA; this value is extracted through the search, evaluation, purchase transaction and consumption experience of the customer.

Yet, while according to Barney (1991, p.102) *"A firm is said to have CA when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors,"* the *"implementation"* or process of a value creating strategy has not received sufficient attention in the literature; there has been no attempt to look at how the interaction between the firm on one hand and its customers on the other creates CA for the firm, beyond the fact of deployment of resources (Slotegraaf, Moorman and Inman 2003). As Astley and Van de Ven (1983, p.267) argue, to say that A causes B may be predictive but is intellectually sterile until one can explain the process by which the relationship unfolds. In this paper, we argue that the firm-customer interface is an important focus of the implementation and is, therefore, involved in the creation of CA for the firm. In doing so, we integrate different perspectives and build on the literature, to enhance our understanding of the CA formation process.

How the Organization Interfaces with the Customer

The literature has established that customers search for and evaluate a product (e.g., Akerloff 1970; Moorthy, Ratchford and Talukdar 1997; Zhang, Fang and Sheng 2007). Customers' purchase transaction that can have various manifestations (e.g., Jap 2007). The consumption process of the purchased product – whether satisfactory for the customer - also has a bearing on the likely product success and, therefore, of a firm (e.g., Fournier 1998). Research also suggests that customer engagement with a product and behavior with respect to it depends on their involvement level with the product category (e.g., Mathwick and Rigdon 2004; Richins and

Bloch 1986), the frequency of purchase (e.g., Ji and Wood 2007) and the mix of cognition and affect in the purchase decision (e.g., Drolet and Aaker 2002; Edell and Burke 1987; Homburg, Koschate and Hoyer 2006). Below, we briefly review the relevant literature from a CA standpoint.

Search Costs

The identification of sellers, their products, the prices at which the products are being offered and comparison with other similar products or services requires information search on the part of buyers (Stigler 1961). Customers incur considerable search costs when they are buying, since they evaluate products on quantitative and qualitative aspects such as price, quality, comfort etc. (Tversky 1972; Zhang, Fang & Sheng 2007). Indeed on some occasions, the market "fails" because the information is not available as desired by the customer (Akerlof 1970). Also, it has been empirically found that in case of online buying, *"search cost is inversely correlated with search depth*[3]*"* (Zhang, Fang & Sheng 2007, p.81). Organizations can, therefore, increase their CA by decreasing the customer search cost. Search costs and the present incumbents in the consumer's consideration set determine alternatives that consumers consider (Nedungadi 1990).

Evaluation Costs

Customers evaluate products prior to purchase. The probability of selecting an alternative depends not only on its overall value, but also on its relations with other available alternatives (Tversky 1972). Customers will use different evaluation processes depending on the context, product category and involvement levels (e.g., Petty and Cacioppo 1983; Shiv and Fedorikhin 1999). Customers choose brands that are less effortful to evaluate (Garbarino and Edell 1997). A firm gains advantage by decreasing evaluation costs for the customer.

[3] Search depth has been defined as the number of "unique" retailer websites within a product category visited during a search session.

Purchase transaction costs

For every purchase made by the customer she would incur transaction costs relating to monetary, time, and hassle costs of going to a store, making a payment, customizing the product to his/her own requirements before using it, learning how to use the product properly, and finally using the product itself (Tyagi 2004, p.335). Customer transaction costs should, thus, affect customer choice behavior significantly. A reduction in customer transaction cost should lead to CA.

Consumption Experience

Consumption experiences can lead to brand relationship formation that strengthens customer loyalty (Fournier 1998). Firms should not only focus on the product usage but also on how a specific consumer uses the product, in order to understand consumer's consumption pattern (Seybold 2001). Firms, therefore, should also focus on the customer *"consumption chain"* (Macmillan & McGrath 1997, p. 133) to gain CA. Firms providing benefits on search, evaluation, purchase transaction and consumption experience of the customer should enjoy CA.

Product Involvement, Frequency of Purchase and Affect-Cognition Mix in Buying Decision

The literature posits three categories of variables that influence purchase and consumption process: (a) individual specific (e.g., product involvement, experience with product class, expertise, etc.), (b) contextual (e.g., frequency of purchase, time available for decision, retail format, etc.) and (c) nature of decision making process (e.g., affect vs. cognition in decision making, peripheral vs. central route, etc.). In this research, for reasons of tractability and relative importance in terms of amount of research done so far, we choose one from each category – product involvement, frequency of purchase and the relative mix of affect and cognition in the decision making process.

Involvement levels with a product are known to be a predictor of customer purchase intentions (Richins and Bloch 1986, p.283-284), to influence amount of search (Bloch, Sherrell and Ridgeway 1986; Chaudhari 2000) and to moderate search behavior (Mathwick and Rigdon 2004); and search is a significant contributor to consumer costs of acquisition (Moorthy, Ratchford and Talukdar 1997). Customers behave differently depending on frequency of purchase; for instance, for more frequently purchased products, they tend to employ heuristics or habits (Ji and Wood 2007) and tend to be more price sensitive (Kalyanaram and Little 1994).

Affective balance theory posits that cognitive and affective processes interact in decision making (Grossberg and Gutowski 1994, p. 301-2) and empirical research finds that cognition and affect interact to influence consumer decisions (Shiv and Fedorokhin 1999), that overall both affective and cognitive processes in decision making now receive equal footing in research (Weber and Johnson 2009). Both affect and cognition predict satisfaction judgments and reactions (e.g., Homburg, Moschate and Hoyer 2006, p.22-23; Cowley 2007), as well as choice and loyalty. Customer decisions are usually a mix of cognition and affect (Drolet and Aaker 2002, p.66-67) and affect can significantly reduce search and evaluation (Cowley 2007).

In the following sections, we examine how firm resources (internal) and market based (external) factors influence different aspects of the organization-customer interface. When an antecedent factor raises customer value through a decrease in search, evaluation or transaction costs or through an improved consumption experience, the firm is likely to reap CA.

Customer Buying Process, Resource Based View & Competitive Advantage

The RBV literature has operationalized firm resources in a multitude of ways; these can be summarized parsimoniously under the following categories:

- ***Tacit Knowledge*** (Polanyi 1969; Berman, Down & Hill 2002),
- ***Market Orientation*** (Day 1994; Hult and Ketchen 2001; Kohli and Jaworski 1990)
- ***Cooperative Strategy*** (Dyer & Singh 1998; Wuyts, Dutta & Stremersch 2004),
- ***Human Capital*** (Wright, McMahan & McWilliams 1994; Hitt et al 2001; Hatch & Dyer 2004),
- ***Corporate Reputation*** (Schwaiger 2004; Dowling 2004; Sivastava, Shervani and Fahey 1999),
- ***Organizational Learning*** (Dunphy, Turner & Crawford 1997; Hult and Ketchen 2001; Smith, Vasudevan & Tanniru 1996) and

While many studies show that when a certain type of firm resource is present it results in better organization performance and CA (e.g., Berman, Down & Hill 2002) they do not discuss the process (Exhibit 1). We now build on the extant RBV and marketing literature and discuss the impact of RBV variables on the customer buying and consumption process as an input to obtaining CA.

Tacit Knowledge and Consumer Buying Process

Tacit knowledge has been conceptualized as knowledge which is *hard to explain and codify*, and yet an invaluable asset for the organization (Polanyi 1969). In the context of National Basketball Association Berman, Down & Hill (2002, p.17), show that higher levels of firm tacit knowledge possessed lead to more CA (as measured by organizational performance) upto a certain extent, and further addition in the tacit knowledge would lead to decline in the organizational performance (p.19). However, there is no reference to the *process* of advantage creation.

Consider Apple's i-Pod, which has wonderful user experience interface coming out of Apple's famed internal design capabilities. Anecdotal evidence suggests that Apple possesses a considerable amount of tacit knowledge regarding the customer's usage pattern of durables (BusinessWeek 2005). According to Ferrari & Toledo (2004, p.118-119), tacit knowledge

possessed by the employees engaged in the product development process leads to better products; harnessing of tacit knowledge leads to breakthrough innovations (Mascitelli 2000). Had this knowledge been explicit, competitors would have successfully copied the product, since explicit knowledge has been found to leak out more often (Brown & Duguid 2001). However, no other company has been able to copy this technology (i.e. i-Pod) in a meaningful way in the past few years. The fixed cost of knowledge transfer rises with tacitness (Teece 1977). Therefore, since the knowledge has still has not *"leaked"* out of Apple, it is likely that the knowledge is tacit. Better product development processes lead to better quality products (De Luca & Atuahene-Gima 2007; Mascitelli 2000), which would result in improved product consumption experience (Henard & Szymanski 2001) and lower search and evaluation costs. Therefore,

P1: The greater the product related tacit knowledge within a firm, the better the product development process and hence, lower the search and evaluation costs and better the product consumption experience and, therefore, the higher the CA.

