



CORPORATE ENTREPRENEURSHIP: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

Corporate entrepreneurship (CE) intentions which are outcome of individuals' cognitive and affective state, plays an eminent role in triggering firms' success, growth, and profitability. Despite this recognition, the literature on the corporate entrepreneurial activities on the whole is largely fragmented and disparate. The present study builds on the fragmented work on CE to synthesize it. For this, an integrative framework on the previous studies have been developed to gain an overview of the field. The framework facilitated in guiding promising future directions in the field. The way forward on the corporate entrepreneurship is also discussed for the scholars to extend theory.

Keywords: Corporate entrepreneurship, corporate venturing, innovation, intrapreneurship

JEL Codes: O16, O31

I. INTRODUCTION

Entrepreneurship as a discipline has its roots in various other fields such as psychology, sociology and economics (Ireland et al., 2001). Corporate entrepreneurship (CE) has triggered the interest of a large number of scholars in the past owing to its significance in firms' success (Thornhill and Amit, 2001), growth (Antoncic and Hisrich, 2001; Lin and Lee, 2011), performance (Zahra, 1996; Simon et al., 2002), profitability (McDougall, Robinson and DeNisi, 1992), and strategic objectives (Winters and Murfin, 1988). This suggests that CE as a domain pursues benefits for the wider scholarly community which is not confined to entrepreneurship solely rather to the strategy as well. Corporate entrepreneurship is an emergent area, gaining interest from scholars. Considering the importance of CE and its process which includes new ventures, strategic renewal or innovation. To date, few scholars have consolidated the literature on CE to overview the role of entrepreneurial activities within the human resource management (Hayton, 2005), hospitality and tourism industry (Brizek and Khan, 2008). Besides, Phan et al. (2009) reviewed the role of knowledge-based resources in CE. The current research attempts to synthesize the literature on CE regarding entrepreneurial behaviors and activities. As the concept of CE is not confined to a single department or industry solely, the current systematic review aims to overview the domain through considering prominent research on the concept since its inception. The review is an effort to assess the domain and its contributions in the existing body of knowledge from 1985-2017. Based on the top tier entrepreneurship journals, the study delineates the definitional concerns, origin of the field and its emergence as a field of study. Systematic review of the literature facilitated the development of an integrated framework picturing the wide themes studied to date. Therefore, current study is significant not only for the academic researchers but also for practitioners. As the review allows us to gain insights on the previous research, therefore facilitated in providing future directions. These insights can extend theory development in the field to guide future researchers, in addition it is equally important for practitioners as the empirical test of the questions can help entrepreneurs to deal with the challenges. The article includes following sections. At first, the literature delineates the background and definition of the concept. Secondly, the methods section comprehensively describes the criteria of conducting a systematic literature review. Results derived from the literature are depicted in the results followed by an integrative research framework. The article concludes with the research directions and limitations.

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II. LITERATURE REVIEW

II.I. ORIGIN OF THE CONCEPT- ENTREPRENEURSHIP

History of the concept “entrepreneurship” can be traced back to the seminal work of Schumpeter (1934). ‘A person able to execute new combination in the form of a whole new process, product, market or organization’ is defined as entrepreneur (Schumpeter, 1934). He argued on the role of entrepreneurs as agents of economic growth and the contributors of innovative products and processes. Literature found variety of definitional concerns by previous scholars and researchers on the basis of context of the study. For instance, five characteristics including; team orientation, pro-activeness, ability to resolve complexities, learning capabilities and aspirations beyond capabilities have been linked to internal entrepreneurship by Stopford and Baden-Fuller (1994). While other scholar associated six attributes to categorize the term including: ownership structure, economic function, degree of entrepreneurship, size, resource-based view, consolidation approach and life cycle of a firm (Morrison, 2000). For the operational purposes, entrepreneurial processes are defined as “(a) the current or potential existence of something new, (b) the creation of a new entity due to an operational problem, (c) changing of operations due to business environmental change, (d) can be complementary to existing strategies, (e) and innovation being championed by an innovator/manager” (Brazeal and Herbert, 1999, pp.34). Stevenson, Roberts and Grousbeck (1989) defined entrepreneurship as a process that allows unique combination of resources through exploiting an opportunity with the aim of value creation. These are the criteria under which entrepreneurship has been defined in literature.

Later Sharma and Chrisman (1999, pp.17) defined entrepreneurship as a process that “encompasses acts of organizational creation, renewal, or innovation that occur within or outside an existing organization”. As the involvement of new combination can be an outcome of innovation resulted in a creation of new market or an industry (Schumpeter, 1934). Innovation though significantly contributes in an entrepreneurial act, it is an essential but not necessary condition, as renewal or organizational creation is possible without innovation. Therefore, suggests the role of innovation as imperative but not necessary in entrepreneurial activity (Sharma and Chrisman, 1999).

II.II. CORPORATE ENTREPRENEURSHIP AS A RESEARCH FIELD

Sharma and Chrisman (1999) provided the seminal work on CE by differentiating it from independent entrepreneurship. Based on their definitional framework, CE can be framed under three elements: strategic renewal, innovation and corporate venturing (Sharma and Chrisman, 1999; Guth and Ginsberg, 1990). Guth and Ginsberg (1990) delineate that CE involves two forms: i) creation of a new venture capital within current organization and ii) strategic renewal to transform an organization. The term is defined as follows:

“Corporate entrepreneurship is the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization” (Sharma and Chrisman, 1999, pp.18).

