

Hypercompetition: A Review and Agenda for Future Research

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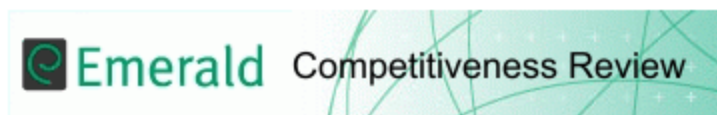
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HYPERCOMPETITION: A REVIEW AND AGENDA FOR FUTURE RESEARCH

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HYPERCOMPETITION: A REVIEW AND AGENDA FOR FUTURE RESEARCH

ABSTRACT

Purpose: The aim of the study is to review and understand the dimensionality of hypercompetition, factors causing a hypercompetitive environment, and the consequences of hypercompetition on markets. Thereby, the purpose of the study is to cover the main contributors in the research field of hypercompetition and explore their findings and different views on hypercompetition.

Design/methodology/approach: Systematically review 131 conceptual and empirical studies published or presented at a conference in the last 25 years, with the focus on the definitions, causes, and consequences (or presumed effects) of hypercompetition. In the paper, I follow the well-known SLR method by Tranfield *et al.* (2003).

Findings: The contribution of the study is to advance the knowledge of researchers and managers, in such way that it becomes easier for them to select relevant variables to measure hypercompetition and identify strategies for gaining temporary competitive advantages in hypercompetitive environments. The construct of hypercompetition required a consolidation of commonalities in the definitions and characteristics used by scholars, to ensure that proper assumptions and variables are being used to measure hypercompetition in future research. Several ways to measure the effects of hypercompetition on firms, industries and individuals have been proposed, but the field still lacks of a clear definition on how to directly measure the construct.

Practical implications: In this paper, I highlight three managerial implications of hypercompetition: (1) action-based strategy, (2) the determinants of hypercompetition, and (3) the importance for managers of accurately establishing their firm's competitive situation.

Originality: Previous reviews in the area have either focused on specific components or effects of hypercompetition. The present study collectively takes into consideration the definitions, causes, and consequences of hypercompetition on firms, industries and individuals. The contribution of the paper is to indicate future opportunities and challenges within research on hypercompetition.

Keywords: hypercompetition, temporary competitive advantage, disequilibrium, competitive aggressiveness

1. INTRODUCTION

Approximately three decades ago, D’Aveni (1994) argued that a new revolution of competitive strategies was brewing, as managers and strategy researchers were discovering that the existing models of strategy were nearly obsolete in a new fast-paced competition. D’Aveni (1994) defines the new type of competition as “hypercompetition”, and describes it as an environment of “*intense change, in which flexible, aggressive, innovative competitors move into markets easily and rapidly, eroding the advantages of the large and established player*” (D’Aveni, 1994: p. 6), where no competitive advantage is sustainable. The hypercompetition thesis has led to a steady stream of studies of this form of competition, and inspired a related stream of literature on temporary competitive advantage (Dagnino *et al.*, 2020). While some have pointed to hypercompetition as the “new normal” (Thomas, 1996; Thomas and D’Aveni, 2009; Wiggins and Ruefli, 2005), others have questioned its very existence (Castrogiovanni, 2002; Lindskov *et al.*, 2020; McNamara *et al.*, 2003; Vaaler and McNamara, 2010). This review surveys a quarter century of literature on hypercompetition and provides a comprehensive overview of the causes and effects of hypercompetition, of the ways it has been measured, and of what gaps remain to be explored.

Over the years, the theory of hypercompetition has attracted increasing attention within management literature, generating different streams of research on hypercompetition. The majority of these studies investigate the effects of hypercompetition at different levels of analysis, whereas others focus more on how to respond to such intense and volatile environmental conditions. Along with these studies, scholars have provided a variety of views and understandings, generating several definitions and characteristics of a hypercompetitive environment. Despite the interest from management scholars, the literature has provided a mixed bag of theoretical and methodological issues, such as the

inconsistency in the empirical findings related to the existence (Thomas, 1996; Thomas and D'Aveni, 2009; Wiggins and Ruefli, 2005) or nonexistence (Castrogiovanni, 2002; Lindskov *et al.*, 2020; McNamara, Vaaler and Devers, 2003; Vaaler and McNamara, 2010) of hypercompetition. This leaves several questions unanswered for future research to explore.

Since the 1990s, several literature reviews on hypercompetition have been published or presented at a conference (Dagnino *et al.*, 2020; Saadatmand *et al.*, 2018; Turgay and Emeagwali, 2012). Most recently, the study by Dagnino *et al.* (2020) reviews temporary competitive advantages. Although, Dagnino *et al.* (2020) highlights a dimension of hypercompetition, they do not explicitly review the phenomenon of hypercompetition. In sum, while the hypercompetition research field is expanding quite quickly, scholars have not yet had access to a review that is both comprehensive, analytical, and forward-looking. Therefore, a systematic review of hypercompetition literature is increasingly important for several reasons: (1) a timely synthesis of the literature will contribute to the basis of theory building in the area of hypercompetition; (2) an identification of the components of hypercompetition may help scholars in selecting variables for measuring whether markets have become hypercompetitive; and (3) the causes and effects identified and the research framework proposed in this study can be adopted and further developed by future studies.

This review is based on 131 empirical and theoretical studies following the systematic literature review approach proposed by Tranfield *et al.* (2003). I systematically gather, analyse and synthesise hypercompetition contributions to the management literature in a way that facilitates further research and supports management practice. First, a brief review of the development of the research on hypercompetition in order to identify the issues that remain to be resolved. Second, the growing literature on this topic has provided several definitions and characteristics of the construct. Such

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proliferation of the definitions of hypercompetition shows the dynamism generated on the topic from different research fields and disciplines, but it also produces confusion and may hinder effective progress within this research area. Therefore, this construct requires a consolidation of commonalities in the definitions and characteristics used by scholars, to ensure that proper assumptions and variables are being used in future research. Third, the rapid growth of the literature on hypercompetition, and the diversity in the causes and effects of such an environment, have led to a body of research pointing in different directions. For instance, scholars argue that hypercompetition affects different variables at both the industry-, firm-, individual-, and team-level. Accordingly, the literature needs a review and clarifications of the causes and effects of hypercompetition for guidance for future research. This review offers a revised framework of hypercompetition, creating a structure of its causes, dimensions, and presumed effects.

2. REVIEW APPROACH

In this study, I employ a systematic literature review (SLR) approach following studies such as Kraus *et al.* (2020) and Transfield *et al.* (2003). Thus, an approach that follows three main steps (1) planning, (2) conducting, and (3) reporting and dissemination. This approach differs from the traditional and narrative literature review by being more systematic and explicit in the selection of literature. The goal is to identify a representative sample of literature on the causes, dimensions and presumed consequences of hypercompetition. This method involved several choices, which are outlined below, and shown in Figure 1:

Figure 1 about here

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4 In the first step, I identified the need for an SLR on the topic, explained the motivation, and
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6 developed a review protocol. In the second step, I first made a broad search in two widely used
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8 academic databases *Scopus* and *Web of Science (WoS)* for literature explicitly using the term
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10 “hypercompetition” in the title, abstract, or keywords. This was to ensure that the review had a wide
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12 spectrum of potentially relevant literature. In order to account for terminological heterogeneity in the
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14 literature, the search was expanded to “hypercompetitive” and “hypercompetitiveness” with and
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16 without a hyphen. I relied on these terms to limit the search to studies explicitly addressing
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18 hypercompetition and using the terms in their title, abstract or keywords. Rather than providing an
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20 overview and synthesis of studies of related concepts. Thus, this search returned 1,095 results. Then, to
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22 ensure that the search was not too broad and still focused on a relevant set of research fields, I limited
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24 the categories to “business” and “management”. The search was also restricted to the document types:
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26 “articles”, “proceeding paper”, “review”, “editorial material” and “early access”. This resulted in 160
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28 records from the *WoS* and 220 records from *Scopus* written in English. After removing duplicates, 275
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30 records were left for title and abstract analysis. Then, I thoroughly screened the titles and abstracts of
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32 the 275 articles to determine whether each article explicitly reported the causes, dimensions or
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34 presumed effects of hypercompetition, which resulted in exclusion of 144 articles from further analysis.
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36 Specifically, I excluded articles that mentioned the term “hypercompetition” (often in the abstract), but
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38 failed to explain or use the concept (e.g. using the term only as a theoretical hook). I thus identified 131
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40 articles, which form the basis of this SLR. In the Appendix, Table 1A lists the articles included in the
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In the third and final step, I synthesised the studies by first running an analysis using a simple set of categories (e.g. journal title, year of publication, findings), and then a thematic analysis of the field using three categories (1) definitions, (2) causes, (3) effects of hypercompetition.

3. RESEARCH ON HYPERCOMPETITION: EMERGENCE OF THE FIELD

Over the years, scholars have argued that strong exogenous forces (e.g. the globalisation and technological revolution) have changed and reshaped the competitive landscape worldwide (e.g. D’Aveni, 1994; Lahiri *et al.*, 2008). As a result of these exogenous changes, the environmental conditions are becoming more uncertain, dynamic and complex. The well-known stable equilibrium that defined competition in the 20th century is being rapidly transformed into a constant state of disequilibrium (i.e. hypercompetition) (D’Aveni, 1994).

Although, the roots of the concept of hypercompetition go far back to the traditional theories of competition (i.e. neoclassic economy, industrial economy and industrial organisation), D’Aveni (1994) stresses a more dynamic view. D’Aveni (1994) argues that strategic concepts such as “*sustainable advantage, barriers to entry, long-range planning, the use of financial goals to control strategy implementation, and SWOT analysis*” (D’Aveni, 1994: p. 12) all fall apart when we start to consider the dynamics of competition. D’Aveni (1994) continues “*stable equilibria are impossible because constantly shifting technology, global competitors, and strategic positioning will result in frequent or almost constant disequilibrium in which new entrants and established competitors disrupt the balance of power and gain temporary superiority*” (D’Aveni, 1994: p. 18). The more traditional approaches to strategy focus on the creation of competitive advantage, while D’Aveni (1994) takes an alternative view and argues that strategies should also incorporate the creative destruction of competitors’ advantages. This draws a link back to Schumpeter (1934, 1939), who viewed superior economic

performance as achievable through “*successful innovation in capitalist society and is temporary by nature*” (Schumpeter, 1939: p. 105). In this theory, Schumpeter (1934, 1939) argues that firms can, through innovation, gain superior economic performance, depending on the pattern of creative accumulation and creative destruction (Baaij *et al.*, 2004; Breschi *et al.*, 2000). Similarly, D’Aveni (1994) suggests that firms make a series of temporary advantages through, for example, product innovations or technological advancements. However, these advantages last only until competitors have either duplicated or outmanoeuvred them. Therefore, firms must constantly develop new initiatives. In the traditional and stable equilibrium, competitive advantage is also eroded, but over longer time, resulting in a longer product life cycle (D’Aveni, 1994). Thus, in a hypercompetitive market these cycles are more compressed, and therefore sustaining advantage has become increasingly difficult.