Customers perceive high involvement products as risky (Kaplan, Szybillo & Jacoby 1974); the potential negative outcomes of a wrong choice are larger. Since customers would like to reduce risk, they involve themselves in more information search to better evaluate and make a purchase decision (Clarke & Belk 1979); customers, therefore, engage in more search and evaluation. Also, at high levels of customer product involvement, there is a greater level of *"engagement"* with the product (Xue 2008, p.87). Highly involved customers seek information not only to augment product knowledge but also to experience pleasure (Mathwick and Rigdon 2004, p.326). Customer experience of the product is a part of the brand relationship formation process and value extraction (Fournier 1998). High involvement customers are more closely associated with the consumption process. In contrast, for low involvement products, customers are less conscious about product features or usage (Hoyer 1984); the perceived risk is lower (Chaudhuri

2000, p.3); consumers forget low involvement products' prices within minutes of purchase (Dickson and Sawyer 1990). Hence:

P1a (i):The greater the level of product involvement of the customer, the *weaker* the influence of levels of product related tacit knowledge within firm, on customer search and evaluation cost.

P1a (ii):The greater the level of product involvement of the customer, the *stronger* the influence of levels of product related tacit knowledge within firm, on customer consumption experience.

With accumulated product related knowledge, firms are able to develop good products / services (Ferrari & Toledo, 2004, p.127); however consumption experience of the customer does not vary with respect to the frequency of purchase. In contrast, so far as search and evaluation are concerned, frequently purchased goods are often purchased on heuristics to minimize information related activities by consumers (Macdonald & Sharp 2000). Consumers would have greater experience with frequently purchased products and greater experience leads to lower search (Moorthy, Ratchford and Talukdar 1997) and hence, we propose:

P1b (i): The frequency of purchase will not influence the relationship between levels of product related tacit knowledge within firm and customer consumption experience.

P1b (i):The higher the frequency of purchase, the *stronger* the influence of levels of product related tacit knowledge on customer search and evaluation cost.

Customers' choice and purchase decision are made with the combination of both cognitive and affective evaluation of attributes (Zajonc & Markus 1982; Hansen 2005, p.421). However, the proportion of cognitive and affective evaluation would differ with respect to the product category and purchase situation of the customer (Zajonc & Markus 1982; Homburg, Koschate & Hoyer 2006). In purchase situations where cognitive evaluation dominates affective evaluation, cognitive evaluation may require more search and evaluation attenuating the decreasing effect that high levels of product related tacit firm knowledge would, otherwise have had on search

and evaluation cost,. Dominance of affect in the decision, on the other hand, may reduce (Cowley 2007) the need for information because customer may employ heuristics (Macdonald and Sharp 2000). Therefore:

P1c: The more the cognitive based (affect based) evaluation, the *weaker (stronger)* the influence of product related tacit knowledge on customer search and evaluation cost.

Market Orientation and the Consumer Buying Process

Hult and Ketchen (2001, p.905) found that, as a firm resource, market orientation had the greatest explanatory power in explaining a firm's positional advantage and marketplace performance; other studies confirm the influence of market orientation on customer satisfaction and firm performance (e.g., Atuahene-Gima 2005) A firm's market orientation has been defined as its "organizationwide *generation* of market intelligence pertaining to current and future customer needs, *dissemination* of the intelligence across departments, and organizationwide *responsiveness* to it" (Kohli and Jaworski 1990, p.6). Evidently, a market oriented firm should be able to offer customers, lower search, evaluation and transaction costs and better consumption experience with positive customer judgment (Day and Nedungadi 1994). Hence:

P2: The higher a firm's market orientation, *lower* the customer search, evaluation and transaction cost and *better* the consumption experience and, therefore, the higher the CA.

Customers perceive high involvement products to be risky (Kaplan, Szybillo & Jacoby 1974) with potentially higher negative outcomes; consumers do more information search for better evaluation and a better purchase decision (Chaudhuri 2000, p.7). While high levels of market orientation result in lower search and evaluation requirements and transaction costs for the customer, a high involvement customer's search propensity would mitigate the decrease. Hence:

P2a: The higher the product involvement, the *weaker* the influence of market orientation on customer search, evaluation and transaction cost.

With frequently purchased products, information sought in subsequent purchase situations would be in most cases retrieved from previously acquired product information stored in memory and satisfaction or dissatisfaction experience based on post-purchase evaluation of earlier purchases (Hoyer 1984). In addition, consumers also minimize information related activities for frequently purchased items by using heuristics (Macdonald & Sharp 2000). Consumers would have greater experience with frequently purchased products and greater experience leads to lower search (Moorthy, Ratchford and Talukdar 1997). Thus, the influence of market orientation would increase in frequent purchase situations. Therefore:

P2b: The higher the frequency of purchase, the *stronger* the influence of market orientation on customer search and evaluation cost.[4]

Customer's attitude towards brand or product consists of both hedonic and utilitarian components (Batra & Ahtola 1991). Customers' choice and purchase decision are made with the combination of both cognitive and affective evaluation of attributes (Zajonc & Markus 1982; Hansen 2005, p.421). However, the proportion of cognitive and affective evaluation would differ with respect to the product category and purchase situation of the customer (Zajonc & Markus 1982; Homburg, Koschate & Hoyer 2006). So, in purchase situations where cognitive evaluation dominates affective evaluation, high levels of market orientation should reduce the levels of cognition required leading customers to reduce their search and evaluation efforts further. Dominance of affect in the decision, on the other hand, also reduces (Cowley 2007) the need for information because customer may employ heuristics (Macdonald & Sharp 2000). Therefore:

[4] There is little to no evidence suggesting any impact of involvement or frequency of purchase or the affect cognition mix in the evaluation on the relationship between market orientation and consumption experience.

P2c The greater the cognition based (affect based) evaluation, the *stronger (stronger)* the influence of firm market orientation on customer search and evaluation cost.

Cooperative Strategy and Consumer Buying Process

There is much research that suggests that inter-organizational relationships (termed as "cooperative strategy") result in CA for firms as they enhance the resource base of the firm. For example, inter-organizational relations often yield better organizational learning (Khanna, Gulati & Nohria 1998, p.200), thus, improving firm resources. Technological diversity among the alliance partners increases capability and leads to different forms of innovation (Wuyts, Dutta & Stremersch 2004, p.90-91); innovations enhance the market position of a firm. Inter-organizational relationships manifest themselves as relation-specific assets (Dyer & Singh 1998, p.663); these include *physical asset specificity and human asset specificity*.

(i) *Physical asset specificity* refers to the relationships involving transaction specific capital investments. For instance, banks invest in transaction specific physical assets to offer services like e-payment of telephone bills, electricity bills, income tax payments etc. that make consumption of these services easier; these services also reduce purchase transaction costs for products like books, CDs, etc. Thus, banks develop specific assets with the help of infrastructure providers to provide these services. Such arrangements have obviated the need for the earlier tedious process when customers needed to stand in queues for the payment of the bills. Similarly, suppliers of major retailers invest in efficient customer response infrastructure in cooperation with retailers (Corsten and Kumar 2005). From a customer perspective, such asset specific investments decrease the purchase transaction cost. In another context, retailers using congruent music and scent in the store found consumers exhibiting a higher level of impulse buying behavior (Mattila and Wirtz 2001), perhaps because the

purchase transaction process becomes psychologically less costly. With greater physical asset specificity, therefore, customer purchase transaction costs should reduce. Hence:

P3(a):Better the physical asset specificity shared through inter-organizational relationship, lesser the purchase transaction costs and, therefore, higher the CA.

With low involvement products / services purchase situations, customers would like to optimize time and resources (Einhorn & Hogarth 1981). However, in high involvement purchase instances, the customer is motivated to spend time and/or effort to search, evaluate and consume (Richins and Bloch 1986) regardless of the conditions; in these conditions, investment in specific assets by the firm that facilitate the customer may likely have lower impact on the customers' transaction costs. And hence, the influence of physical asset specificity would be more relevant in case of low involvement products, as compared to high involvement products. Therefore:

P3a (i):The greater the level of product involvement of the customer, the *weaker* the influence of levels of physical asset specificity shared through inter-organizational relationship on customer purchase transaction cost.

