

Hypercompetitive Environments, Coopetition Strategy, and the Role of Complementary Assets in Building Competitive Advantage: Insights From the Resource-Based View

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Abstract

D'Aveni (1994) suggests that the only way firms can survive in a hypercompetitive environment is by relentlessly competing against each other. Yet, we notice that intense competitive conditions lead industry players to not only compete but also cooperate with each other simultaneously. Using the resource-based view (RBV) of the firm as a theoretical lens, we offer arguments for (i) why rival firms adopt coopetition strategy in hypercompetitive environments and (ii) how a firm can benefit from coopetition strategy in order to build competitive advantage under hypercompetition.

Keywords

Competition, Hypercompetition, Strategy, Competitive Advantage, Resource-Based View

INTRODUCTION

The changing nature of competition and its implications for business strategy have been well documented (Ghemawat, 2002; Tsaliki and Tsoulfedis, 1998). When competition in an industry intensifies, evolving from static to dynamic, incumbent firms demonstrate greater involvement in managing the competition process (Barney, 1986). A growing body of literature has characterized one such competitive environment as hypercompetition (D'Aveni, 1994; Gimeno and Woo, 1996; McNamara et al., 2003; Wiggins and Ruefli, 2005). Under hypercompetition, the notion of sustained competitive advantage (SCA) loses its meaning and firms are continuously engaged in competitive moves and counter-moves, as they attempt to create and break temporary advantages in the marketplace. Given the high levels of competitive intensity that prevail in a hypercompetitive environment, it is generally expected that competing firms will be wary of each other and refrain from forging any kind of collaborative partnerships. Yet, paradoxically enough it is seen that under hypercompetition firms engage in a coopetition strategy, that is, simultaneous cooperation and competition with their rivals (Bengtsson and Kock, 2000). For instance, as the Chinese internet giant Alibaba plans its forays into the United States, it is close contact with both Apple and PayPal to forge collaborations for the American market. This despite the fact that Alibaba is a close competitor of these firms in other markets.

Further, there is evidence to suggest that even though adoption of a coopetition strategy is necessary in a hypercompetitive environment, high levels of competitive intensity (i.e., an incumbent firm competing against many rivals as opposed to a chosen few) actually diminish the effectiveness of this strategy (Ritala, 2012). This raises a very interesting research question as to what should an incumbent firm facing hypercompetition look for in a rival that it wants to partner

with based on a coopetition strategy, such that the firm is able to build sustainable competitive advantage (SCA). Utilizing insights from the resource-based view (RBV) of the firm, we develop theoretical arguments in this paper to provide an answer to this question. We suggest that complementary assets available with the rival are critical in ensuring the success of adoption of coopetition strategy under hypercompetition. Further, specialized complementary assets from the partner are more beneficial for building SCA than generic complementary assets.

THE RBV OF THE FIRM

According to the RBV, SCA accrues to the firm from its access to and ownership of heterogeneous, immobile, rare, hard-to-imitate and non-substitutable resource bundles and capabilities (Barney, 1991; Rumelt, 1984; Wernerfelt, 1984). Firm resources are broadly defined to include assets, capabilities, organizational processes, information and knowledge – anything that is owned and controlled by the firm and that allows it to create SCA, that is, implement a value creating strategy that cannot be simultaneously created or its benefits duplicated by the firm's current or potential competitors (Barney, 1991). The link between a firm's resources and SCA is complex. It is not easy to be replicated by its competitors.

Imperfect inimitability and imperfect substitutability of resource bundles possessed by a firm make them non-tradable and lead to SCA (Peteraf, 1993). This happens because of both *ex ante* and *ex post* limits to competition arising out of possessing these resources. On the one hand, *ex ante* limits to competition ensure that the firm that first develops or secures access to the resource bundle does so in the absence of competition from others. Only this firm has the foresight and/or access to certain amenable conditions that make it the possessor of this resource. Yet, acquisition of the resource bundle also acts as a limiting factor on *ex post* competition (or competition faced by the firm after its acquisition of the specific resource bundles), making it difficult for these resources to be weaned away from the firm. As a result, once it has been developed, SCA remains within the firm.