Strategy scholars have typically assumed that sustainable competitive advantages exists (e.g. Baaij *et al.*, 2004; Penrose, 1959; Porter, 1980, 1985). Considerable effort has been dedicated to empirically demonstrate the existence of superior economic performance and sustainable advantages. However, around the 1990s scholars started to question whether competitive advantages were sustainable (Ilinitich *et al.*, 1996). Scholars proposed ‘early warning signals’ of dynamic environments with similar characteristics to hypercompetition, such as “hyperturbulence” and “high-velocity” environments (Eisenhardt and Bourgeois, 1988; Zohar and Morgan, 1996). Although some previous references to the concept of hypercompetition may be found in the literature, it is after the publication of D’Aveni’s (1994) seminal book that the construct generated an increasing flow of studies on the phenomenon, as shown in Figure 2.

Figure 2 about here

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Early contributions came from the special issue in *Organization Science*, where the editors challenged management scholars to answer the question, “*where are the theories for the ‘new’ organisational forms?*” (Ilinitch *et al.*, 1996: p. 211). In this issue, scholars seem to agree that the nature of competition has shifted towards an environment with increasing rivalry, affecting the sustainability of profit levels (e.g. Thomas, 1996; Young *et al.*, 1996). Collectively, these articles provided with different models, frameworks, methods, strategies, and organisational structures addressing the difference between hypercompetition and the traditional type of competition. The issue increased interest among strategy scholars and created a debate as to whether industries are becoming hypercompetitive and advantages less sustainable. Some scholars provided empirical evidence of a shift in the nature of competition towards hypercompetition (e.g. Thomas and D’Aveni, 2009), whereas others found no evidence of a decrease in profit levels (e.g. McNamara *et al.*, 2003) or intra-industry differences in the level of competition (Lindskov *et al.*, 2020; Vaaler and McNamara, 2010).

Later on, *Strategic Management Journal* published a special issue in 2010, focusing on the antecedents, consequences and management of temporary competitive advantages. In this issue, scholars provided a variety of studies on the competitive actions of firms. Some measured the links between competitive advantage and rivalry, whereas others investigated the possible effects of hypercompetition on a firm’s resources and capabilities (e.g. Hermelo and Vassolo, 2010; Lee *et al.* , 2010; Sirmon *et al.*, 2010). Since then, the research on hypercompetition has provided a large array of both conceptual, theoretical and empirical studies. As depicted in Figure 2, the studies on hypercompetition have developed from focusing on competitive advantage, economic growth and

competitive strategy to now investigating dynamic capabilities and technological innovations in hypercompetitive environments.

Research on hypercompetition has explored a wide array of empirical contexts ranging from technology-intensive, manufacturing, automobile, hotel industry, and hairstyling industries (e.g. Alcalde-Giraudó *et al.*, 2020; Hoisl *et al.*, 2017; Lee *et al.*, 2010; Mattila, 2001; Thomas and D'Aveni, 2009; Vaaler and McNamara, 2010). Technology-intensive industries are often mentioned as a canonical example of a hypercompetitive market (e.g. Lee *et al.*, 2010; McNamara *et al.*, 2003; Thomas and D'Aveni, 2009), but it is not the most empirically studied industry. A sector that has been examined intensively and empirically by scholars is the manufacturing sector (e.g. McNamara *et al.*, 2003; Thomas, 1996; Thomas and D'Aveni, 2009). Notably, the majority of the studies on hypercompetition use the context of the United States. Only a few of the studies have provided other contexts such as Denmark, Norway, and Latin America (Hanssen-Bauer and Snow, 1996; Hermelo and Vassolo, 2010; Lindskov *et al.*, 2020). In general, the theory of hypercompetition does not specify how to determine whether a firm is operating in a hypercompetitive market. Therefore, scholars use different methodologies to measure different variables to explain hypercompetition. In turn, the lack of construct clarity makes operationalisation and measurement difficult. Additionally, the hypercompetition literature does not possess a clear research model laying out the variables causing and driving hypercompetition, and affecting industry environments. These different characteristics and lack of clarity may have hindered the cumulativeness of research effort to investigate the phenomenon of hypercompetition.

4. HYPERCOMPETITION: DEFINITION AND SCOPE

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Since the seminal work of D’Aveni (1994), a lot has been said about the phenomenon. Scholars have focused on different components or dimensions in their definition of hypercompetition, such as market instability (e.g. Castrogiovanni, 2002; McNamara *et al.*, 2003), disequilibrium (e.g. D’Aveni, 1999; Volberda, 1996), the frequency of competitive attacks (Hermelo and Vassolo, 2010) and temporary competitive advantages (e.g. Bogner and Barr, 2000; Harvey *et al.*, 2000). Although definitions differ across studies, as shown in Table A2 in the Appendix, the majority of them are close to or consistent with D’Aveni’s (1994) definition of hypercompetition. Altogether, the definitions points to several dimensions of a hypercompetitive environment that highlight the major theoretical underpinnings (competitive advantage, the state of equilibrium and rivalry). The main definitions are shown in Table 1 (if you are interested in all of the definitions of the concept see Appendix A2).

Table 1 about here

Temporary advantage. The most frequently identified dimension is temporary competitive advantage (for a recent review of the literature on temporary advantages see Dagnino *et al.* (2020)). In the theory of hypercompetition, D’Aveni (1994) questions the well-known view of sustainable competitive advantages and argues that “*today’s strengths become tomorrow’s weaknesses so quickly that sustaining advantages is nearly impossible*” (1994: p. 6), as the environment constantly changes. D’Aveni (1994) continues: “*No organisation can build a competitive advantage that is sustainable*” (D’Aveni, 1994: p. 6), as every advantage will be eroded by competitors over time. This means a firm performing poorly today, may be the star of the industry tomorrow, and a leading firm may erode its market share if it fails to keep moving forward. The ‘old’ advantage is no guarantee of future success, not even for the largest and most successful firm (D’Aveni, 1994; Harvey *et al.*, 2000; Liao *et al.*, 2009). The solution scholars have provided to this problem is that firms need to disrupt their *status quo*

and stay one step ahead of the competition by creating a series of temporary advantages, rather than relying on an advantage (D'Aveni, 1994; Dagnino *et al.*, 2020; Liao *et al.*, 2009; Veliyath and Fitzgerald, 2000). This means firms need to design and implement a series of, for example, product innovations (Volberda, 1996), dynamic capabilities (Liao *et al.*, 2009; Volberda, 1996) or process innovations (Ali *et al.*, 2020; D'Aveni, 1994; Harvey and Novicevic, 2001; Lahiri *et al.*, 2008; Richardson, 1996). Scholars measure these temporary advantages by using a function of time or “*the pace of erosion, or regression to the mean, of abnormal returns*” (Pacheco-De-Almeida, 2010: p. 1502). However, the empirical evidence of decreasing sustainability in competitive advantages over time are mixed (Lindskov *et al.*, 2020; McNamara *et al.*, 2003; Vaaler and McNamara, 2010; Wiggins and Ruefli, 2005).

Disequilibrium. The state of equilibrium in this new hypercompetition is said by scholars to differ from the traditional and stable equilibria (D'Aveni, 1999; Palmer *et al.*, 2001), but not saying that the environment is something really ‘new’ (Fiegenbaum *et al.*, 2001; Parayre and Hurry, 2001). Scholars link the equilibrium to different economic theories. Some argue that the conditions are similar to what Schumpeter (1934, 1939) defines as ‘creative destructions’ (Craig, 1996; D'Aveni, 1994), whereas others argue that the environment should be seen as a complex combination of perfect competition and oligopoly (e.g. Fiegenbaum *et al.*, 2001). However, scholars seem to agree that the environment includes a high level of turbulence and frequent competence-destroying changes, creating a state of disequilibrium (e.g. D'Aveni, 1999; D'Aveni *et al.*, 2010; Fiegenbaum *et al.*, 2001). This means the ‘hyper’-market’s capacity to meet demand is limited, as it constantly changes, making it unbalanced (Burke and van Stel, 2014), which can be reflected in aspects such as volatility in business

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performance, rapidly changing customer preferences and constantly eroded market share (e.g. Chen *et al.*, 2010; D’Aveni *et al.*, 2010; Parayre and Hurry, 2001).

Aggressive Competitors. In hypercompetitive markets, the movement of competitors is rapid, intense, unexpected, and unconventional, where their aim is to constantly develop advantages and erode rivals (D’Aveni, 1994; Hoisl *et al.*, 2017; Ruiz *et al.*, 2017). Consistent with the industrial organisation literature, the theory of hypercompetition suggests that rivalry should be framed as the sequence of moves from competitors within the industry (Young *et al.*, 1996). This means when competitors act highly aggressively (i.e. high number of competitive actions), the rivalry within the industry is high. As shown by Young *et al.* (1996), increasing rivalry affects firm performance negatively. More specifically, in ‘hyper’-markets, firms are not independent but affected by their competitors’ actions and are prone to react or they may not survive.

5. HYPERCOMPETITION: CAUSES AND CONSEQUENCES

Several strong exogenous forces have been cited as contributing causes of hypercompetition. This includes forces such as technological innovations, globalisation, aggressive competitors, institutional changes, deregulations, hedge funds, the rise of China and other emerging regions, demographical trends and economic changes, but what are the main changes contributing to a hypercompetitive environment (e.g. D’Aveni, 1994; D’Aveni *et al.*, 2010; Hermelo and Vassolo, 2010; Ilinitich *et al.*, 1996; Lindskov *et al.*, 2020)? Similarly, scholars have mentioned a variety of consequences (or presumed effects) at both the industry-, firm-, and individual- and team-level. These causes and consequences are illustrated in Figure 3. The components of hypercompetition discussed in the previous section are equally found in the figure.

Figure 3 about here

5.1. Causes of Hypercompetition

Early contributions to the hypercompetition field assume that the causes of hypercompetition are new customer preferences, technological innovations and globalisation (D'Aveni, 1994). Since then, these causes have been extended. Now, scholars add the demographical and social trends, economic changes, and institutional changes to the list of causes contributing to a hypercompetitive environment (Castrogiovanni, 2002; Lahiri *et al.*, 2008; McNamara *et al.*, 2003). To guide future research, this section reviews the past research describing the causes of hypercompetition. This analysis can be viewed in Table 2.

Table 2 about here

Globalisation. As world trade increases, technology and knowledge transfer becomes quicker and the level of competition and dynamism increases (e.g. Hanssen-Bauer and Snow, 1996; Uhl-Bien *et al.*, 2007). Over time, globalisation has affected the economy, business environment and society in different ways such as reducing entry barriers. Now, firms can more easily penetrate new markets and relocate their production activities abroad (e.g. Akhter, 2003; Bayraktar and Ndubisi, 2014; Chen *et al.*, 2010; Schneider, 2002). Hypercompetition is said to be the corollary of the globalisation process (Hanssen-Bauer and Snow, 1996; Lahiri *et al.*, 2008; Veliyath and Fitzgerald, 2000; Walumbwa *et al.*, 2014), as it increases corporate mobility between regions, reduces the importance of localisation advantages, and eliminates a potential source of sustainable competitive advantage. The globalisation process represents a cause of hypercompetition, because it opens up the market (i.e. increases rivalry)

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and competitive actions within an industry. Therefore, as globalisation proceeds, so too will hypercompetition.