Customers optimize time and effort in their purchase transactions Einhorn and Hogarth (1981). For frequently purchased products, customers employ heuristics to reduce transaction costs. Firms that provide physical specificity would help customers in reducing their purchase transaction cost, and enable firms to reap CA; this reduction in purchase transaction will likely be less for infrequently purchased product because customers will employ a lower level of heuristics and a higher level of processing. Hence, the influence of physical specificity would be more relevant for frequently purchased products and hence, we propose

P3a (ii):The higher the frequency of purchase, the *stronger* the influence of levels of physical asset specificity shared through inter-organizational relationship, on customer purchase transaction cost.

In purchase situations where customer's evaluation process is more inclined towards cognition, the customer might realize the importance of the cost being incurred and beyond certain levels of cognitive effort might even develop a negative affect toward the alternative being evaluated (Garbarino and Edell 1997). However, when affective evaluation dominates the cognitive evaluation, customer might not sense the importance of the transaction cost, but might be more interested in obtaining the product. Hence, in situations when cognitive evaluation dominates, the influence of physical asset specificity would be stronger since they would yield customers lesser purchase transaction cost and, hence we propose

P3a (iii):The greater the cognition based (affect based) evaluation, the *stronger (weaker)* the influence of levels of physical asset specificity shared through inter-organizational relationship, on customer purchase transaction cost.

(ii) *Human asset specificity* refers to the relationships involving transaction specific know-how of persons within the firm or those that act on behalf of the firm. In purchase situations when customer is not able to contact any responsible person from the firm, in order to gain insights for the purchase, customer would have to depend on the intermediary or the immediately accessible person, who might be the representative of main firm (Kirmani and Campbell 2004). In the absence of human asset specificity, customers spend extra effort in locating the right person from the firm and which may result in increased search and evaluation cost. Under the Shakti model, Hindustan Unilever entrusted the responsibility of forming groups and selling products to local village women. This model benefited HUL in reducing distribution costs substantially and increased customer access reducing their purchase transaction costs. These women worked for Hindustan Unilever on contractual terms with training in specific skills, creating human asset specificity in the form of product

related knowledge and merchandising skills. Customers gained access to and were able to evaluate products more easily. Therefore:

P3 (b): The greater the human asset specificity shared through inter-organizational relationships, lesser the customer search cost, lesser the customer evaluation cost and lesser the purchase transaction cost and, therefore, the higher the CA.

Customers are influenced by the expertise / product knowledge of the salesperson when they are in need of information and the knowledge of salesperson helps them in making the purchase decision (Stafford 1996). Since, customers in high involvement product buying situations look for various sources of information (Clarke & Belk, 1979), the decreasing influence of human asset specificity of the firm on customer search, evaluation and purchase transaction cost is likely to be less, i.e., customer will continue to search and evaluate and hence, we propose

P3b (i): The greater the level of product involvement of the customer, the *weaker* the influence of human asset specificity shared through inter-organizational relationships, on customer search, evaluation and purchase transaction cost.

With higher purchase frequency, the customer is more comfortable with the product category and needs less aid in the purchase situation (Shoemaker et al 1977; Macdonald & Sharp 2000). Further, information sought in subsequent purchase situations would be in most cases be retrieved from previously acquired product information stored in memory and satisfaction or dissatisfaction experience based on post-purchase evaluation of earlier purchase (Hoyer, 1984) leading to lower search and evaluation. In contrast, where there is a large time gap between two purchase instances, more information may be required leading to greater search and evaluation and, therefore, the influence of human asset specificity within firm might have stronger influence on customer search, evaluation and purchase transaction cost and, hence, we propose

P3d (ii): The higher the frequency of purchase, the *weaker* the influence of human asset specificity shared through inter-organizational relationships, on customer search, evaluation and purchase transaction cost.

Whether product evaluation is primarily cognition based or affect based will be determined by the customer (Drolet and Aaker 2002); customer decision characteristics have been postulated to affect outcomes (e.g., Challagalla, Venkatesh and Kohli 2009, p. 78) even though a salesperson might influence the customer decision (Gough 2005). When affective evaluation dominates the cognitive evaluation, customer might not sense the quantum of search, evaluation and purchase transaction cost, but might be more interested in obtaining the product; in contrast cognition driven decisions would lead to greater effort. Therefore:

P3d (iii):The higher (lower) the degree of cognition in the product evaluation process *the weaker (stronger)* the influence of human asset specificity shared through inter-organizational relationships, on customer search, evaluation and purchase transaction cost.

Human Capital and Consumer Buying Process

Scholars have argued that, higher education levels of the human resource, better training of the human resource, better learning activities of the human resource and better past experience yield an improved organization performance (Barney 1991; Wright, McMahan & McWilliams 1994; Hitt et al 2001). It has been argued these characteristics result in better employee performance leading to increased firm performance and helping the firm to attain CA. The impact of human capital on the firm performance has been studied in various contexts. Hatch & Dyer (2004, p.1156) found that in the context of semiconductor manufacturing industry that better human capital in terms of education, training, learning ability, past work experiences result in higher learning ability of the employees which resulted in decreased number of defects in the production of semiconductor chips. Hitt et al (2001, p.23-24) found that better human capital of the firm resulted in increased ratio of net income to total firm revenue. Extending the argument,

knowledge gained by the workforce either through the route of better training and development activities or better past experience, should make the purchasing process more convenient.

For instance, when customers are buying a product/service for the first time, they possess high level of uncertainty (psychological and financial) in their minds; front end human capital helps convince customers in their decision making process. In these situations, an informed salesperson would be able to help customers in making purchase decisions. They would play an effective role in the evaluation stage of the buying process, where the customer may have difficulty in distinguishing various offerings. In such circumstances, the better the quality of the information and knowledge that the staff provides to the customer, directly or indirectly – through advertisements - (Vakratsas and Ambler 1999), lower would be the customer's search, evaluation and transaction cost. The quality of information provided by front-end salespersons during the customer purchase process is an important input to an optimal purchase decision (Kirmani and Campbell 2004); it helps the customer avoid yet another round of search. Further, according to the Hatch and Dyer (2004, p.1171), better human capital results in better quality products, leading to better consumption experience. Therefore:

P4: The better the human capital, lower the search, evaluation, purchase transaction cost and better the consumption experience of the customer and, therefore, the higher the CA.

While purchasing high involvement products, customers generally engage in an in-depth information collection (Clarke & Belk 1979). With better organizational human capital, customers' search, evaluation and purchase transaction cost would reduce. Compared to low involvement products, customers look for more information in purchasing high involvement

products (Chaudhuri 2000); implying that the decreasing effect of good human capital on search, evaluation and transaction costs would be attenuated for high involvement products. Therefore:

P4a: The greater (lower) the level of product involvement of the customer, the *weaker (stronger)* the influence of human capital on search, evaluation and purchase transaction cost.

For frequently purchased products, customers get familiar with the purchase process (Leong 1993; Macdonald & Sharp 2000). Further, information sought in subsequent purchases would be in most cases retrieved from previously acquired product information (Hoyer 1984). Frequently purchased products provide greater experience to customers and greater experience leads to lower search (Moorthy, Ratchford and Talukdar 1997). Customers with high purchase frequency in a category already have sharply defined preferences (Byong-do and Rossi 1994) and so would do less evaluation. Hence, the amount of information in the subsequent purchase situations would not be as relevant as in the less frequent purchase situations. The preceding argument suggests that for frequently purchased goods the impact of human capital on search, evaluation and transaction costs would be accentuated and hence, we propose

P4b: The higher (lower) the frequency of purchase, the *stronger (weaker*) the influence of human capital on search, evaluation and customer purchase transaction cost.

In purchase situations where cognition based evaluation dominates affect based evaluation, customer desires more information to make a purchase decision. And if it takes considerable amount of cognitive effort on part of the customer due to unavailability of right information, it could result in negative affect of the customer towards the particular alternative being evaluated (Garbarino & Edell 1997, p.156). Thus, it becomes necessary that adequate information be made available on attributes that could be evaluated by customer cognitively and reduce their purchase transaction cost. Since good human capital reduces search and evaluation effort, the presence of

a cognition based evaluation would attenuate the decreasing impact of human capital on search and evaluation costs for the customer. Hence, we propose:

P4c: The more the evaluation is cognition based (affect based), the *weaker (stronger)* the influence of human capital on customer purchase transaction cost.