Having developed SCA, the firm can engage in activities that provide it an ability to capture economic rents (Amit and Schoemaker, 1993). Not only do the unique nature of these resources make it difficult for other firms to replicate them, but given that a firm acquires a specific resource bundle as a consequence of its past managerial decisions and action provides it with a unique opportunity set for securing advantage in the marketplace in the future (Lockett and Thompson, 2001). These resource bundles are not static, however. They are shaped and reshaped continually based on the firm's organizational processes, specific asset position, paths available to it and its managerial action (Teece et al., 1997). Similarly, resources need not always be tangible. Intangible resources – both assets and competencies – enable a firm to create competency differentials vis-à-vis its competitors along functional, cultural, positional and regulatory dimensions, thus securing for itself competitive advantage (Hall, 1992, 1993). Knowledge forms the critical element in developing intangible and dynamic capabilities within the firm, given that this is essentially an evolutionary process (Grant, 1996b). Building dynamic capabilities involves experience accumulation, knowledge articulation and codification. The process is shaped by co-evolution of these learning mechanisms (Zollo and Winter, 2002). At the same time, to protect knowledge

from expropriation and imitation, firms use institutional capabilities such as incentive alignment, employment contract, job design, and reorder rewards (Liebeskind, 1996).

The RBV provides an internally focused view on building SCA through heterogeneous firm resources and capabilities by evaluating them for their value, rareness, inimitability and organizational orientation (Barney, 1991). At the same time, subsequent research has expanded the coverage to incorporate the role of context and the wider industry into the RBV (Barney et al., 2001; Wills-Johnson, 2008). There are limits to the extent that SCA can be developed based on firm-level resources and capabilities. The context of the firm plays a significant role in deciding whether SCA will accrue to the firm or will it be invalidated by higher-order capabilities that a competitor secures access to (Collis, 1994). Firm capabilities and industry co-evolve and acquisition of a competitive position by the firm is based not only on the firm's internal resources and capabilities, but also driven by market position and external relationships (Levinthal and Myatt, 1994). Barney and Zajac (1994) note that there appears to be a linkage between competition and competence, in that as firms learn to handle specific competitive challenges, they develop potentially valuable resources and capabilities that, in turn, provide firms with competitive advantage that enable them to face competitive conditions in future. In other words, though the RBV begins with the assumption that SCA is an endogenous characteristic of the firm, it acknowledges the existence of an inextricable link between firm and industry and suggests that competitive advantage and competitive positioning affect each other on a dynamic basis (Fahy, 2000). In their study of comparison of firm versus industry specific factors on SCA, Spanos and Lioukas (2001) note that both effects are important and explain different aspects of firm performance. Thus, firm performance is affected not only by access to resources but also by competitive rivalry. Even industry structure characteristics are partially endogenously determined by firms' specific strategic action. A question that arises is what happens to the notion of SCA when competitive pressures on the firm intensify. In the next section of the paper, we describe the competitive context that emerges around the firm in dynamic or fast changing environments. We focus on a specific type of the environment, viz. under hypercompetition.

HYPERCOMPETITION AND EMERGENCE OF COOPETITION STRATEGY

Competition and Its Manifestations

According to the classical view, competitive behavior on the part of firms arises as a response in order to neutralizing inequalities associated with deployment of capital and labor in the marketplace. It is "... a process characterized by free mobility of capital and labor, and with the concomitant tendential inter-industry equalization of the rate of profit, as well as of supply and demand" (Tsaliki and Tsoulfidis, 1998, p. 189). The classical view of competition is cognizant not only of price and quantity adjustments by the firm to achieve equilibrium but is also concerned with overall uncertainty and disequilibrium in the industry, which must necessarily be set right through competitive actions. Contrasted with this, the neo-classical view adopts a static view of competition, suggesting that firms freely enter and exit from the market. Therefore, the intensity of competition prevailing at any point in time – from monopolistic to perfect competition – depends on the actual number of buyers and sellers active in the market at that time (Tsaliki and Tsoulfidis,

1998). In other words, the foremost issue of concern in the neo-classical view of competition is whether or not there is any persistence of profits above normal, which would indicate that there is a kind of market imperfection and a degree of monopolistic behavior. If competition is depicted in terms of its intensity along a continuum varying from monopoly through oligopoly to perfect competition, then hypercompetition happens to fall between oligopoly and perfect competition (D'Aveni, 1994).