Technological (r)evolution. One of the most striking manifestations of a hypercompetitive environment is the rapid and ongoing development of technological innovations by both entrepreneurial and incumbent firms to exploit new business opportunities (Christensen and Knudsen, 2008). This accelerating pace of technological innovations may force some firms to disrupt their current business model or invest more in R&D. For example, the development of the internet created a new market for business and increased the level of competition within not only the broad technology sector, but also in other sectors (i.e. the suppliers market). This created an opportunity for firms to allow orders from abroad through online channels. As a result of the rapid development of new technologies, the technology life cycle has become shorter and competitors faster, thereby increasing the pace of product innovations and competitive attacks (Andreovski and Ferrier, 2019; Drejer, 2002).

Demographic and socio-economic changes. The economic up- and down-streams such as the global financial crisis, rising income levels, economic prosperity and the recent COVID-19 outbreak have affected the markets and competition worldwide, in some cases pushing industries towards a state of disequilibrium (e.g. Fourné *et al.*, 2014; Hermelo and Vassolo, 2010; Lindskov *et al.*, 2020; Ruiz *et al.*, 2017). Globalisation has made markets across regions more influential on each other, therefore the economic growth in one industry may also generate growth in another industry (e.g. the supplier industry) (Chattopadhyay and Bhawsar, 2017; Nath and Newell, 1998).

Similar to economic changes, demographic and social trends also affect the competitive environment. Consider, for instance, the behavioural changes between generations. A new generation's taste in products or services may distinguish it from the older generation, enhancing an opening up of a

new market (Ilinitich *et al.*, 1996). This was the case for the Japanese beer industry that started to emerge in the 1980s, as the new generation had a different taste for beers (Craig, 1996). This change forced firms to produce new types of beer, and opened up the market for foreign competitors and intensified firm rivalry.

Institutional context and regulations. The different institutional environments (i.e. regulations, capital markets and governance) of regions may help explain the variations in the level of competition between regions (Ruiz *et al.*, 2017; Schneider, 2002). As Hermelo and Vassolo (2010: p. 1457) argue “*a diverse institutional context will generate different competitive conditions and also create dissimilar pressures on firms’ competitive advantages*”, indicating that institutional changes may affect industries differently, depending on the region’s development (i.e. developed and developing regions). In general, institutional changes can have various effects on the competitive environment. Consider, for example, lower transaction costs, which may decrease entry barriers, enhance competitive movements and decrease the ability to gain long-term superior economic performance, whereas enhanced intellectual property rights may encourage local investment in technology and favour knowledge and technology transfers from foreign firms to local firms (Chattopadhyay and Bhawsar, 2017; Drejer, 2002; Hermelo and Vassolo, 2010; Ruiz *et al.*, 2017). Therefore, institutional changes can push industries towards a state of hypercompetition. This was the case in the financial sector in Thailand, where regional deregulation and liberalisation supported the marketing and sales activities within the sector, but also increased the level of competition and frequency of competitive attacks, resulting in decreasing sustainability of advantages (Ngamkroeckjoti and Johri, 2003).

Customer preferences. After globalisation, customers have become more sophisticated and demanding. They have more choice, which affects their general purchase behaviour, changing their bargaining

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power and bringing competitive pressure to a higher level (Akhter, 2003). Today, customers can use technologies to compare prices and quality of products, which may affect brand loyalty. Consequently, customers can easily switch from one provider to another when unsatisfied with the product, service or even delivery. In turn, that may drive customers to expect a higher quality, better service and faster delivery at a cheaper price (Akhter, 2003; Bayraktar and Ndubisi, 2014; Lahiri *et al.*, 2008; McNamara *et al.*, 2003; Thomas, 1996). This relatively high demand uncertainty makes it difficult for firms to gain superior economic performance over time and puts pressure on the competition between firms.

In the research on hypercompetition, scholars propose different factors causing hypercompetition. Considering all the factors, the underlying cause of hypercompetition is the actions of stakeholders. Without the actions of stakeholders, hypercompetition would not be present.

5.2.Consequences of Hypercompetition

The rich and growing literature on hypercompetition shows several implications stemming from the intense environment. Some of these studies show that hypercompetition affects both industries (e.g. dynamism, munificence and complexity), firms (e.g. firm performance, mortality, and business models), and individuals and teams (e.g. decision-making and cognitive framework). The following sections describe the effects and implications corresponding to hypercompetition. The analysis of the presumed effects can be viewed in Table 3.

Table 3 about here

5.2.1. Industry-level

Scholars argue that the environmental tendencies of a hypercompetitive market affects industry structure, such as increasing dynamism, decreasing munificence and increasing industry complexity.

Munificence. As the barriers to entry start to decline industry density and rivalry increases, leading to decreasing munificence. That means the environmental capacity tends to be exploited and resources become scarce (Castrogiovanni, 2002; Lindskov *et al.*, 2020; McNamara *et al.*, 2003; Vaaler and McNamara, 2010). In hypercompetitive environments, firms will exploit the available resources until the resource usage of the population reaches its environmental capacity limit. Consequently, industry munificence starts to decline as the capacity approaches its limit. If an industry only has a few unexploited resources available, it becomes difficult for firms to identify and utilise those resources, thus decreasing the ability to support population growth (Castrogiovanni, 2002; Lindskov *et al.*, 2020; McNamara *et al.*, 2003; Vaaler and McNamara, 2010). Then, firms start to “struggle” for their existence in these ‘hyper’-markets, creating a competitive pressure.

Dynamism. The markets are becoming unstable, due to short product life cycles, new technological innovations, frequent entries by unexpected firms, repositioned incumbent firms, and radical changes to the market boundaries such as diverse industries that starts merging. In other words, in hypercompetitive industries the level of uncertainty, dynamism, heterogeneity among industry members and hostility are increasing (Aupperle, 1996; D’Aveni, 1994). Competition has shifted towards an arena where timing and know-how are important for eroding an advantage (Richardson, 1996). The rate of change and innovation within hypercompetitive markets, as well as the level of uncertainty and unpredictability of competitors’ actions and customers’ demands are increasing industry dynamism. This dynamism may be reflected in the frequency of changes in products,

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processes and organisational structures (Castrogiovanni, 2002; Dess and Beard, 1984; Lindskov *et al.*, 2020; McNamara *et al.*, 2003; Vaaler and McNamara, 2010).

Complexity. Firms may use different strategies in their pursuit of growth and competitive advantage, which may lead to greater heterogeneity among industry members (Castrogiovanni, 2002; Thomas, 1996; Thomas and D’Aveni, 2009). This industry heterogeneity may increase industry complexity. This can be reflected in many ways such as the variety of products, services, distribution channels, and stakeholders within an industry. However, the heterogeneity may differ from industry to industry, as the need for processes, products and services may vary. For instance, a bakery producing bread is less complex than an IT firm that designs and manufactures microchips. However, scholars argue that hypercompetitive industries in general have a high level of complexity that may require specific structures, processes and infrastructures (D’Aveni, 1999; D’Aveni *et al.*, 2010).

5.2.2. Firm-level

Over the years, several scholars (e.g. Bettis and Hitt, 1995; D’Aveni, 1994) have argued that the competitive environment is evolving and becoming hypercompetitive, requiring rapid product innovations, new business models, new strategic alliances, and more aggressive behaviour in a firm’s pursuit of growth and survival.

Business performance. The conditions in a hypercompetitive market make it difficult for firms to gain and sustain competitive advantages. Consequently, long-run firm performance is declining, and as D’Aveni (1994: p. 46) argues only “*short periods of profits are achievable*”. The hypercompetition literature shows evidence of an increase of volatility in firm performance (Thomas, 1996; Thomas and D’Aveni, 2009), possibly caused by the constant attacks and counterattacks. Similarly, scholars have found that hypercompetition decreases the duration of sustainable competitive advantages, and business

performance is becoming less persistent over time (D'Aveni, 1994; Thomas, 1996; Thomas and D'Aveni, 2009; Wiggins and Ruefli, 2005). This may occur because firms are constantly eroding advantages from each other, making them impotent to every competitive movement, as they just generate a new series of counterattacks.

Market Share. As industry density increases, firms start battling others for market share (Makadok, 1998; Parayre and Hurry, 2001; Vaaler and McNamara, 2010). Scholars have found some advantages and disadvantages associated with the leading or non-leading market share positioning in 'hyper'-markets. Makadok (1998) found that first-movers and early-entry-movers often have a pricing advantage, as their product price tends to be higher and more sustainable than later entrants. Ferrier *et al.* (1999) argue that firms with the greatest market share often experience market share erosion and dethronement of their leading position. While Nault and Vandebosch (1996) contribute with a different perspective, arguing that leading firms may sometimes be forced to cannibalise their own advantages, by launching a new series of temporary advantages to secure their future market position. Overall, the market share of firms in hypercompetitive markets is constantly changing.

Business mortality. The sustainability of any given competitive advantage is dependent on the threats of the competitors' ability to innovate or imitate (Pacheco-De-Almeida, 2010). The low barriers to entry, high level of imitation and increasing product innovations in 'hyper'-markets are forcing firms to adapt to these new and intense environmental conditions. Some incumbent firms may have accumulated rules and stagnated their relationship with customers, which may render them less agile and re-structuring increasingly expensive. On the other hand, new entrants may be more flexible towards change, but not having the right resources and capabilities to support a re-configuration (García-Sánchez *et al.*, 2014; Vassolo *et al.*, 2017). Furthermore, the new entrants may also be less

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experienced, thus more susceptible to market shocks. Consequently, competitive pressure is pushing firms (both new entrants and incumbent firms) to make organisational changes that may raise the risk of failure and business mortality (i.e. decreasing firm survival) (Lindskov *et al.*, 2020; McNamara *et al.*, 2003; Vaaler and McNamara, 2010).

Competitive actions. The phenomenon of temporary advantage is demanding that firms compete aggressively, if they want to survive and thrive in a hypercompetitive market (Andrevski and Ferrier, 2019; Chen *et al.*, 2010). Firms can compete aggressively through product innovations, price cuts and marketing campaigns, and thereby gaining temporary superior economic performance. However, they must have the needed resources and capabilities to increase the speed and development of the competitive actions while lowering cost (Andrevski and Ferrier, 2019). Competing aggressively is necessary for some firms, but not sufficient for all firms (Andrevski and Ferrier, 2019; Chen *et al.*, 2010). For example, while competing aggressively may work for firms with specialised resources, it may not be efficient for firms with broad resources. Therefore, firms need to understand how fast and aggressive they have to be in their competitive actions.