Corporate Reputation & Consumer Buying Process

A market based asset like corporate reputation is one of the key dimensions for an organization to gain CA (Schwaiger 2004; Srivastava, Fahey and Christensen 2001). Corporate reputation also referred to as "corporate image," and "corporate identity" is considered as the manner in which organization presents itself to its stakeholders (Dowling 2004; Srivastava, Shervani and Fahy 1999). Keller (1993, p.8) defined customer-based brand equity as "*the differential effect of brand knowledge on consumer response to the marketing of the brand,"* where customer response to marketing is in terms of customer perceptions, preferences, and behavior arising from marketing mix activity (e.g., brand choice, comprehension of copy in an advertisement, reactions to a coupon promotion, or evaluations of a brand extension). Where product brands carry the same name as that of the firm, the reputation of the brand is, to an extent, synonymous with that of the firm (Keller 1993; Berens, van Riel and van Bruggen 2005); brand reputations have been found in numerous studies to influence consumer preference and choice behavior (Nedungadi 1990; Aaker 2004). Corporate reputation dimensions that have been identified for realizing CA, therefore, should do so through influencing the customer buying process, since corporate reputation has strong brand related overtones.

Corporate reputation has been measured on cognitive and affective dimensions (Schwaiger 2004). The cognitive dimension includes performance, global reach and perception as a top competitor while the affective component is related to brand recall. Considering the

cognitive component (Schwaiger 2004, p.66), we argue that dimensions like "performance", "global reach", "perceptions" play an important role in the customer buying process. These project the image of an organization in the minds of the customer, which results in the organization's name being present in the customer consideration set (Nedungadi 1990). For instance, the global reach of multinationals such as Microsoft, Apple, Wal-Mart and Mercedes etc. automatically grants them entry into the customer's mind in their categories, resulting in the customer's short listing of the products of these companies for search and/or evaluation before the decision. Berens, van Riel and van Bruggen (2005, p. 41-42) show the impact of a dominant corporate brand on product attitude. Therefore, though customers may decide not to purchase from the organization, it would still be on the consideration list for evaluation and may reduce search for other alternatives and resulting in lower customer search and evaluation cost. Hence:

P5(a):Better the cognitive components, (like performance, global reach and perception) of corporate reputation, lower the search and evaluation cost and, therefore, the higher the CA.

While buying high involvement products, there is more evaluation (Dowling & Staelin 1994; Chaudhuri 2000). In high involvement product purchase instances like consumer durables, automobiles, financial products, real estate etc., higher perceived risk involved in the decision (Dholakia 2001, p.1346-1347) encourage the customer to look for cognitive cues (Chaudhuri 2000) that would establish the credibility of the firm; cognitive components of corporate reputation would, thus, influence the customer decision making process. Perceived corporate ability has a significant positive effect on product attitude when involvement is high and no effect when involvement is low (Berens, van Riel and van Bruggen 2005, p. 43). In low involvement products customer would not be so concerned about these factors due to the lower amount of risk involved in the purchase process and hence:

P5a (i) The greater the level of product involvement of the customer, the *stronger* the influence of cognitive components (like performance, global reach and perception) of corporate reputation, on customer search and evaluation cost.

For frequently purchased items, customers become accustomed to the cognitive components of corporate reputation; customers develop sharply defined preferences for frequently purchased products (Byong-do and Rossi 1994). Be it highly capital intensive purchase decisions involving capital goods, IT outsourcing, power projects or any other low involvement B2C product / service, once the customer has experienced adequate amount of exposure to the cognitive components, these factors might be in recent memory of the customer due to frequent purchases (D'Astous, Bensouda & Guindon 1989; Leong 1993). However, in less frequent purchase situations, customer might not be able to recall these cognitive factors and might be encouraged to re-evaluate the alternatives available at that instant. Thus, the cognitive components of corporate reputation would be more relevant to customers in less frequent purchase situations than in more frequent purchase instances and, hence we propose

P5a(ii):The higher the frequency of purchase, the *weaker* the impact of cognitive components (like performance, global reach and perception) of corporate reputation on customer search and evaluation cost.

Unless a customer attains adequate satisfaction from the cognitive cues, the customer continues the search process (Dowling and Staelin 1994) resulting in increased search and evaluation. Thus, purchase situations in which cognitive evaluation dominates the decision making process, the cognitive components of corporate reputation would become more important in supplying the customer's information requirements. Evidence also suggests that affect based decision making tends to decrease search and evaluation (Cowley 2007; Shiv and Fedorikhin 1999). Therefore:

P5a (iii):The greater the cognitive based (affect based) evaluation, the *stronger (weaker)* the influence of cognitive components (like performance, global reach and perception) of corporate reputation, on customer search and evaluation cost.

Let us next consider *affective component of corporate reputation* as described by Schwaiger (2004, p.66) which is congruent to the "brand recall' of the firm. According to Keller (1993), brand recall plays a crucial role in the customer decision process. Brand recall relates to customer's ability to retrieve the brand when given cues related to the product category. With high brand recall, the customer is able to recall the brand in short span of time, implying lower search and evaluation cost for the customer. Hence, we propose

P5 (b):The stronger the brand recall component of corporate reputation, lower the search and evaluation cost and, therefore, the higher the CA

For higher levels of product involvement, higher brand recall will help customers to narrow their choice more quickly (e.g., Pham et. al. 2001) reducing search and evaluation. Greater product involvement is correlated with subjective product knowledge (Park and Moon 2003) and brand recall has an element of subjectivity (Keller 1993). On the other hand, brand recall would also, while not a necessary criterion in purchase situations of low involvement products, help customers in reducing their search and evaluation cost. Hence, brand recall would have equal influence both in high and low involvement product purchase situations and hence:

P5b (i):The level of product involvement does not the influence the relationship between the brand recall component of corporate reputation on customer search and evaluation cost.

In a highly frequent purchase category, the customer would remember the brand to be purchased due to the retrieval of information regarding past (recent) purchases (D'Astous, Bensouda & Guindon 1989; Macdonald & Sharp 2000) and hence the brand recall factor would either have a lower influence or would not influence the purchase decision. However, if the purchase frequency is less, a strong brand name would facilitate retrieval of past purchase information

from memory, implying that the influence of brand recall component of corporate reputation on search and evaluation cost becomes accentuated for less frequently purchased items. Therefore:

P5b (ii):The higher (lower) the frequency of purchase, the *weaker (stronger)* the influence of brand recall component of corporate reputation, on customer search and evaluation cost.

Affect oriented factors play an important role in the purchase decisions and customers often evaluate and make purchase decision based on these factors (Darke, Chattopadhyay & Ashworth 2006). When affect based evaluation dominates the cognitive based evaluation, this would add to the influence of the brand recall part of corporate reputation on search and evaluation cost – in effect further decreasing search and evaluation. Pham et. al. (2001) find that, feelings provide judgmental responses that are potentially faster, thus, reducing search and evaluation time. As firms increase the presence of brand recall component of corporate reputation, search and evaluation cost for the customer would decrease because influence of affect oriented features would be stronger in case of affect based evaluation than in cognition based evaluation. Hence:

P5b(iii):The greater the cognition based (affect based) evaluation, the *weaker* the influence of brand recall component of corporate reputation, on customer search and evaluation cost.

Organizational Learning and Consumer Buying Process

Organizational learning is considered as a key resource that leads to CA (Dunphy, Turner & Crawford 1997, p.238) through specific learnings; for example, Vorhies and Morgan (2005) document learning through benchmarking of marketing capabilities as a contributor to CA. Smith, Vasudevan & Tanniru (1996, p.42) argue that organizations should *"continuously"* learn to configure their resources and execute the configuration effectively in order to sustain CA; resource configuration would at some stage require an interaction with the customer in order to translate into CA. This may be inferred from the operational dimensions of organizational

learning (Dunphy, Turner & Crawford 1997, p.238) – technical competencies and management competencies essentially indicate the unnoticed but an important involvement role of customer on the path to CA. For instance the use of IT enabled support services by numerous organizations across product categories has resulted not only in cost effective mode of business for the organization (and CA) but has also simplified the customer's buying process to a great extent and thereby reduced the customer cost across the different stages of buying process – search, evaluation and purchase transaction. Hence, we propose

P6 : Better the organizational learning, lower the search, evaluation and purchase transaction cost and better the utility for the customer, and therefore, the better the CA.