Hypercompetition: Its Characteristics

Characterized by rapid competitive maneuvers in the marketplace, hypercompetition arises when each incumbent firm intensifies the level of competition by continuously generating new competitive advantage and destroying, neutralizing or making obsolete competitors' advantage such that other firms have no option but to retaliate (D'Aveni, 1994). Under conditions of hypercompetition, firms are engaged in redefining the so-called parameters of competition based on cost-quality balance, creation of know-how and moving into new markets or geographical territories as a first mover, and deep pockets of resources available. By competing simultaneously on one or more of these parameters, firms create a series of short-term, discontinuous competitive advantage that always keeps them one step ahead of the competition.

Craig (1996) distinguishes factors leading to hypercompetitive by classifying them as those that produce a "round" of hypercompetition versus those that lead to a broader "state" of hypercompetition. A round of hypercompetition can be initiated by a sudden competitive move on the part of one firm, which automatically leads to a series of retaliatory moves on the part of the others, thus creating tension and discontinuity in the marketplace. On the other hand, a state of hypercompetition is reached when "competitive change is continual and multiple rounds succeed one another with little respite in between" (p. 162). It is brought about by a major shift in technology and innovation in the industry, which turns the rules of the game upside down as it were, and leads to a series of follow-up hypercompetitive shifts on the part of all players in the industry, not just the player that introduced the innovation.

Even though hypercompetition primarily is a firm-induced phenomenon, it is also affected by industry-level parameters. In their study of 352 firms in ten economic sectors between 1977 and 1984, Fombrun and Ginsberg (1990) find that strategic activity in terms of corporate aggressive in changing environments is conditioned by firm-level and sector level forces that both enable change as well as disable it. The extent of hypercompetition in an industry depends on the level of dynamic resourcefulness in the industry, that is, the innate propensity of an industry to create new strategic assets (Thomas, 1996). Unstable market conditions brought about by hypercompetition actually result in firms building their survival strategies based on internal capabilities rather than based on cues received from served markets (Grant, 1996a). At the same time, however, firms may find it increasingly difficult to develop all the required capabilities in-house. One reason why this may be so is because of the bounded rationality of managers, which makes it difficult for them to accurately predict the content and pace of environmental change and prepare the organization to adequately respond to these forces. Chakravarthy (1997) suggests that firms do not really create and/or "manage" turbulence on an ongoing basis; instead they cope with it in the best possible way they can, sometimes through offensive postures vis-à-vis competition and sometimes through exit mechanisms.

Under hypercompetition, as competitive pressures build up in the environment and competitive moves intensify in terms of attributes such as disruption, speed, surprise and dissonance, it becomes increasingly difficult for managers to make sense of the environmental uncertainty and take appropriate strategic action. This is when managers are compelled to look beyond the boundaries of their own organization and look for potential coping mechanisms that may exist or can be created in the wider industry.

Emergence of Coopetition Strategy

Coopetition, a term first coined in the 1990s by Novell CEO Raymond Noorda (Fisher, 1992), denotes *simultaneous* cooperation and competition among rival firms operating in the same industry (Bengtsson and Kock, 2000; Gnyawali et al., 2006). According to Luo (2007), coopetition is a unique firm behavior that makes it distinct from either competition or cooperation: (i) first, coopetition happens when there is simultaneous competition and cooperation between the *same* set of rivals; (ii) second, coopetition requires simultaneous competition and cooperation to occur between rivals during the *same* time periods; and (iii) third, especially for multinational firms coopetition can arise at different levels of the organizational hierarchy (corporate, division or subsidiary), and across geographical contexts. Other authors (e.g., Padula and Dagnino, 2007) have gone as far as to say that interfirm cooperation itself is a truly competitive game, where participating firms engage with each other on the basis of a partially convergent interest set. In order for coopetition to emerge as a successful strategy between rival firms, adoption of this strategy should enable them to (i) increase the extant market size or create new markets; (ii) make do with less resources or use current resources more efficiently; or (iii) protect their extant market shares while capturing a larger share of the market that is not under their control at present (Ritala, 2012).