Organisational structure. As Sirmon *et al.* (2010) argue, competitive advantage is not only built through a firm's strengths (e.g. resources and capabilities) alone, but the weaknesses do also have a direct impact on the relative performance. In hypercompetitive markets, firms are frequently under attack by competitors, which forces them to find new sources of revenue. For some firms, this may require them to restructure their organisation. Scholars argue that firms need to either combine the traditional and new practices (Palmer *et al.*, 2001), or replace the traditional practices with new practices (Galunic and Eisenhardt, 1996). In general, firms could make several changes to the organisational structure such as create new strategic alliances (e.g. Hanssen-Bauer and Snow, 1996),

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4 build new business models (e.g. Chattopadhyay and Bhawsar, 2017), penetrate new markets (e.g.
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6 Atesci *et al.*, 2010), globalise (e.g. Kaivo-oja and Lauraeus, 2018) or add new resources and
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8 capabilities (e.g. Veliyath and Fitzgerald, 2000; Waard *et al.*, 2012) to prepare themselves for future
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10 competitive attacks or challenges.
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14 *Product life cycle.* The rapid technological revolution has put pressure on the life cycle of both
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16 technology and products. As Richardson (1996: p. 200) argues, firms can no longer depend on “*a few*
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18 *designs from the most savvy designers*”, they should try out many, quickly imitate others, and only
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20 supply with the demanded products. Therefore, firms need to increase the speed of product
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22 development (i.e. from idea to product), as the life cycles of both product and technology are becoming
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24 shorter and shorter over time (Harvey *et al.*, 2000; Pacheco-De-Almeida, 2010). Some scholars even
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26 argue that the life cycles in disruptive environments never reach maturity (D’Aveni *et al.*, 2010).
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28 D’Aveni *et al.* (2010) argue that firms have to “*self-reproduce, cannibalise, innovate, and self*
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30 *perpetuate by incessantly innovating, reviving, and reinitiating the initial stages of different waves of*
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32 *industry and product life cycles*” (p. 1372) to survive in a hypercompetitive environment. As a side
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34 effect of continuous product innovation, firms may over time become exhausted or blinded by their
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36 ‘temporary’ success and forget to make the new and required changes (D’Aveni *et al.*, 2010; Pacheco-
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38 De-Almeida, 2010), which may result in eroded advantages, declining business performance, or at
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40 worst business mortality.
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47 **5.2.3. Individual or Team-level**

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49 Conventionally, the resource-based view posits that the resources and capabilities within a firm
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51 are key to superior economic performance (i.e. enable the firm to gain and sustain competitive
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53 advantage) (Barney, 1991; Foss and Knudsen, 2003; Peteraf, 1993). Given the increasing amount of
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imitation and innovation within hypercompetitive industries (Pacheco-De-Almeida, 2010), scholars have provided other theoretical perspectives complementing the RBV by focusing on how firms can gain temporary advantages through resources and capabilities. The rapidly changing hypercompetitive environment is putting pressure on the capabilities of firms in making fast and good strategic decisions with less reflection time (Walumbwa *et al.*, 2014). In this review, some studies have focused on the need for decision-making teams, whereas others take a broader view on management capabilities.

First, scholars argue that the management capabilities of firms in hypercompetitive markets are very important, as the choices of managers may create competitive advantages or, conversely, decrease firm performance. In general, managers have to respond urgently to new attacks from competitors as well as to rather predictable changes (Waard *et al.*, 2012; Walumbwa *et al.*, 2014). The intensive competition in ‘hyper’-markets requires managers to be both transcendent (i.e. go beyond the expected) and flexible in their leadership (Christensen and Knudsen, 2008; Gallo and Gardiner, 2007; Karuppan and Kepes, 2006; Volberda, 1996).

Second, scholars argue that a firm’s sensory and analytical skills are critical for good decision-making. In hypercompetitive markets, the increasing time constraint and information overload are making it difficult for managers to find the most reliable information to base their decisions on. The cognitive framework that managers have used to make sense of and react within a stable equilibrium are significantly compromised in hypercompetitive markets (Lahiri *et al.*, 2008). From the existing literature, there is no doubt that firms need now, more than ever, the right management ‘sensing’ or analytical capabilities, as they constantly have to identify new business opportunities and build new competitive advantages (Bayraktar and Ndubisi, 2014; D’Aveni, 1999, 1994; Waard *et al.*, 2012). This refers to their capabilities to (1) distinguish between potential threats and opportunities from the variety

of changes in the surrounding environment, (2) interpret these changes (i.e. how the manager assigns meaning to the stimuli), and (3) acquire, integrate and exploit new information and existing knowledge (Waard *et al.*, 2012). In sum, managers need to know how to recognise, filter and apply information quickly in order to provide with both effective directions for the employees and for the firm in general.

Third, Chen *et al.* (2010) argues that top management teams are necessary for overcoming the extensive volatility in hypercompetitive market, as it is through the firm's actions and aggressiveness that the firm gains competitive advantage and performance. These teams may benefit from being dynamic and cohesive (Chen *et al.*, 2010), but should not be too diverse. Scholars argue that team diversity and job-related capabilities may increase the likelihood that the team will observe more environmental threats, opportunities and general tendencies, than one individual manager (Bogner and Barr, 2000; Hoisl *et al.*, 2017). However, firms have to think carefully about this team composition, as these individuals may be from various parts of the organisation bringing in different perspectives based on their functional orientation (Bogner and Barr, 2000; Fourné *et al.*, 2014) or with various individual experiences. Therefore, they need to have or develop some sort of shared understanding of the environmental changes and paths for future of the firm.

6. DIRECTIONS FOR FUTURE RESEARCH

Based on this review and proposed framework (shown in Figure 3), I identified future research directions across the different causes, components and consequences of hypercompetition. The section below addresses the methodological and theoretical issues in the current literature and discusses a number of directions for future research.

6.1. Methodological Issues

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This review of the hypercompetition literature also identified a number of methodological issues. First, the quest to define industry environments has long been an important topic of discussion (D’Aveni, 1999, 1994; Porter, 1985), but when these discussions drift into hypercompetitive environments, the current knowledge and insights regarding how to measure hypercompetition appear rather limited (e.g. Castrogiovanni, 2002; McNamara *et al.*, 2003; Vaaler and McNamara, 2010). A major limitation in the theory of hypercompetition is that D’Aveni (1994) does not define how to measure or determine whether a market is hypercompetitive. As can be seen in Table 4, scholars have used different techniques to measure different variables, such as sustainability of business profit (e.g. McNamara *et al.*, 2003; Vaaler and McNamara, 2010), industry dynamism (e.g. Castrogiovanni, 2002; Lindskov *et al.*, 2020), and industry heterogeneity (e.g. Thomas and D’Aveni, 2009).

Table 4 about here

These measurements have provided with consistent (Hermelo and Vassolo, 2010; Thomas, 1996; Thomas and D’Aveni, 2009; Wiggins and Ruefli, 2005) and inconsistent (Castrogiovanni, 2002; Lindskov *et al.*, 2020; McNamara *et al.*, 2003; Vaaler and McNamara, 2010) empirical findings with the assumption of increasing hypercompetition. Based on this mixed bag of empirical findings, it could be that scholars have used techniques that are devised for more stable environments, as they do not directly measure hypercompetition. From the definitions of hypercompetition shown in Table 1, we know that hypercompetition is related to uncertainty (i.e. disequilibrium and volatility in firm performance), high rates of change (i.e. frequency of competitive actions) and high intensity of change (i.e. aggressiveness of competitors). However, these determinants are also similar to what Knecht

(2013) uses to measure of industry dynamism. So, the question of how to measure or determine whether a region or industry is hypercompetitive still remains unanswered.

Another methodological issue is the lack of empirical evidence regarding what causes hypercompetition. Even though the special issue in *Strategic Management Journal* in 2010 was open for studies on the antecedents of hypercompetition, only a few articles have contributed with such links over the years. In this review, a few articles investigate the impact of exogenous changes on competitive advantage e.g. Hermelo and Vassolo (2010) who found that institutional changes affect the level of competition within an industry, but they also found that the regional-industry competition differences that can be explained by how developed the region is. At present, there is still room for empirical studies investigating the causes of hypercompetition. For example, scholars could focus on the frequency of competitive actions of stakeholders, and whether an increase in the competitive intensity causes hypercompetition.

6.2. Theoretical Issues

There is also room for improvement on the theoretical part. Research on hypercompetition has been growing steadily over the past 25 years, but more research is needed both on the general concept and its outcomes.

First, several scholars argue that hypercompetition has spread worldwide across both industries (Mattila, 2001; Thomas and D'Aveni, 2009) and regions (Hermelo and Vassolo, 2010; Ruiz *et al.*, 2017). However, some scholars have still found context-specific differences in the level of competition (Hermelo and Vassolo, 2010; Lindskov *et al.*, 2020; Ruiz *et al.*, 2017; Vaaler and McNamara, 2010), which may suggest that hypercompetition comes in different forms. Similarly, the typology by Pacheco-De-Almeida (2010) suggests different types of environmental hypercompetition (i.e.

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innovative hypercompetition, imitative hypercompetition and dual hypercompetition), based on the speed of innovation and imitation in industries (or stages of the industry’s life cycles). It may be that different types of hypercompetition exist if one uses Pacheco-De-Almeida’s (2010) conceptualisation. However, the research field on hypercompetition lack of studies empirically testing this theory proposed by Pacheco-De-Almeida (2010). There is great potential in this area for research on the multiple types of hypercompetition, as the empirical evidence is rather limited.

Second, several scholars have provided research on the effects of hypercompetition, thereby proposing a need for certain organisational structures (i.e. from business model to resources and capabilities). However, suggested business models, strategic alliances, and resources and capabilities are numerous, making it difficult to get a clear overview of the potential links and patterns of within these suggested organisational new structures.

Third, research will also be needed to investigate how firms in hypercompetitive markets deal with the accelerating focus on social and environmental responsibilities from e.g. customers and governments. Today, firms are increasingly expected to have the necessary capabilities to deal with issues such as high level of pollution, good working conditions, and production waste. In hypercompetitive industries with constant disequilibrium, highly competitive pressure and only temporary advantages, is there room for initiatives consistent with CSR (Perrini *et al.*, 2006)? How do firms that constantly fight for their survival use their resources and capabilities to create temporary advantages, and still address complicated long-term scoped issues such as equality in the workplace and fair working conditions?

7. CONCLUSIONS AND IMPLICATIONS

Over the years, strategic manoeuvring in hypercompetitive environments has become an important aspect of strategic management, and it is increasingly emphasised in the academic literature. The purpose of this article is to advance the knowledge on hypercompetition by conducting an SLR of 131 studies of hypercompetition with focus on the definitions, causes, and consequences of such an intense environment. Furthermore, provide a framework showing the causes and consequences of hypercompetition on different levels of analysis, and suggest directions for future research.

7.1. Managerial implications

The review findings have several implications for managers. In particular, I highlight three managerial implications: (1) action-based strategy, (2) the determinants of hypercompetition, and (3) the importance for managers of accurately establishing their firm's competitive situation.