For high involvement products, customers tend to spend greater effort in search and evaluation; Mathwick and Rigdon (2004) document this influence of involvement on search behavior. Alba and Hutchinson (1987, p.414) suggest that the level of expertise will also determine the degree of search – that expert customers may search less. However, in a general sample of customers (where the number of experts will be very few in a product category), it is likely that high levels of product involvement will be associated with higher levels of search and evaluation effort and, therefore, cost. Under conditions of high product involvement, therefore, the influence of organizations learning on search and evaluation cost will be mitigated – customers would continue to search because of their involvement regardless of the level of organizational learning – the level of decrease in search and evaluation that might otherwise follow from high organizational learning will reduce and, therefore:

P6a : The higher the levels of product involvement, the *weaker* the decreasing impact of organizational learning on search, and evaluation cost.

Consumers develop heuristics for frequently purchased products (Ji and Wood 2007) and spend less effort on search and evaluation, suggesting that the impact of organizational learning on customer search and evaluation costs will change; search effort will become lesser. Hence:

P6b*:*The greater the frequency of purchase in a product class, the *stronger* the decreasing impact of organizational learning on search, and evaluation cost.

When decision making is dominated by cognitive efforts, then consumers are more likely to do greater search and evaluation. So far as affect is concerned, the importance of post purchase affective experiences in customer reactions to a product is documented by Cowley (2007) who finds that sometimes even non-diagnostic information influences the consumer reaction; the finding that consumers are not consciously aware of the interfering effect of post-experience affective reactions or of their reliance on post-experience behavior when constructing memory of their product experience would suggest that the effect of affective reactions would be strong (Cowley 2007). Pham et. al. (2001) show that feelings provide judgmental responses that are faster, thus potentially reducing search and evaluation time. This implies that when the decision making is primarily driven by affect, then search and evaluation will decrease and, therefore

P6c*:* The greater the cognitive (affective) component of the purchase decision, the *weaker (stronger)* the decreasing impact of organizational learning on search, and evaluation cost.

Customer Buying Process, External Factors and Competitive Advantage

Economies of Scale and Consumer Buying Process

Economies of scale have often been cited in the literature as an important route for attaining CA (Porter 1985; Scherer & Ross 1990). Scherer & Ross (1990) discuss three categories of economies of scale: *product specific economies*[5], *plant specific economies*[6] and *multi-plant*

[5] Product specific economies, was associated with the volume of any single product that was produced and sold.
[6] Plant specific economies would result from expanding the size of individual processing units present in the manufacturing plant of the firm

economies[7]; all three are variants of the reduction in costs; we, therefore, consider a summary 'economies of scale' variable. It would appear reasonable to assume that firms having *economies of scale*, produce their more output and at a comparative lower cost than competitors that do not possess similar scale economies. Lower costs and greater production quantity would translate into a greater volume reaching customers and possibly wider reach (penetration), enabling customers to find and locate the product easily. Hence, economies of scale of a firm should result in reduced search cost; a corollary would be reduced evaluation costs. Firms that have economies of scale should also be able to sell at lower prices – a clear positioning in the mind of the customer that would likely lead to reduced search and evaluation. Hence, we propose

P7 : The greater the economies of scale, *lower* the customer search and evaluation cost and, therefore, the higher the CA for the firm.

In high involvement purchase instances, the customer is motivated to spend time and/or effort to search and evaluate (Richins and Bloch 1986) regardless of the conditions. Thus, despite the availability arising from economies of scale, the customer would continue to be motivated to have high levels of search and evaluation – thus decreasing the level of negative impact of economies of scale on search cost and evaluation cost. In contrast, in low involvement product situations customers spend less time and resources to accomplish the task (Einhorn & Hogarth 1981). Thus, the impact of increased availability that could result from economies of scale on search and evaluation would be limited compared to the high involvement context. Therefore:

P7a: The greater the level of product involvement of the customer, the *weaker* the influence of economies of scale, of the firm on customer search and evaluation cost.

[7] Multi-plant economies, was associated with a firm's operation of multiple plants in the manufacture of similar array of products to supply distant places.

In frequent purchase product categories, customers would like to optimize time and effort Einhorn and Hogarth (1981). Consumers would have greater experience with, and knowledge of, frequently purchased products (Kalyanaram and Little 1994) and greater experience leads to lower search (Moorthy, Ratchford and Talukdar 1997). Hence, the influence of economies of scale would be more relevant for customers in reducing their search cost for the frequently purchased products and hence, we propose

P7b: The higher the frequency of purchase, the *stronger* the influence of economies of scale, on customer search and evaluation cost.

When the product purchase decision is based primarily on cognition rather than affect, customers would take into account the availability factor of the products, since it would directly influence their search and evaluation cost. Thus, more easily is a product available, the less is the search cost and evaluation cost incurred by the customer. On the other hand, in primarily affect based decisions, Cowley's (2007) finding that consumers are not consciously aware of the interfering effect of post-experience affective reactions or of their reliance on post-experience behavior when constructing memory of their product experience would suggest that the effect of affective reactions would also reduce search and evaluation and hence we propose:

P7c (i):The greater the cognitive (as opposed to affect based) evaluation, the *stronger* the influence of economies of scale, on customer search and evaluation cost.

P7c(ii):The greater the affective component (as opposed to cognitive based) in evaluation, the *stronger* the influence of economies of scale, on customer search and evaluation cost.

Membership of Knowledge Clusters and Consumer Buying Processes

Knowledge clusters have been broadly defined as a common geographical region where companies and associated institutions in a particular field exist (Tallman et al 2003; Tallman et al 2004, p.258) in order to match their commonalities and complementarities. The major

advantages of knowledge clusters are lower input costs, development of common suppliers, specialist labor pools, and spillover of technical know-how, which result in CA for the firm (Tallman et al (2004, p.261). Knowledge transfer (Tallman et al 2004, p.264-268) between firms present in the knowledge clusters, makes firms capable of producing higher quality products which will likely lead to a better customer consumption experience. Hence, we propose

P8: Firms that are members of knowledge clusters will provide *higher* levels of customer consumption experience and, therefore, CA for the firm.

In high involvement products, a customer expects better features and consumption experience, due to the high psychological and/or financial risk involved in the consumption process; the customer uses more information processing (Chingching 2004) and a firm's cluster membership provides more cues in the consumption experience; indeed many high involvement customers develop "relationships" with brands (Fournier 1998). In contrast, for low involvement products, the comparatively lower psychological and/or financial risk involved, may lead customers to expect a lower number of features and be less concerned with the consumption experience. Firms in clusters are likely to produce higher quality products (Tallman et. al. 2004) that offer better consumption experiences to the customer. Therefore:

P8a :The greater the level of product involvement of the customer, the *stronger* the influence of knowledge cluster membership on customer consumption experience.

Regardless of whether the product is bought frequently or not, customer would expect better (or at least certain minimum level of consumption experience irrespective of the situation (though the extent of consumption satisfaction may vary based on situation). Thus, frequency of purchase as a moderating variable is unlikely to have a significant effect on the relationship between membership of knowledge cluster and the consumption experience. Hence, we propose

P8b: The influence of knowledge cluster membership on customer consumption experience is *independent* of the frequency of purchase.

Whether the decision making is primarily cognition based or affect based, it will not impact the consumption experience of the customer – which is a post purchase phenomenon. Hence:

P8c: The influence of knowledge cluster membership on customer consumption experience is independent of whether the purchase decision evaluation is dominantly cognition based or affect based.

Discussion and Implications for Marketers

We argue in this article that, while the intrinsic and external factors that result in CA for the firm have been identified and studied in the literature, the *process* by which they lead to CA has not received sufficient attention. A precondition for CA in a competitive marketplace is that an organization has to acquire and retain customers. Thus, leveraging organizational resources requires organization-customer interaction. This paper highlights how *processes* at the organization customer interface benefit customers at various customer buying stages (i.e. search, evaluation, purchase transaction) or the consumption stage and, hence, result in CA for the firm. This article, therefore, integrates diverse literatures to improve our understanding of the process of formation of CA and attempts to (a) build on the edifice of the resource advantage theory of competition advanced by Hunt and Morgan (1995), (b) answers the call of Barney (1991) and others who have suggested that researchers need to examine the implementation of the RBV to improve our understanding of CA and (c) provides a framework for integrating factors internal and external to a firm that create CA with a firm's interaction with customers .