Ritala (2012) found that coopetition strategy is especially beneficial when market uncertainty is high and helps to improve the adopting firm's market performance as well as innovative performance. Yet, the author also notes that the effect of coopetition strategy diminishes in case conditions of high competitive intensity (i.e., too many firms competing in the industry against each other) prevails. Therefore, in such a scenario it becomes extremely important for a firm considering adoption of coopetition as an effective strategy to carefully identify and assess the specific characteristics it should be looking for in a rival that it wants to partner with. In this regard, the notion of complementary assets from the RBV offers a powerful solution.

COOPETITION STRATEGY, COMPLEMENTARY ASSETS, AND SCA

Need for Coopetition Strategy in Hypercompetitive Environments

Hypercompetitive environments demand of the firm an increased ability to integrate knowledge and constantly combine and recombine its capabilities. However, to do so firms face a practical constraint – a burgeoning knowledge gap or what can be termed as a “knowledge trap”. Engaging in a coopetition strategy with other strong players (competitors) in the industry can be a very effective way for a firm to get out of a knowledge trap, even though it involves easing out some of the competitive intensity that is otherwise required. In other words, by deciding to emphasize collaboration in areas of significance for knowledge gathering with close competitors, firms make a conscious

choice that helps them reduce environmental uncertainty over creating intensely disruptive competitive conditions in the market. Further, under high environmental uncertainty the firm may not be able to plan for and internally develop its valuable, rare, inimitable and non-substitutable (VRIN) resource bundles. In fact, it may even be that some of the unique resources required by the firm are available only outside its organizational boundaries (McEvily and Zaheer, 1999). For example, Powell et al., (1996) suggest that in industries characterized by a complex and rapidly expanding knowledge base and with dispersed nodes of expertise (e.g., biotechnology), the locus of innovation is found within networks of firms rather than in individual firms. Thus, firms tend to go for cooperative mechanisms to build resources in the long-term despite the unfavorable exchange conditions it might bring in the short run (Combs and Ketchen, 1999). Therefore, we suggest:

Proposition 1: In hypercompetitive environments, coopetition strategy provides the firm with a way to build and preserve SCA.

Coopetition Strategy, Complementary Assets, and SCA

Complementary Assets. In order for an interfirm partnership to become a source of competitive advantage, it must bring to the firm relation-specific assets, knowledge sharing routines, complementary resources/capabilities, and effective governance structures. Collectively, these are termed as complementary resources/assets that the firm gains access to, based on the partnership. According to Dyer and Singh (1998), complementary assets or resource endowments are "...distinctive resources of alliance partners that collectively generate greater rents than the sum of those obtained from the individual endowments of each partner" (p. 666–667). The basic argument from RBV is that each partner brings unique resources and capabilities which, when combined, provide partners with an overall resource endowment that is VRIN, leading to competitive advantage for each partner firm.

Generic versus Specialized Complementary Assets. Extending the argument of complementary assets as supporting assets available to the firm to benefit from technological innovation, Teece (1986) suggests that complementary assets are of different types: generic (i.e., not tailored in any way), specialized (i.e., unilaterally dependent on a core technology), or co-specialized (i.e., bilaterally dependent on a core technology). Even though there is a nuanced difference between specialized and co-specialized complementary assets, in line with previous authors (e.g., Lai et al., 2010) we can treat them as a single category, termed specialized complementary assets, and thus distinct from generic complementary assets.

One fundamental difference between generic versus specialized complementary assets is that while both forms of complementary assets bring advantages through coopetitive partnerships, the potential for deriving SCA is higher under specialized complementary assets as opposed to generic complementary assets. In the case of a generic complementary asset, it is easier for the receiving firm to assimilate it with its internal resource endowment and achieve competitive advantage. However, given the generic nature of the asset, it is also easy for the firm's competitors to copy and replicate it or source it from another provider. In contrast, it is harder for the receiving firm to assimilate a specialized complementary asset obtained from a coopetitive partner with the firm's internal resource endowment. However, if the firm is able to do so, this truly serves as a

VRIN resource and is very hard for competitors to replicate, thus providing the firm now owning the specialized complementary asset with SCA. This makes us suggest:

Proposition 2a: In hypercompetitive environments, coopetition strategy enables the firm to build SCA based on complementary assets.