First, scholars have typically taught managers to seek long-term strategies and competitive advantages, but under hypercompetition this type of strategy would make firms inflexible and slow to change. As D'Aveni (1994: 6) says, "today's strengths become tomorrow's weaknesses so quickly that sustaining advantages is nearly impossible". Thus, if managers put effort into sustaining advantages, they may actually undermine the dynamic competitiveness of the firm. Based on the findings of the review, the primary implication of hypercompetition literature is that firms cannot enjoy long-term advantage, but have to rethink their strategies. In hypercompetitive markets, managers need a dynamic strategy. D'Aveni (1994) argues that such a strategy is based on the actions or reactions of the firm. To illustrate, a firm acts to gain an advantage over its competitors, then the competitor reacts to neutralize that advantage (or build a new advantage), and then the first firm has to react to this action of its rival. Under hypercompetition, the frequency of

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these actions increases (Andrevski and Ferrier, 2019). Therefore, managers have to develop a strategy that focuses on these dynamic strategic interactions. More specifically, a firm needs to constantly develop temporary advantages through either innovating their products (i.e. disrupting their own advantages) or destroying the advantages of their rivals (i.e. imitation). A firm that survives and thrives in a ‘hyper’-market does not remain static, but changes its market positioning, constantly develops new advantages, and tries to be one step ahead of the competitor.

Second, the thematic analysis of the hypercompetitive dimensions used in literature show that scholars have used a variety of characteristics and definitions to describe the phenomenon. The variety of definitions of hypercompetition may have made it difficult for managers to identify whether they are competing in a ‘hyper’-market. A clear definition can help managers identify a hypercompetitive market. For example, if a manager increases the firm’s frequency of competitive actions and observes that the advantages are more temporary than sustainable, it is more likely that the market has become hypercompetitive. The research framework presented in this paper may therefore help managers in the future to identify and understand the hypercompetitive market conditions.

Third, as previous studies (Lindskov et al., 2020; McNamara et al., 2003) and the results of this paper suggest, hypercompetition in one industry does not necessarily imply hypercompetition in another. Even though D’Aveni (1994) argues that hypercompetition has spread to different industries worldwide, the findings of other scholars tell a different story. This highlights the importance of determining the competitive situation within your own industry, rather than assuming hypercompetition. Failing to do so may lead to wasteful efforts to adapt their strategy to hypercompetition where it doesn’t exist.

7.2. Summary of central findings

The findings of this review can help explain why some markets become hypercompetitive, and how this may affect both industries, firms, individuals and teams. Hypercompetition is a state of intense rivalry, where firms are constantly creating new competitive advantages through either disrupting their own advantages or eroding those of competitors, thereby creating a temporary state of disequilibrium. The factors causing hypercompetition is the actions of stakeholders, which may affect the speed of technological innovation, market barriers, and rivalry. When markets have become hypercompetitive it affects both industries (e.g. increasing dynamism), firms (e.g. decreasing superior economic performance), and individuals and teams (e.g. flexible and dynamic management). Based on these insights, the review suggests that future research focus on the phenomenon of hypercompetition itself. Even though, several scholars argue that hypercompetition has spread across industries and regions, the current empirical evidence is mixed. This could be due to the lack of a clear definition on how to measure hypercompetition. On one hand, industries and regions may have become hypercompetitive, but on the other hand, it could also be that hypercompetition is more perceptual in its nature, as Makadok (1998) argues. If scholars and practitioners misjudge hypercompetition, the implications might be that scholars oversee or waste resources potential growth opportunities or fail to exploit their current advantages.

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TABLES AND FIGURES

Study	Definition
D’Aveni (1994: 6)	Hypercompetition is an environment of intense change, in which flexible, aggressive, innovative competitors move into markets easily and rapidly, eroding the advantages of the large and established players
Craig (1996: 303)	The competitive environment described by Schumpeter, however, is neither static nor predictable. It more closely resembles what is today known as hypercompetition
Volberda (1996: 360)	The defining characteristic of hypercompetition is that firms, in their struggle for control, continuously identify and develop new advantages, thereby creating a temporary disequilibrium
Harvey <i>et al.</i> (2000: 647)	Hyper-competition has been viewed as the continuous generation of new forms of competitive advantage through neutralizing, destroying or rendering competitors competitive advantages obsolete
Parayre and Hurry (2001: 281)	Hypercompetition thus differs from normal competition, as it involves a departure from the usual type of competitive equilibrium
McNamara <i>et al.</i> (2003: 264)	Hypercompetition increases the frequency of decision making and consequently decreases the stability of markets and business performance over time
D’Aveni <i>et al.</i> (2010: 1382)	Hypercompetition turns out to be a special case of Porter’s five forces (low barriers to entry and substitution, high power of buyers and suppliers, and rising industry rivalry
Hermelo and Vassolo (2010: 1459)	Hypercompetition is the phenomenon that increases the speed and aggressiveness of competition in the four arenas reducing the duration of the launch, exploitation, and counterattack cycles
Hoisl <i>et al.</i> (2017: 1456)	Hypercompetition is the result of strategic maneuvering among competing firms
Lindskov <i>et al.</i> (2020: 1)	‘hypercompetition’, a state of intense industry rivalry, making it impossible to sustain competitive advantages
Table 1. Selected Hypercompetition definitions (ordered by year of publication); see Appendix A2 for all the definitions on hypercompetition.	

Globalization (Akhter, 2003; Ang and Cummings, 1997; Bayraktar and Ndubisi, 2014; Božič and Dimovski, 2019; Brown and Fai, 2006; Chen *et al.*, 2010; Cox and Bridwell, 2007; Craig, 1996; Cule and Robey, 2004; D'Aveni, 1999; D'Aveni *et al.*, 2010; Flier *et al.*, 2001; Fourné *et al.*, 2014; Hanssen-Bauer and Snow, 1996; Harvey and Griffith, 2007; Harvey and Novicevic, 2001, 2002; Hermelo and Vassolo, 2010; Ilinitich *et al.*, 1996; Khan and Azmi, 2005; Kiessling *et al.*, 2004; Lahiri *et al.*, 2008; McNamara, Vaaler, and Devers, 2003; Panigrahi, 2019; Richardson, 1996; Rindova and Kotha, 2001; Schneider, 2002; Sternberg *et al.*, 2019; Thomas, 1996; Uhl-Bien *et al.*, 2007; Veliyath and Fitzgerald, 2000; Walumbwa *et al.*, 2014)

Technological revolution (Akhter, 2003; Ali *et al.*, 2020; Ang and Cummings, 1997; Bogner and Barr, 2000; Božič and Dimovski, 2019; Chen *et al.*, 2010; Christensen and Knudsen, 2008; Craig, 1996; D'Aveni, 1999; Drejer, 2002; Esper *et al.*, 2007; Flier *et al.*, 2001; Fourné *et al.*, 2014; Grewal *et al.*, 1999; Hanssen-Bauer and Snow, 1996; Harvey and Griffith, 2007; Harvey and Novicevic, 2001, 2002; Hermelo and Vassolo, 2010; Hosseini, 2011; Ilinitich *et al.*, 1996; Jarach, 2002; Khan and Azmi, 2005; Kiessling *et al.*, 2004; Kulkarni and Sivaraman, 2019; Lahiri *et al.*, 2008; Liu *et al.*, 2006; Mathews, 2006; McNamara *et al.*, 2003; Nath and Newell, 1998; Panigrahi, 2019; Parayre and Hurry, 2001; Richardson, 1996; Rindova and Kotha, 2001; Ruiz *et al.*, 2017; Schneider, 2002; Sternberg *et al.*, 2019; Thomas, 1996; Uhl-Bien *et al.*, 2007; Veliyath and Fitzgerald, 2000; Walumbwa *et al.*, 2014)

Demographic and socio-economic changes (Akhter, 2003; Ali *et al.*, 2020; Chattopadhyay and Bhawsar, 2017; Craig, 1996; Drejer, 2002; Esper *et al.*, 2007; Flier *et al.*, 2001; Fourné *et al.*, 2014; Harvey and Novicevic, 2001; Hermelo and Vassolo, 2010; Ilinitich *et al.*, 1996; Kiessling *et al.*, 2004; Lahiri *et al.*, 2008; Nath and Newell, 1998; Ngamkroeckjoti and Johri, 2003; Ruiz *et al.*, 2017; Schneider, 2002; Uhl-Bien *et al.*, 2007; Veliyath and Fitzgerald, 2000)

Institutional context and regulations (Akhter, 2003; Ang and Cummings, 1997; Bogner and Barr, 2000; Brown and Maylor, 2005; Chattopadhyay and Bhawsar, 2017; Cox and Bridwell, 2007; Craig, 1996; Flier *et al.*, 2001; Harvey and Griffith, 2007; Harvey and Novicevic, 2002; Hermelo and Vassolo, 2010; Lahiri *et al.*, 2008; Ngamkroeckjoti and Johri, 2003; Panigrahi, 2019; Ruiz *et al.*, 2017; Schneider, 2002; Uhl-Bien *et al.*, 2007; Veliyath and Fitzgerald, 2000)

Customers (Akhter, 2003; Ali *et al.*, 2020; Bogner and Barr, 2000; Castrogiovanni, 2002; Chattopadhyay and Bhawsar, 2017; Craig, 1996; Cule and Robey, 2004; D'Aveni, 1999; D'Aveni and Dagnino, 2010; Fourné *et al.*, 2014; Grewal *et al.*, 1999; Hanssen-Bauer and Snow, 1996; Hosseini, 2011; Khan and Azmi, 2005; Kulkarni and Sivaraman, 2019; Lahiri *et al.*, 2008; Liu *et al.*, 2006; Mathews, 2006; Nath and Newell, 1998; Ngamkroeckjoti and Johri, 2003; Parayre and Hurry, 2001; Sternberg *et al.*, 2019; Thomas, 1996; Walumbwa *et al.*, 2014)