We argue that the study of CA requires that scholars examine the impact of firm resources on customer purchase and consumption behavior and consistently look forward to differentiate the intermediate stages of customer purchase process in a meaningful manner, so

that the process either reduces the cost or increases the utility of the product / service. We have also examined the impact of firm related resources on a firm's CA in the context of moderating variables that may influence the purchase decision (Exhibit 2) – involvement with products, frequency of purchase and the affect cognition mix in the customer's product evaluation. Thus, we attempt to unfold the process by which CA manifests, in line with Astley and Van de Ven (1983); overall, our propositions suggest that it may well be the firm's "organizing context," rather than only its resources or external factors that lead to CA (Newbert 2007, p. 142).

Therefore, firms need to focus on the purchase and consumption stages of the customer, in order to design their product, provide right interface for the customer to interact with the firm and decide the channel of distribution etc. Analyzing this may help firms to design appropriate customer interfacing *"processes"* with the help of requisite *"capabilities"* so that appropriate marketing actions are designed for different situations on order to gain CA; thus, appropriate marketing actions may be designed and implemented. Overall, the approach suggested in this article points to a greater focus on the process of gaining CA as leading to a better understanding of how and why some firms gain CA and others do not.

Directions for Future Research

Research relating to the process of manifestation of CA has been sparse so far. The propositions advanced in this article suggest a rich agenda for future research. First, we have highlighted how intrinsic factors of the firm may either, lower the cost of search, evaluation and purchase transaction of the customer, or increase the customer consumption utility – that in turn leads to CA. Our hope is that researchers will take cognizance of this link and examine further this relatively unexplored link between RBV and IO economics on one side, and the customer buying

and consumption process on the other, from a theoretical and an empirical standpoint. This research should help to advance theory and practice of how CA actually develops. Incorporating this approach in tests of RBV may increase the robustness of the theory and provide a rationale for why almost half of all empirical studies on RBV do not find support (Newbert 2007).

Second, and following on from the first, future researchers could also look at the differential impact of a particular factor on the different stages of the customer purchase process; for example does human capital impact search cost more or the transaction cost? Third, an empirical study could be conducted, product category-wise and the results could be compared between the market leaders and other players in the market, to highlight the incremental benefit that market leaders gain, by serving customers better through a suitable match between capabilities and actions at the organization customer interface.

Fourth, it would be interesting to conduct a comparative study between public sector firms which are in general not considered to be customer friendly (especially in emerging markets – and recently given the global economic scenario in public sector firms worldwide) and private sector companies, operating in the same product / service category from a customer perspective and assess the differences between them in terms of manifestations of CA. Finally, linking the marketing manifestations in the process of gaining CA (decrease in search, evaluation and transaction costs; improvement in consumption experience in the presence of moderating variables like product involvement, etc) to measures of CA, such as market share or shareholder value, would be fruitful from a theoretical and managerial viewpoint.

References

Akerlof, George A. (1970), "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84 (August), 488 – 500.

Akuahene-Gima, Kwaku (2005), "Resolving the Capability-Rigidity Paradox in New Product Innovation," *Journal of Marketing*, 69(4), 61-83.

Alba, Joseph et. al (1997), "Interactive Home Shopping: Consumer, Retailer, And Manufacturer Incentives To Participate In Electronic Marketplaces," *Journal of Marketing*, 61 (July), 38-53.

Alba, Joseph W. and Wesley J. Hutchinson (1987), "Dimensions Of Consumer Expertise," *Journal of Consumer Research*, 13 (March), 411-454.

Amit, Raphael and Paul J.H. Schoemaker, (1993), "Strategic Assets and Organizational Rent," *Strategic Management Journal*, 14 (January), 33-46.

Astley, Graham W. and Andrew H. Van-de-Ven, (1983), "Central perspectives and debates in organization theory," *Administrative Science Quarterly*, 28 (June), 245 – 273.

Barney, Jay (1991), "Firm Resources And Sustained Competitive Advantage," *Journal of Management*, 17 (March), 99-120

Batra, Rajeev and Olli T. Ahtola (1991), "Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes", *Marketing Letters*, 2 (April), 159 – 170.

Berens, Guido, Cees B. M. van Riel and Gerrit H. van Bruggen (2005), "Corporate Associations and Consumer Product Responses: The Moderating Role of Corporate Brand Dominance," *Journal of Marketing*, 69(3), 35-48.

Berman, Shawn L., Jonathan Down and Charles W.L. Hill (2002), "Tacit Knowledge as A Source Of Competitive Advantage In The National Basketball Association," *Academy of Management Journal*, 45 (February), 13-31.

Bloch, Peter, Daniel Sherrell and Nancy Ridgeway (1986), "Consumer Search: An Extended Framework," *Journal of Consumer Research*, 13 (June), 119-126.

Brown, John Seely and Paul Duguid (2001), "Knowledge and Organization: A Social-Practice Perspective," *Organization Science*, 12 (March / April), 198 – 213.

Byong-Do, Kim and Peter F. Rossi (1994), "Purchase Frequency, Sample Selection, and Price Sensitivity: The Heavy-User Bias.," *Marketing Letters*, 5(1), 57-67.

Challagalla, Goutam, R. Venkatesh and Ajay K. Kohli (2009), "Proactive Post Sales Service: When and Why Does it Pay Off," *Journal of Marketing*, 73 (March) 70-87.

Chaudhuri, Arjun (2000), "A Macro Analysis of the Relationship of Product Involvement and Information Search: The Role of Risk", *Journal of Marketing Theory and Practice*, 8(Winter), 1-15.

Chingching, Chang (2004), "Country of Origin as a Heuristic Cue: The Effects of Message Ambiguity and Product Involvement," *Media Psychology*, 6(2), 169-92.

Clarke, Keith and Russell W. Belk (1979), "The Effects Of Product Involvement And Task Definition On Anticipated Consumer Effort", *Advances in Consumer Research*, 6(1), 313-318.

Corsten, Daniel and Nirmalya Kumar (2005), "Do Suppliers Benefit from Collaborative Relationships with Large Retailers: An Empirical Investigation into Efficient Customer Response Adoption," *Journal of Marketing*, 69(3), 80-94.

Cowley, Elizabeth, (2007), "How Enjoyable Was It? Remembering an Affective Reaction to a Previous Consumption Experience," *Journal of Consumer Research*, 34(December), 494-505.

D'Astous, Alain, Idriss Bensouda and Jean Guindon (1989), "A Re-Examination of Consumer Decision Making for a Repeat Purchase Product: Variations in Product Importance and Purchase Frequency", *Advances in Consumer Research*, 16 (1), 433 – 438.

Darke, Peter R., Amitava Chattopadhyay and Laurence Ashworth (2006), "The Importance and Functional Significance of Affective Cues in Consumer Choice", *Journal of Consumer Research*, 33 (December), 322 – 328.

Day, George S. and Robin Wensley, (1988), "Assessing Advantage: A Framework for Diagnosing Competitive Superiority," *Journal of Marketing*, 52 (April), 1-20.

Day, George S. (1994), "Capabilities of Market Driven Organizations," *Journal of Marketing*, 58

Day, George S. and Prakash Nedungadi (1994), "Managerial Representations of Competitive Advantage," *Journal of Marketing*, 58 (April), 31-44.

De Luca, Luigi M. and Kwaku Atuahene-Gima, (2007), "Market Knowledge Dimensions and Cross-Functional Collaboration: Examining the Different Routes to Product Innovation Performance", *Journal of Marketing*, 71 (January), 95-112.

Dickson, Peter Reid (1992), "Toward a General Theory of Competitive Rationality," *Journal of Marketing*, 56 (January), 69-83.

Dickson, Peter and James Ginter (1987), "Market Segmentation, Product Differentiation and Marketing Strategy," *Journal of Marketing*, 51(2), 1-10.

Dickson, Peter and Alan Sawyer (1990), "The Price Knowledge of Super market Shoppers," *Journal of Marketing*, 54(3), 42-53.

Dowling, Grahame R. (2004), "Corporate Reputations: Should You Compete on Yours?," *California Management Review*, 46 (Spring), 19-36.

Dowling, Grahame R. and Richard Staelin (1994), "A Model of Perceived Risk and Intended Risk Handling Activity", *Journal of Consumer Research*, 21 (June), 119 – 134.