Proposition 2b: In hypercompetitive environments, for a firm adopting coopetition strategy, the impact on SCA is higher when the firm is able to source specialized complementary assets than when it is able to source generic complementary assets.

CONCLUSION

Received wisdom suggests that under hypercompetition rival firms would relentlessly compete against each other and refrain from engaging in coopetition, which is simultaneous cooperation and competition against the same rivals. Further, even if firms do adopt a coopetition strategy, market uncertainties would reduce the positive impact of this strategy on their performance. Such a paradoxical situation raises questions as to (i) why would firms adopt coopetition strategy in hypercompetitive environments and (ii) if they do, how would firms ensure that they continued to achieve performance benefits. Using the RBV as a theoretical lens, we are able to offer an explanation for how firms can still ensure adoption of coopetition strategy allows them to build and maintain SCA. The way is to carefully pick and choose rival firms with whom to forge a coopetition strategy: to go with those rivals that offer to the firm the benefits of complementary assets, especially specialized complementary assets as opposed to generic complementary assets.

By integrating the literature on hypercompetition, coopetition strategy, and the role of complementary assets as explicated in the RBV of the firm, we are able to offer a theoretical rationale that explains the cooperative behavior of rival firms in hypercompetitive environment. In building our theoretical arguments, our paper makes two major contributions. First, we suggest that environmental uncertainty is a critical challenge the firm must deal with in a hypercompetitive environment. A relentlessly shifting environment faced with high competitive intensity impinges upon the firm high levels of environmental uncertainty. Multiple notions of the environment as well as of uncertainty in the sensemaking schema of managers, coupled with volatile signals emanating out of the environment, create conditions that make it difficult for managers to develop coherent strategic action plans that can adequately address the environmental uncertainties. In such a scenario, contrary to predictions from hypercompetition literature the firm's efforts at embracing coopetition strategy actually can actually turn out to be beneficial. By thus elaborating our arguments on simultaneous cooperative and competitive behavior, we support similar notions that have emerged in recent literature on firm behavior in fast-changing environments, for example, coopetition (e.g., Bengtsson and Kock, 2000) or co-evolution (e.g., Hinterhuber et al., 1998).

Second, utilizing the literature on complementary assets as an extension of the overall RBV framework, we are able to argue that for the firm to realize the potential of coopetition strategy, it needs to carefully consider the resource types it plans to acquire from a rival and bundle with its in-house resource endowment. The focus has to be on acquiring complementary assets. While all forms of complementary assets are useful, the benefit toward building and maintaining

SCA is higher if the complementary asset acquired happens to be specialized as opposed to being generic. In doing so, we are also able to expand the discussion in extant literature on the role of complementary assets to provide benefits for the firm. So far, scholars have primarily examined the impact acquisition of complementary assets have on technological innovation within the firm (Chiu et al., 2008; Lai et al., 2010; Lai et al., 2010; Rothaermel, 2001) and development of new technologies (Garud, 1984). Our paper broadens this discussion to focus on the general impact of complementary assets, and the differential impact of specialized versus generic complementary assets in particular, on building and maintaining SCA in hypercompetitive environments.

Our research has several implications for managers. We provide a theoretical explanation for managerial action noticed in hypercompetitive environments: firms engaging in simultaneous cooperation and competition with the same rivals, and at the same time. We are also able to provide managerial recommendations on ways of building and maintaining SCA through coopetition strategy with a focus on acquiring complementary assets from rivals, especially specialized complementary assets that can be assimilated with the firm's own resource endowments. Thus, we are able to suggest a viable route for managers operating in hypercompetitive environments to strive for preserving SCA – an untenable proposition otherwise, when operating under hypercompetition. In doing so, we reconcile a paradoxical situation emerging out of hypercompetition as regards the firm's long-term performance and SCA, by suggesting that such a competitive environment can actually unleash the creative force of managers to identify innovative ways of assimilating carefully chosen complementary assets from rivals in an effort to build and maintain competitive advantage.

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