Table 2. The past research describing the causes of hypercompetition

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Industry-level	Organizational-level	Individual-level
Dynamism (Castrogiovanni, 2002; Chen <i>et al.</i> , 2010; Galunic and Eisenhardt, 1996; Hermelo and Vassolo, 2010; Lahiri <i>et al.</i> , 2008; Lindskov <i>et al.</i> , 2020; McNamara <i>et al.</i> , 2003; Rindova and Kotha, 2001; Thomas, 1996; Vaaler and McNamara, 2010; Wiggins and Ruefli, 2005)	Firm performance (Andrevski and Ferrier, 2019; Chen <i>et al.</i> , 2010; Hermelo and Vassolo, 2010; Hinterhuber, 2013; Lindskov <i>et al.</i> , 2020; McNamara <i>et al.</i> , 2003; Pacheco-De-Almeida, 2010; Panigrahi, 2019; Ruiz <i>et al.</i> , 2017; Thomas, 1996; Thomas and D’Aveni, 2009; Vaaler and McNamara, 2010; Young <i>et al.</i> , 1996)	Managerial capabilities (Akhter, 2003; Christensen and Knudsen, 2008; Esper <i>et al.</i> , 2007; Foss and Klein, 2014; Gallo and Gardiner, 2007; Gómez-Gras and Verdú-Jover, 2005; Halbesleben <i>et al.</i> , 2003; Kaivo-oja and Lauraeus, 2018; Karuppan and Kepes, 2006; Lahiri <i>et al.</i> , 2008; Lengnick-Hall and Wolff, 1999; Mathews, 2006; Ritala, 2013; Selsky <i>et al.</i> , 2007; Shang <i>et al.</i> , 2010; Sirmon <i>et al.</i> , 2010; Smith <i>et al.</i> , 2010; Uhl-Bien <i>et al.</i> , 2007; Volberda, 1996; Waard <i>et al.</i> , 2012; Walumbwa, Maidique, and Atamanik, 2014)
Munificence (Castrogiovanni, 2002; Lindskov, Sund and Dreyer, 2020; McNamara <i>et al.</i> , 2003; Sirmon <i>et al.</i> , 2010; Thomas, 1996; Wiggins and Ruefli, 2005)	Market share (Andrevski and Ferrier, 2019; Banker <i>et al.</i> , 2013; Craig, 1996; Ferrier <i>et al.</i> , 1999; Gimeno and Woo, 1996; Hoisl <i>et al.</i> , 2017; Lee <i>et al.</i> , 2010; Li and Chuang, 2001; Makadok, 1998; Nault and Vandenbosch, 1996; Parayre and Hurry, 2001; Vaaler and McNamara, 2010; Wiggins and Ruefli, 2005)	<i>Sensing capabilities</i> (Bayraktar and Ndubisi, 2014; Bogner and Barr, 2000; Drejer, 2002; Fourné <i>et al.</i> , 2014; Harvey and Novicevic, 2001; Lahiri <i>et al.</i> , 2008; Roberts and Grover, 2012; Shang <i>et al.</i> , 2010; Waard <i>et al.</i> , 2012)
Complexity (Castrogiovanni, 2002; Lee <i>et al.</i> , 2010; Selsky <i>et al.</i> , 2007; Thomas, 1996; Thomas and D’Aveni, 2009; Volberda, 1996)	Business mortality (Amezcuca <i>et al.</i> , 2019; Kim and Kogut, 1996; Lindskov <i>et al.</i> , 2020; McNamara <i>et al.</i> , 2003; Vaaler and McNamara, 2010)	Teams (Bogner and Barr, 2000; Chen <i>et al.</i> , 2010; Christensen and Knudsen, 2008; Fourné <i>et al.</i> , 2014; Harvey and Griffith, 2007; Hoisl <i>et al.</i> , 2017; Karuppan and Kepes, 2006)
	Competitive actions (Andrevski and Ferrier, 2019; Chen <i>et al.</i> , 2010; Ferrier <i>et al.</i> , 1999; Lengnick-Hall and Wolff, 1999; Li and Chuang, 2001; Ravichandran, 2018; Rindova <i>et al.</i> , 2010; Sirmon <i>et al.</i> , 2010)	
	Organizational structure <i>Business models</i> (Adeleye, 2015; Akhter, 2003; Aupperle,	

1996; Chattopadhyay and Bhawsar, 2017; Cule and Robey, 2004; Foss and Klein, 2014; Galpin, Hilpirt, and Evans, 2007; Galunic and Eisenhardt, 1996; Gómez-Gras and Verdú-Jover, 2005; Jarach, 2002; Nath and Newell, 1998; Palmer *et al.*, 2001; Richardson, 1996; Smith *et al.*, 2010; Volberda, 1996)

Strategic alliances: (Ang and Cummings, 1997; Brown and Fai, 2006; Bruce, 1998; Fiegenbaum *et al.*, 2001; Hanssen-Bauer and Snow, 1996; Harvey *et al.*, 2000; Kiessling *et al.*, 2004; Palmer *et al.*, 2001; Parayre and Hurry, 2001; Ze *et al.*, 2018)

Penetration of new markets (Atesci *et al.*, 2010; Fourné *et al.*, 2014)

Globalization of firms (e.g. firms being forced to globalize) (Bayraktar and Ndubisi, 2014; Flier *et al.*, 2001; Kaivo-oja and Lauraeus, 2018; King, 2013; Mathews, 2006)

Resources and capabilities (Akhter, 2003; Awazu, 2004; Božič and Dimovski, 2019; Brown and Fai, 2006; Brown and Maylor, 2005; Drejer, 2002; Grant, 1996; Hinterhuber, 2013; Makadok, 1998; Oh, 2020; Parayre and Hurry, 2001; Pisar and Tomaskova, 2020; Ritala, 2013; Roberts and Grover, 2012; Sedera *et al.*,

	<p>2016; Shang <i>et al.</i>, 2010; Veliyath and Fitzgerald, 2000; Waard <i>et al.</i>, 2012)</p> <p>Product life cycle* (Ali <i>et al.</i>, 2020; Bruce, 1998; Castrogiovanni, 2002; Chattopadhyay and Bhawsar, 2017; D’Aveni and Dagnino, 2010; Drejer, 2002; Esper <i>et al.</i>, 2007; Gómez-Gras and Verdú-Jover, 2005; Hanssen-Bauer and Snow, 1996; Harvey and Griffith, 2007; Harvey and Novicevic, 2002; Hermelo and Vassolo, 2010; Hoisl <i>et al.</i>, 2017; Hosseini, 2011; Ilinitch <i>et al.</i>, 1996; Javalgi <i>et al.</i>, 2006; Kaivo-oja and Lauraeus, 2018; Karuppan and Kepes, 2006; Khan and Azmi, 2005; Kiessling <i>et al.</i>, 2004; Kim and Kogut, 1996; King, 2013; Kriz <i>et al.</i>, 2014; Kulkarni and Sivaraman, 2019; Lahiri <i>et al.</i>, 2008; Liu <i>et al.</i>, 2006; Malhotra and Majchrzak, 2004; McNamara <i>et al.</i>, 2003; Paap and Katz, 2004; Pacheco-de-Almeida, 2010; Palmer <i>et al.</i>, 2001; Panigrahi, 2019; Parayre and Hurry, 2001; Richardson, 1996; Rindova <i>et al.</i>, 2010; Sternberg <i>et al.</i>, 2019; Vaaler and McNamara, 2010)</p>	
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Table 3. the past research on the competitive and strategic implications of hypercompetition

*These research papers do not measure “PLC”, but only use the term to describe the effects of hypercompetition.

Author	Sample	Method(s)	Measure(s)	Findings
Thomas (1996)	U.S., Manufacturing sector (including multiple industries), 1958-91	Autoregressive models; linear- nonlinear models; variance regressions	The resourcefulness of industries and intra-industry variances in performance; rivalry; The impact of growth in industry shipments and prices on firm value	Increasing industry rivalry is associated with lower market performance; Growth in shipment had no significant impact of firm value; Increasing concentration in market structure, are associated with decreasing variance in performance.
Castrogiovanni (2002)	U.S., Manufacturing sector (including established industries and new industries), 1967-92	Generalized least squares	Environmental munificence, dynamism and complexity. New industries face greater environmental munificence, dynamism and complexity than established industries.	Munificence decreased over time; Dynamism and Complexity did not increase over time; New industries did not face greater environmental munificence than established industries. New industries faced greater dynamism and complexity than established industries.
Hermelo and Vassolo (2010)	Latin America, 1990-2006	Kolmogorov- Smirnov approach and Event History Analysis;	Persistent Superior Economic Performance of firms and industries; SEP decreases over time; The development of institutions decreases SEP; The hazard of exiting SEP, depending on whether the firm is domestic or multi- country firms.	Higher levels of PSEP in Latin America compared to the US; A hypercompetitive shift in the last decades; The development of institutions increases firms' rate of exit from SEP
McNamara <i>et al.</i> (2003)	U.S., Manufacturing sector, 1978-97	Autoregressive model, Cox- Proportional Hazard rate model and a	Abnormal business returns, Business mortality, industry dynamism and munificence	No general evidence of increasing HC, but decreasing performance from late-70s to late-80s. However, then this trend reverses again and

		composite fixed effects model		performance and market stability increases.
Wiggins and Ruefli (2005)	U.S., Multiple industries, 1978-97	Descriptive statistics; Event history analysis; Pattern analysis	The persistency of performance decreases over time; Industry differences in the level of competition;	Persistency of performance decreases over time; Hypercompetition has spread to several industries; The performance patterns has become more prevalent over time;
Thomas and D'Aveni (2009)	U.S., Manufacturing sector, 1950-2002	OLS regression models; Fixed effects models;	Volatility for profits; Increasing industry heterogeneity;	Increase in the within-industry heterogeneity of business returns; Increase in volatility of firm profit; Industry effects have decreased over time; Industry volatility and within-industry heterogeneity are becoming highly correlated
Vaaler and McNamara (2010)	U.S., Technology-intensive (TI) industries and a broad sample of non-TI industries, 1978-97	Autoregressive model, Logit models, Cox-Proportional Hazard rate model and a composite fixed effects model	Abnormal business returns, Market leadership; Business mortality, industry dynamism	No general evidence of increasing hypercompetition, but Intra-industry-specific trends. For high-performing TI firms, the performance stability declines over time.
Lindskov <i>et al.</i> (2020)	Denmark, Multiple industries, 1980-2017	Autoregressive models; Kaplan Meier; linear regression model; a composite fixed effects model	Abnormal business returns, Firm survival, industry dynamism and munificence	No general trend of increasing hypercompetition across industries. Industry differences in the level of competition.
Table 4. Studies investigating the existence or nonexistence of hypercompetition.				