Drolet, Aimee and Jennifer Aaker 2002), "Off-Target? Changing Cognitive-Based Attitudes," *Journal of Consumer Psychology*, 12(1), 59-68.

Dunphy, Dexter, Dennis Turner and Michael Crawford (1997), "Organizational learning as the creation of corporate competencies," *Journal of Management Development*, 16 (4), 232-244.

Dyer, Jeffrey. H. and Harbir Singh (1998), "The Relational View: Cooperative Strategy and Sources Of Interorganizational Advantage," *Academy of Management Review*, 23 (October), 660-679.

Edell, Julie A. and Marian C. Burke, (1987), "The Power of Feelings in Understanding Advertising Effects," *Journal of Consumer Research*, 14 (December), 421-433.

Einhorn, Hillel J. and Robin M. Hogarth (1981), "Behavioral Decision Theory: Processes of Judgment and Choice," *Annual Review of Psychology*, 32, 53-58.

Ferrari, Fernanda M. & Toledo, Jose C. (2004), "Analyzing the Knowledge Management Through the Product Development Process", *Journal of Knowledge Management*, 8(1), 117-129.

Fournier Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (March), 343- 373.

Garbarino, Ellen C. and Julie A. Edell (1997), "Cognitive Effort, Affect and Choice", *Journal of Consumer Research*, 24 (September), 147 – 158.

Gough, Orla (2005), "Independent Financial Advisors – Why They Remain the Strongest Distribution Route for Pension Advisors," *Service Industries Journal*, 25(5), 709-720.

Graeff, T.R. (1996), "Using Promotional Messages to Manage the Effects of Brand and Self-Image on Brand Evaluations", *Journal of Consumer Marketing*, 13 (3), 4-18.

Grossberg, S. and W. E. Gutowski (1994), "Neural Dynamics of Decision Making Under Risk: Affective Balance and Cognitive-Emotional Interactions," *Psychological Review*, 94(3), 300-318.

Hansen, Torben (2005), "Perspectives on Consumer Decision Making: An Integrated Approach", *Journal of Consumer Behavior*, 4 (December), 420 – 437.

Hatch, Nile W. and Jeffrey H. Dyer, (2004), "Human Capital and Learning as A Source Of Sustainable Competitive Advantage," *Strategic Management Journal*, 25 (December), 1155-1178.

Henard, David H. and David M. Szymanski, (2001), "Why Some New Products are More Successful Than Others", *Journal of Marketing Research,* 38 (August), 362 – 375.

Hitt, Michael A. et al. (2001), "Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service Firms: A Resource – Based Perspective", *Academy of Management Journal,* 44 (February), 13 – 28.

Holcomb, Tim R., R. M. Holmes and B. L. Connelly (2009), "Making the Most of What You Have: Managerial Ability as a Source of Value Creation," *Strategic Management Journal*, 30(5), 457-485.

Homburg, Christian, Nicole Koschate and Wayne D. Hoyer, (2006), "The Role of Cognition and Affect in the Formation of Customer Satisfaction: A Dynamic Perspective," *Journal of Marketing*, 70(July), 21-31.

Hoyer, Wayne D. (1984), "An Examination of Consumer Decision Making for a Common Repeat Purchase Product", *Journal of Consumer Research*, 11 (December), 822-829.

Hult, T. and D. Ketchen (2001), "Does Market Orientation Matter: A Test of the Relationship Between Positional Advantage and Performance" *Strategic Management Journal*, 22(9), 899-906.

Hunt, Shelby D. and Robert M. Morgan, (1995), "The Comparative Advantage Theory Of Competition," *Journal of Marketing*, 59 (April), 1-15

Hunt, Shelby D. and R. M. Morgan, (1997), "Resource-advantage theory: A Snake Swallowing its Tail or a General Theory of Competition," *Journal of Marketing*, 61 (October), 74 – 82.

Jap, Sandy D. (2007), "The Impact of Online Reverse Auction Design on Buyer--Supplier Relationships", *Journal of Marketing,* 71 (January), 146-159.

Ji, Mindy and Wendy Wood (2007), "Purchase and Consumption Habits: Not Necessarily What You Intend," *Journal of Consumer Psychology*, 17(4), 261-276.

Kalyanaram, G. and J. D. C. Little (1994), "An Empirical Analysis of Latitude of Price Acceptance in Consumer Package Goods," *Journal of Consumer Research*, 21(December), 408-418.

Kaplan, Leon B.; George J. Szybillo and Jacob Jacoby (1974), "Components of Perceived Risk in Product Purchase: A Cross-Validation", *Journal of Applied Psychology*, 59 (June), 287-291.

Keller, Kevin Lane (1993), "Conceptualizing, Measuring, Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (January), 1-22.

Khanna, T., R. Gulati and N. Nohria(1998), "The Dynamics of Learning Alliances: Competition, Cooperation, and Relative Scope," *Strategic Management Journal*, 19(March), 193-210.

Kirmani, Amna and Margaret C. Campbell (2004), "Goal Seeker and Persuasion Sentry: How Consumer Targets Respond to Interpersonal Marketing Persuasion," *Journal of Consumer Research*, 31 (December), 9–31.

Kohli, Ajay K. & Jaworski, Bernard J. (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (April), 1-18.

Leong, Siew Meng (1993), "Consumer Decision Making for Common, Repeat-Purchase Products: A Dual Replication", *Journal of Consumer Psychology*, 2 (2), 193 – 208.

Lurie, Robert S. and Ajay K. Kohli (2002), "A Smarter Way to Sell Commodities," *Harvard Business Review*, 80(4), 24-26.

Macdonald, Emma K. and Byron M. Sharp, (2000), "Brand Awareness Effects on Consumer Decision Making for a Common, Repeat Purchase Product: A Replication", *Journal of Business Research*, 48 (April), 5 – 15.

MacMillan, Ian C. and Rita Gunther McGrath, (1997), "Discovering New Points of Differentiation," *Harvard Business Review*, 75 (July / August), 133-145.

Mascitelli, Ronald (2000), "From Experience: Harnessing Tacit Knowledge to Achieve Breakthrough Innovation," *Journal of Product Innovation Management*, 17(3), 179-193.

Mathwick, Charla & Rigdon, Edward (2004), "Play, Flow and the Online Search Experience," *Journal of Consumer Research*, 31 (September), 324-332.

Mattila, Anna S. and Jochen Wirtz (2001), "Congruency of Scent and Music as a Driver of In-store Evaluations and Behaviour," *Journal of Retailing*, 77 (Summer), 273-289.

Moorthy, S., B. T. Ratchford, and D. Talukdar (1997), "Consumer Information Search Revisited: Theory and Empirical Analysis," *Journal of Consumer Research*, 23 (March), 263-277.

Mowery, D. C., Oxley, J. E. & Brian S. Silverman (1996), "Strategic Alliances And Interfirm Knowledge Transfer," *Strategic Management Journal*, 17 (Winter Special Issue), 77 - 91.

Nedungadi, Prakash (1990), "Recall and Consumer Consideration Sets: Influencing Choice without Altering Brand Evaluations," *Journal of Consumer Research*, 17 (December), 263 – 276.

Newbert, Scott. L. (2007), "Empirical Research on the Resource Based View of the Firm: Assessment and Suggestions for Future Research," *Strategic Management Journal*, 28(2), 121-46.

Park, Chan-Wook and Byeong-Joon Moon (2003), "The Relationship between Product Involvement and Product Knowledge: Moderating Roles of Product Type and Product Knowledge Type," *Psychology & Marketing*, 20 (11), 977-997.

Penrose, E. T. (1959), *The Theory of the Growth of the Firm*, John Wiley.

Peteraf, Margaret A.(1993), "The Cornerstones of Competitive Advantage: A Resource-Based View," *Strategic Management Journal*, 14 (March), 179-191.

Petty, Richard E., Cacioppo, John T. and Schumann, David (1983), "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 10 (September), 135-146.

Pham, Michel T., J. B. Cohen, J. W. Pracejus, and G. D. Hughes, (2001), "Affect Monitoring and Primacy of Feelings in Judgment," *Journal of Consumer Research*, Vol. 28 Issue 2, p167-188.

Polanyi, M. (1969), *Knowing and Being*, University of Chicago Press.

Porter, Michael E. (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press Publication.