FIGURES

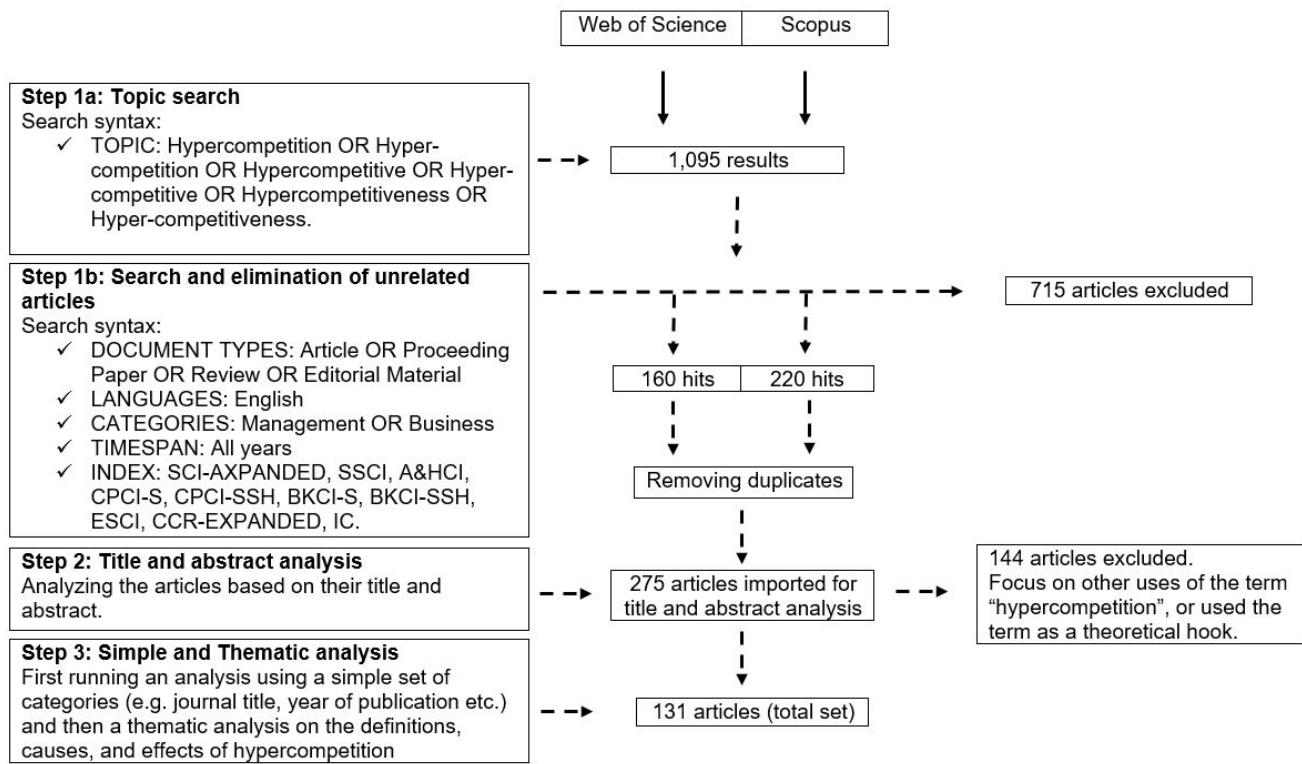


Figure 1. Search Syntax of the Review

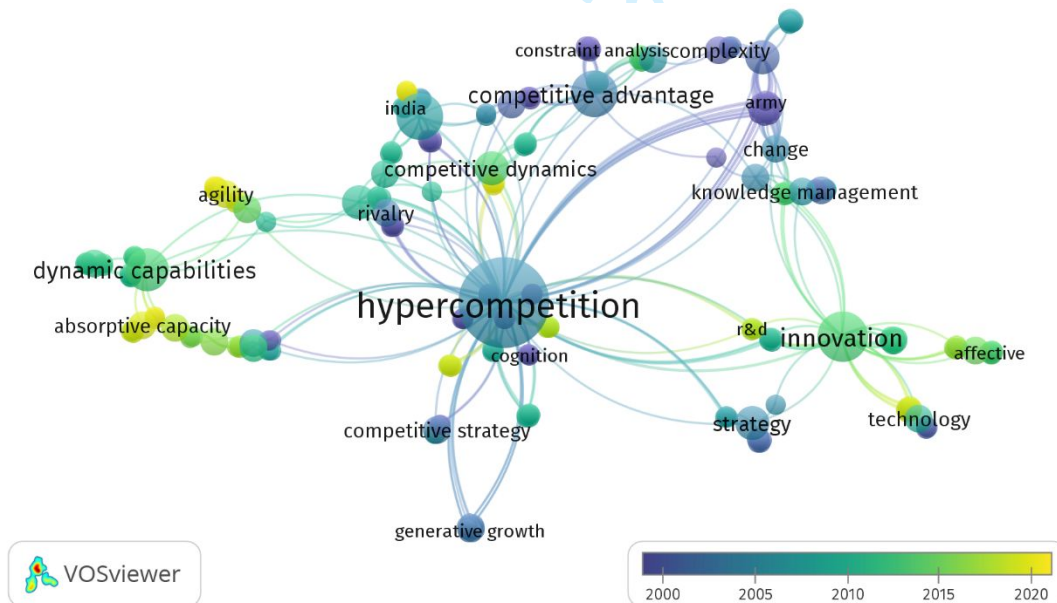


Figure 2: Network visualization map and overlay visualization of author keywords in Hypercompetition research (1996-2020)

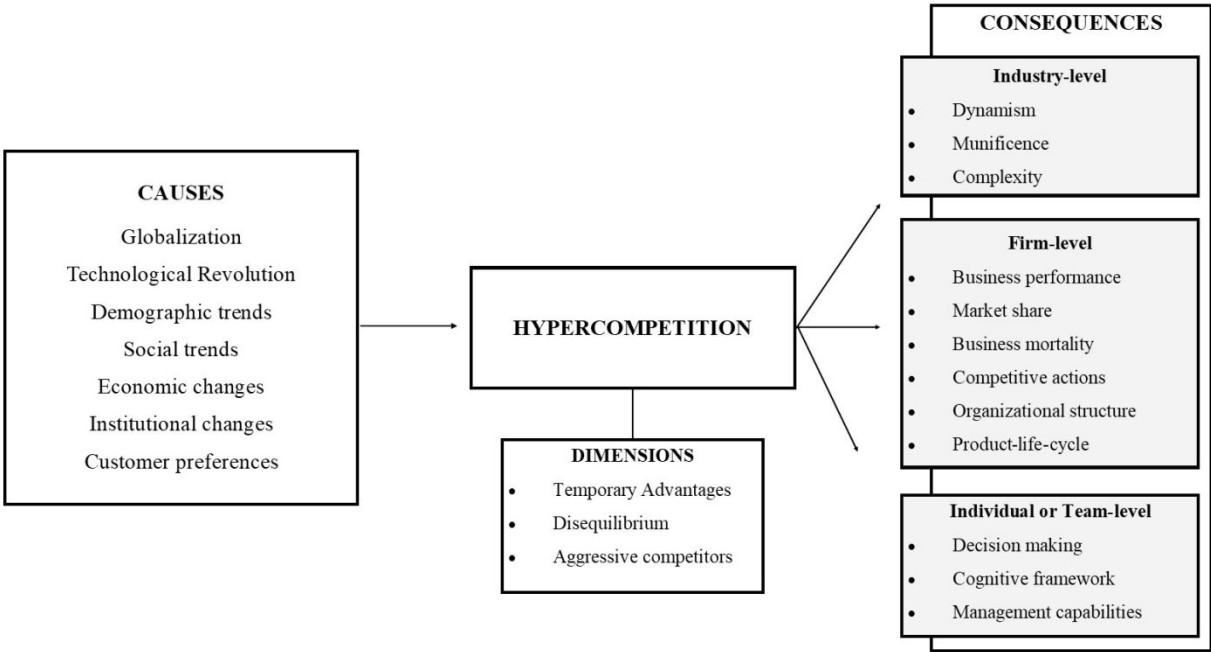


Figure 3: Research framework of Hypercompetition

APPENDIX

1.	Adeleye, I. 2015. Accelerating corporate transformation in emerging markets: The case of firstbank. <i>South Asian Journal of Business and Management Cases</i> , 4(2): 182–191.
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Table A1. The review sample (ordered chronologically)

Study	Definition
Akhter (2003)	"accelerated change - is the watchword for understanding the new landscape" (p. 2)
Andreovski and Ferrier (2019)	"In hypercompetitive environments, firms act under conditions of uncertainty because knowledge is unevenly distributed across market participants and it rapidly changes over time, so firms act with incomplete knowledge" (p. 624)
Ang and Cummings (1997)	"rapidly escalating competition based on new and continually shifting product or geographic markets, frequent entry of unexpected competitors, radical redefinition of market boundaries, rapidly changing technologies, and short product life cycles" (p. 236)
Banker <i>et al.</i> (2013)	"Intense rivalry among firms" (p. 1196)
Bogner and Barr (2000)	"Hypercompetition represents a state of competition with rapidly escalating levels of competition and reduced periods of competitive advantage for firms" (p. 212) "Hypercompetitive industries are characterized by rapid changes in environmental factors such as technology and regulation, relative ease of entry and exit by rival firms, and ambiguous consumer demands" (p. 212)
Brown and Fai (2006)	"current competitive environment is increasingly characterised by rapid technological changes in new and existing products, brought about, in part at least, by enhanced levels of competition" (p. 62)

Bruce (1998)	<i>"Hyper-competitive markets bring pressure for firms to shorten product lifecycles, rapidly identify and penetrate new market segments, dramatically increase operational efficiencies, and disintermediate supply chains and distribution channels" (p. 1)</i>
Chen et al. (2010)	<i>"an 'environment in which advantages are rapidly created and destroyed' (D'Aveni, 1994: 2)" (p. 1411)</i> <i>"A hypercompetitive environment creates uncertainty and perceptual variation among industry players, who tend to have different interpretations and understandings of the nature, scope, pace, (Sutcliffe, 1994), and long-term viability (Dean and Sharfman, 1996) of changes" (p. 1415);</i>
Christensen and Knudsen (2008)	<i>"hypercompetition is seen as the primary cause of their [red. IT industries] emergence" (p. 1280)</i> <i>"Hypercompetition refers to the shift in the rules of competition that was observed through the 1990s" (p. 1280)</i> <i>"A highly turbulent environment has rapid variation in profit levels as well as high volatility of profit levels" (p. 1290)</i>
Cox and Bridwell (2007)	<i>"in today's tumultuous world, the concept of a sustainable competitive advantage is dangerously inflexible and out of date" (p. 210)</i>
Craig (1996)	<i>"The competitive environment described by Schumpeter, however, is neither static nor predictable. It more closely resembles what is today known as hypercompetition" (p. 303)</i> <i>"which D'Aveni (1994) describes as a condition of 'rapidly escalating competition . . . (in which) the frequency, boldness, and aggressiveness of dynamic movement by the players accelerates to create a condition of constant disequilibrium and change'" (p. 303)</i>
D'Aveni (1999)	<i>"now the central focus of strategy is on understanding the relationship between an environment's turbulence and the company's choice of strategy" (p. 128)</i>
D'Aveni and Dagnino (2010)	<i>"as environments get more dynamic, they become more unpredictable and uncertain, making the creation of intended, planned strategies more difficult" (p. 1373)</i> <i>"hypercompetitive shift toward more temporary advantage" (p. 1380)</i> <i>"hypercompetition (defined by D'Aveni, 1994: 2 as 'an environment of fierce competition leading to unsustainable advantage or the decline in the sustainability of advantage')" (p. 1380)</i> <i>"hypercompetition as a nonmunificent environment lacking in resources somewhat akin to a recession" (p. 1380)</i>
Drejer (2002)	<i>"Hyper-competition, according to D'Aveni, is a competitive situation where the key competitive success factor is the ability to constantly develop new products, processes or services, providing the customer with increased functionality and performance" (p. 4-5)</i>

	<i>"in a hypercompetitive environment, firms cannot count on a sustainable competitive advantage, but must continuously develop themselves in new directions"</i> (p. 5)
Esper et al. (2007)	<i>"Many industries have progressed from slow moving, stable oligopolies to hypercompetitive environments characterized by intense and rapid competitive moves, in which competitors strike quickly, unexpectedly, and unconventionally and advantages are rapidly created and eroded"</i> (p. 57)
Fiegenbaum et al. (2001)	<i>"the major contribution of the hypercompetition paradigm is its concentration on competitive dynamics and exploration of the patterns and pathways of strategic maneuvering that take place among industrial competitors"</i> (p. 265) <i>"hypercompetition can be viewed as either differentiated oligopoly or monopolistic competition, but not as anything really 'new'"</i> (p. 266) <i>"hypercompetition is one among many possible types of oligopolistic behavior"</i> (p. 267)
Gallo and Gardiner (2007)	<i>"Hyper-competition, the presence of unpredictability, increased complexity and a rapid pace of change"</i> (p. 446)
Gomez-Gras and Verdu-Jover (2005)	<i>"Greater competition means volatile markets, shorter life cycles and more sophisticated purchasers"</i> (p. 842) <i>"an increase in discontinuity, uncertainty and chaos"</i> (p. 844)
Grant (1996)	<i>"hypercompetition are characteristic of product markets, dynamically competitive conditions also are present in the markets for resources"</i> (p. 376)
Gummesson (1997)	<i>"In an environment of hypercompetition, advantages are rapidly created and eroded"</i> (p. 425) <i>"Hypercompetition is a constant state of disequilibrium"</i> (p. 426)
Hanssen-Bauer and Snow (1996)	<i>"Such environments are highly changeable and even discontinuous, requiring organizations to respond flexibly and rapidly"</i> (p. 413)
Harvey et al. (2000)	<i>"Hyper-competition has been viewed as the continuous generation of new forms of competitive advantage through neutralizing, destroying or rendering competitors competitive advantages obsolete"</i> (p. 647)
Harvey and Novicevic (2001)	<i>"The global economy has created a new hypercompetitive landscape, one in which events, competitors, environments, and industries change constantly and unpredictably"</i> (p. 449) <i>"By its very nature, the hypercompetitive landscape has become precipitously more dynamic, intense, aggressive, and at the same time has become deregulated, technology-intensive, and global in scope"</i> (p. 449)
Harvey and Novicevic (2002)	<i>"The enduring characteristics of hypercompetition are that (1) relative competitive advantages are very time sensitive and therefore erode very quickly, requiring that core competencies of global organizations be rejuvenated constantly; (2) strategies must be formulated continuously to seize competitive initiative resulting only in a temporary market advantage; (3) there needs to be a modification in the conventional wisdom relative to</i>

	<i>timeframes with attention being given to shorter and shorter life cycles; (4) the redefinition of industry boundaries, due to deregulation and the intrusion of nontraditional competitors entering the industry, will continue to occur; and (5) the dynamics of industries and competition are requiring management to address constant change and time as the common bases of global competition” (p. 490)</i>
Hermelo and Vassolo (2010)	<i>“Hypercompetition is the phenomenon that increases the speed and aggressiveness of competition in the four arenas reducing the duration of the launch, exploitation, and counterattack cycles” (p. 1459)</i>
Hinterhuber (2013)	<i>“Where this next round of competition is, and whether this move is indeed profitable, is left unanswered” (p. 798)</i>
Hoisl et al. (2017)	They obtain D'Aveni's (1994) definition: <i>“an environment characterized by intense and rapid competitive moves, in which competitors must move quickly to build advantage and erode the advantage of their rivals” (p. 1457)</i>
Kapur et al. (2003)	<i>“the horizontal, hypercompetitive world that is emerging will look radically different and will require very different responses” (p. 36)</i>
Khan and Azmi (2005)	<i>“The hyper competitive global economy has created a new competitive landscape-one in which events change constantly and unpredictably” (p. 42)</i>
Kiessling et al. (2004)	<i>“one in which events change constantly and unpredictably” (p. 94)</i> <i>“the hypercompetitive marketplace is creating a new business climate that is forcing organizations into adopting a new business model in order to sustain viability within this highly technical arena” (p. 94-95)</i>
Kim and Kogut (1996)	<i>“Industries in which competitive advantages of innovations quickly erode are commonly called ‘Schumpeterian’ or ‘hypercompetitive’” (p. 283)</i>
King (2013)	Hypercompetition <i>“require shorter product cycles and encounter more global competition and greater uncertainty” (p. 22)</i>
Kriz et al. (2014)	<i>“Hypercompetition is demonstrated in industries characterised by turbulence, volatility and competition, and is reflected in aspects such as fluctuation in the demands of target markets” (p. 288)</i>
Kulkarni and Sivaraman (2019)	<i>“In a world which is fast changing and where competitive advantage evaporates in short periods, firms cannot rely and spend months on crafting a single long-term strategy; they need to be agile and think of many new strategic initiatives to remain competitive” (p. 1)</i>
Lahiri et al. (2008)	<i>“Hypercompetition is the extreme rivalry whereby competing firms position themselves aggressively against one another, and seek to disrupt the competitive advantages of industry leaders” (p. 314)</i>
Lee et al. (2010)	<i>“A hypercompetitive industry is ‘characterized by intense and rapid competitive moves, in which competitors must move quickly to build advantage and erode the advantage of their rivals’ (p. 1431)</i>
Li and Chuang (2001)	<i>“the hypercompetitive rivalry perspective embraces the idea that firms’ competitive advantages will be short-lived as competitors’ aggressive</i>

	<i>strategic actions frequently disrupt causal linkages between strategic conduct and firm performance” (p. 331)</i>
Liao <i>et al.</i> (2010)	<p><i>“Fast changing internet-based environment” (p. 263)</i></p> <p><i>“most challenging and competitive environments for entrepreneurs” (p. 264)</i></p> <p><i>“The dynamic, disequilibrium nature of hypercompetitive industries forces firms competing within them to launch strategic actions continuously as they pursue a stream of temporary competitive advantages” (p. 264)</i></p>
Lindskov <i>et al.</i> (2020)	<i>“‘hypercompetition’, a state of intense industry rivalry, making it impossible to sustain competitive advantages” (p. 1)</i>
Mahto <i>et al.</i> (2018)	<i>“Hypercompetition represents environments where sustainable competitive advantages become rare and decline with duration” (p. 231)</i>
Makadok (1998)	<i>“a fast-paced global marketplace in which it is increasingly difficult to sustain competitive advantages for any length of time” (p. 684)</i>
Mathews (2006)	<i>“greater levels of competition” (p. 158)</i>
McNamara <i>et al.</i> (2003)	<p><i>“Hypercompetition increases the frequency of decision making and consequently decreases the stability of markets and business performance over time. Unless there is a rather substantial improvement in the decision-making capabilities of businesses, as markets become more hypercompetitive, there will be less stability in performance across the population over time” (p. 264)</i></p> <p><i>“A hypercompetitive shift in markets leads to greater competitive pressures that, in turn, should increase the rate of decay of abnormal business returns” (p. 264)</i></p>
Nath and Newell (1998)	<i>“rapidly changing competitive rules due to changing consumer preferences, erosion of traditional barriers to entry and development of new entry barriers, and inability to maintain a sustainable competitive advantage for any length of time due to easy imitability” (p. 43)</i>
Ngamkroeckjoti and Johri (2003)	<i>“... has defined the nature of hypercompetition as a state of intense environmental change, in which flexible and innovative players enter the markets rapidly while eroding the advantages of the established players” (p. 362)</i>
Pacheco-de-Almeida (2010)	<i>“hypercompetitive industries are characterized by faster convergence of firm profits to the industry mean” (p. 1502)</i>
Palmer <i>et al.</i> (2001)	<i>“This argument portrays the business environment as having moved away from being a relatively stable set of conditions to one characterized by fast changing, highly competitive conditions. Labels such as discontinuous, postbureaucratic, and chaotic have been used to describe the current period, which for some is associated with the emergence of a postmodern organizational paradigm” (p. 191)</i>
Panigrahi (2019)	<i>“in the global market characterized by an oligopolistic market structure with sticky output price phenomenon” (p. 1)</i>

Parayre et al. (2001)	<i>"Hypercompetition thus differs from normal competition, as it involves a departure from the usual type of competitive equilibrium"</i> (p. 281)
Pavlak and Hurry (2020)	<i>"Today's contemporary business environment is very volatile"</i> (p. 362)
Priporas (2019)	<i>"globalized, dynamic, uncertain and vulnerable environment"</i> (p. 998);
Richardson (1996)	<i>"Competition has shifted to the arena of timing and know-how where vertically integrated firms gained the lead in implementing a set of process innovations known as 'quick response', designed to shorten the PLC"</i> (p. 400)
Rindova et al. (2010)	<i>"a hypercompetitive shift' characterized by a sharp increase in competitive activity, greater volatility in industry profitability, and higher rates of turnover in market share leadership"</i> (p. 1475)
Ritala (2013)	<i>"contemporary business environments in which potential competitive advantages are mostly temporary rather than sustainable"</i> (p. 1177)
Ruiz et al. (2017)	<i>"hypercompetition as an environment that is characterized by rapid and intense movements, in which competitors move quickly to develop advantages and erode rivals"</i> (p. 95) <i>"In this new era, in which rapid and intense movements characterize the environment, competitive advantages are more difficult to achieve, and sustainability becomes more difficult for firms"</i> (p. 105)
Selsky et al. (2007)	<i>"this new landscape the hyper environment. Its defining conditions are (1) the stimulation of positive feedback processes in local fields of action that (2) produce emergent structural effects in wider fields of action"</i> (p. 79)
Smith and Zeithaml (1996)	<i>"short-term advantages, whereby competitors constantly and rapidly redefine the nature of competition"</i> (p. 389)
Smith et al. (2010)	<i>"competitive advantage may increasingly depend on success in managing paradoxical strategies"</i> (p. 448)
Sternberg et al. (2019)	<i>"It is still Schumpeterian creative destruction, but ever disconcertingly faster"</i> (p. 141)
Veliyath and Fitzgerald (2000)	Hypercompetition <i>"portrays an ongoing dynamic of interactions between rivals leading to a series of temporary, sustainable advantages for one or the other"</i> (p. 62)
Volberda (1996)	<i>"In hypercompetitive environments, in which competitive change is frequent and radical, organizations may easily become adrift because flexibility requires high responsiveness (controllability) of the organization and sufficient managerial capabilities (control capability of management)"</i> (p. 360)
Vaaler and McNamara (2010)	<i>"dynamic competition is described by contemporary management researchers in terms of fast-changing technologies, markets, and organizational environments as well as shifting patterns of investment and performance"</i> (p. 273)
Walumbwa et al. (2014)	<i>"a fast-paced, whirlwind environment where decisions must be made quickly and there is little time for reflection, they need to learn how to recognize and</i>

	<i>filter new information and to apply such information quickly in order to provide effective directions to the people they manage” (p. 284)</i>
Weber (1998)	<i>“Today’s more open markets and the related proliferation of competitors from around the globe have shortened technology and product life cycles and intensified pressures to provide more customer responsive and value based market offerings” (p. 548)</i>
Wiggins and Ruefli (2005)	<i>“ ‘an environment characterized by intense and rapid competitive moves, in which competitors must move quickly to build advantage and erode the advantage of their rivals’ (D’Aveni, 1994: 217–218)” (p. 888)</i>
Young et al. (1996)	<i>“market environments characterized by extremely vigorous competitive action, in which sustainability of competitive advantage depends on the speed of action and the extent of competitive rivalry” (p. 243)</i>
Zohar and Morgan (1996)	<i>“A way to explore new insights” (p. 462)</i>

Table A2. the Hypercompetition definitions in the review sample (ordered chronologically)