Ray, Gautam, Jay Barney and Waleed Muhanna (2004), "Capabilities, Business Processes and Competitive Advantage: Choosing the Dependent Variable in Empirical Tests of the Resource Based View," *Strategic Management Journal*, 25(1), 23-37.

Richins, Marsha L. & Bloch, Peter H. (1986), "After the New Wears Off: The Temporal Context of Product Involvement," *Journal of Consumer Research*, 13(September), 280-285.

Richins, M., P. H. Bloch and E. Mcquarrie (1992), "How Enduring and Situational Involvement Combine to Create Involvement Responses," *Journal of Consumer Psychology*, 1(2), 143-153.

Rindova, V.P. & Fombrun, C.J. (1999), "Constructing competitive advantage: the role of firm – constituent interactions," *Strategic Management Journal*, 20 (August), 691-710.

Scherer, Frederic M. & Ross, David (1990), *Industrial Market Structure and Economic Performance*, Houghton Mifflin Company

Schwaiger, Manfred (2004), "Components and Parameters of Corporate Reputation – An Empirical Study," *Schmalenbach Business Review*, 56 (January), 46 – 71.

Seybold, Patricia B. (2001), "Get Inside the Lives of Your Customers," *Harvard Business Review*, 79 (May), 80-89.

Shoemaker, Robert W. et al (1977), "Relation of Brand Choice to Purchase Frequency", *Journal of Marketing Research*, 14 (November), 458-468.

Shiv, Baba and Alexander Fedorikhin (1999), "Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision Making," *Journal of Consumer Research*, 28(December), 278-292.

Sirgy, M.J., et al (1991), "Self-Congruence Versus Functional Predictors of Consumer Behaviour", *Journal of the Academy of Marketing Science*, 19(Fall), 363-375.

Sirgy, M.J. (1985), "Using Self-Congruence and Ideal Congruence to Predict Purchase Motivation", *Journal of Business Research*, 13, 195-206.

Slotegraaf, Rebecca, Christine Moorman and J. Jefferey Inman (2003), "The Role of Firm Resources in Returns to Market Deployment," *Journal of Marketing Research*, 40(3), 295-309.

Smith, Ken A., Satish P. Vasudevan, and Mohan R. Tanniru (1996), "Organizational learning and resource-based theory: an integrative model," *Journal of Organizational Change Management*, 9 (6), 41-53.

Spanos, Yiannis and Spyros Lioukas (2001), "An Examination into the Causal Logic of Rent Generation: Contrasting Porter's Strategy Framework with the Resource Based View," *Strategic Management Journal*, 22(10), 907-934.

Srivsatava, Rajendra K., Liam Fahey and Kurt Christensen (2001), "The Resource Based View and Marketing: The Role of Market-Based Assets in Gaining Competitive Advantage.," *Journal of Management*, 27(6), 777-802.

Srivastava, Rajendra K., Tassaduq A. Shervani and Liam Fahey (1999), "Marketing, Business Processes and Shareholder Value: An Organizationally Embedded View of Marketing Activities and the Discipline of Marketing," *Journal of Marketing*, 63(Special issue), 168-179

Stafford, Thomas E. (1996), "Conscious and Unconscious Processing of Priming Cues in Selling Encounters," *Journal of Personal Selling & Sales Management*, 16 (Spring), 37–44.

Stigler, G. (1961), "The Economics of Information," *Journal of Political Economy*, 69 (June), 213-225.

Tallman et al (2003), "From 'Industrial Clusters' to 'Knowledge Clusters': a Model of Knowledge Dissemination and Competitive Advantage in Industrial Agglomerations", *Journal of Economic Geography*, 3 (October), 373 – 388.

Tallman et al (2004), "Knowledge Clusters and Competitive Advantage," *Academy of Management Review*, 29 (April), 258 – 271.

Teece, David J. (1977), "Technology Transfer by Multinational Corporations: The Resource Cost of Transferring Know-how," *Economic Journal*, 87, 42-61.

Tversky, Amos (1972), "Elimination By Aspects: A Theory of Choice," *Psychological Review*, 79 (4), 281-299.

Tyagi, Rajeev K. (2004), "Technological Advances, Transaction Costs, and Consumer Welfare," *Marketing Science*, 23 (Summer), 335-344.

Vakratsas, Demetrios and Tim Ambler (1999), "How Advertising Works: What do We Really Know," *Journal of Marketing*, 63(1), 26-43.

Vorhies, Douglas A. and Neil Morgan (2005), "Benchmarking Marketing Capabilities for Sustainable Competitive Advantage," *Journal of Marketing*, 69(1), 80-94.

Weber, Elke U. and Eric J. Johnson (2009), "Mindful Judgment and Decision Making," *Annual Review of Psychology*, 60(1), 53-85.

Wernerfelt, Birger (1984), "A Resource-Based View of the Firm," *Strategic Management Journal*, 5 (April / June), 171 – 180.

Woodruff, Robert B. (1997), "Customer Value: The Next Source For Competitive Advantage," *Journal of the Academy of Marketing Science*, 25 (Spring), 139-153.

Wright, Patrick M., Gary C. McMahan and Abigail McWilliams (1994), "Human Resources and Sustained Competitive Advantage: A Resource-Based Perspective", *International Journal of Human Resource Management*, 5 (May), 301 – 326.

Wuyts, Stefan, Shantanu Dutta and Stefan Stremersch (2004), "Portfolios of Inter-firm Agreements In Technology-Intensive Markets: Consequences For Innovation And Profitability," *Journal of Marketing*, 68 (April), 88-100.

http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2005/10/apple_works_for.html (accessed on May 9, 2009)

Xue, Fei (2008), "The Moderating Effects of Product Involvement on Situational Brand Choice", *Journal of Consumer Marketing*, 25(2), 85-94.

Zajonc, Robert B. and Hazel Markus (1982), "Affective and Cognitive Factors in Preferences", *Journal of Consumer Research*, 9 (September), 123 – 131.

Zhang, Jie, Fang, Xiao & Liu Sheng, Olivia R. (2007), "Online Consumer Search Depth: Theories and New Findings," *Journal of Management Information Systems*, 23 (Winter), 71-95.

Exhibit 1

	Is there an impact on?			
Resource Based View (or External Factors) Independent Variables	**Search & Evaluation Cost**	**Purchase Transaction Cost**	**Consumption Experience**	**What NEED of customer has been LEVERAGED by the company?**
1. Tacit Knowledge	Yes	No	Yes	Experience of using product / Possession
2. Market Orientation	Yes	Yes	Yes	Reduction of consumer uncertainty
3a. Cooperative Strategy (Physical asset specificity)	No	Yes	No	Convenience / Lack of time
3b. Cooperative Strategy (Human asset specificity)	Yes	Yes	No	Convenience / Low uncertainty / trust
4. Human Capital	Yes	Yes	Yes	Access to information / Lack of knowledge
5a. Corporate Reputation (Cognitive Components)	Yes	No	No	Trust / Belief
5b. Corporate Reputation (Brand Recall)	Yes	No	No	Emotional connect between one's character and that of the firm
6. Organizational learning	Yes	Yes	Yes	Overall experience
7. Economies of Scale	Yes	No	No	Easily available product at relatively cheap cost
8. Knowledge Clusters	No	No	Yes	Better utility products

Exhibit 2

Impact of Moderating Variables on the Relationship between Resource Based View Independent Variables and Competitive Advantage

	Does the Moderating Variable's Make the Relationship between Independent Variable and Dependent Variable Stronger or Weaker		
Internal / External Factor: Independent Variables	**Product Involvement**	**Purchase Frequency**	**Cognition vs. Affect Based Evaluation**
Tacit Knowledge (H1)	Weaker / Stronger	No effect / Stronger	Weaker / Stronger
Market Orientation (H2)	Weaker	Stronger	Stronger
Co-operative Strategy (H3a) (Physical asset specificity)	Weaker	Stronger	Stronger
Co-operative Strategy (H3b) (Human asset specificity)	Weaker	Weaker	Weaker
Human Capital (H4)	Weaker	Stronger	Weaker
Corporate Reputation (H5a) (Cognitive components)	Stronger	Weaker	Stronger
Corporate Reputation (H5b) (Brand Recall)	No effect	Weaker	Weaker
Organizational Learning (H6)	Weaker	Stronger	Weaker
Economies of Scale (H7)	Weaker	Stronger	Stronger
Knowledge Clusters (H8)	Stronger	No effect	No effect