Other scholars have also defined the term with the key idea similar to the above definition. For instance, Covin and Miles (1999) defined CE as comprising of: establishment of a new business in an existing organization, and championing of a novel idea in an organizational context. Visper (1984) states CE as consists of two disjointed phenomena resulting in new business within the already established organization (by alliances or joint ventures) and transforming organizations in result of strategic renewal through resource-based allocation. Corporate venturing is sub-dividing into internal and external corporate venturing. Innovation has been devised as central in initiation of a corporate venture (CV) or in strategic renewal (Sharma and Chrisman, 1999). Venturing and innovation reflects the initiation of a whole new business within current firm (Guth and Ginsberg, 1990, pp.5). Burgelman (1983) used the term ‘diversification’ to require new combinations of resources which are either slightly related or unrelated to the existing opportunities and competencies of the firm. CE results from the entrepreneurial acts of multiple members. These activities may materialize at any level: i.e. corporate, business, project or functional level, with the underlying purpose of making improvements in the organizations’ financial and competitive positions (Zahra, 1991).

Therefore, the underlying assumption of CE is that all forms of organizations ranging from the most conservative to increasingly entrepreneurial relies on it as behavioral instinct (Barringer and Bluedorn, 1999). Barringer and Bluedorn (1999) differentiate between conservative and entrepreneurial firms in a way where the former holds the characteristic of being risk adverse, less innovative and adopting from external consequences while innovative, proactive and risk taking abilities are the characteristics associated with the later. The ongoing generation and exploitation of new knowledge enable persistent competitive advantage in CE, suggesting that CE can influence the market and organizational financial performance (Zahra, 1996). Resource based allocation holds power in the development of an entrepreneurial initiatives through managerial directions of top to middle level management (Guth and Ginsberg,

1990). The empirical findings also support the resource-based view, which states that strategic benefits are associated with the corporate or individual entrepreneurs (Morris and Kuratko, 2002). This suggests the need for deeper investigation on the CE as a discipline. Therefore, the current study aims to provide the picture of the literature concerning CE.

III. METHODOLOGY

This section comprises of the method and detail through which the systematic literature review was undertaken. In order to consolidate the literature of the field of CE, systematic literature review was adopted as a methodology for journal and article selection. The methodology was adopted with the intent to advance the field. The systematic review is considered as a transparent and organized process to replicate, this methodology is frequently adopted by business and management research scholars (Bouncken et al., 2015), hence enhances the worth of review process. Following the suggestion by tranfield et. al., (2003) a systematic review of literature was deployed that include following steps:

- Defining the research question
- Determining required characteristics of the study
- Retrieving sample of pertinent literature
- Synthesizing the literature and reporting results

III.I. SELECTION OF ARTICLES

To identify the literature related to “corporate entrepreneurship”, the keywords such as “corporate entrepreneur”, “corporate entrepreneurship”, “intrapreneurship”, corporate venture/venturing” were searched. In order to avoid any potential elimination of the research articles, all the studies related to these terms were searched for in Scopus to identify the peer reviewed journals - as they are considered as most valid (Podsakoff et al., 2005). Considering the extensive and vast range of data sources in all fields and to establish the reliability and validity of the data, Scopus was used as a search engine (Mongeon and Paul-Hus, 2016). Keywords in these three streams i.e. corporate entrepreneurship, intrapreneurship and corporate venture/venturing were searched in either the title, abstract or full text search fields in Scopus. Initial search provided 1034, 320 and 296 articles for CE, intrapreneurship and corporate venture/venturing respectively. After exclusion of book chapters, discussion papers and nonpublished papers and confining the search to articles published in English language, articles reduced to 812, 212 and 215 for CE, intrapreneurship and corporate venture/venturing respectively, covering the years from 1937 to 31st March 2022.

The results of Scopus were exported through bibliographic management software Endnote to Microsoft Excel. The data was saved in Microsoft Excel under numerous headers such as: citation information (e.g. author, document title, year, source title etc.), abstract, and keywords. Combining the data of all three terms in excel sheet resulted in 1239 articles which remained 1180 after removal of 59 duplicate articles. Based on the ABS ranking scheme, journals on the rank of 4 and 4* were shortlisted. 12 journals from various disciplines have published the work on CE, with most of the articles published in Entrepreneurship and small business management journal (Table 1, in Appendix). In order to overview the entrepreneurship research specifically in the field, 88 related articles (for years 1985-2022) in top seven entrepreneurship journals as per the ABS ranking scheme were selected for the review. These journals include; Entrepreneurship: Theory and Practice, Journal of Business Venturing, Strategic Entrepreneurship Journal, Entrepreneurship and Regional Development, International Small Business Journal, Journal of Small Business Management and Small Business Economics. The results of the review are provided in the following section.

III.II. OVERVIEW OF THE CORPORATE ENTREPRENEURSHIP RESEARCH

The number of articles exploring trends in the CE research over the year, ranging from 1985-2022 (figure 1). The research trends comprise of topics on CE, intrapreneurship and corporate venturing based on around three decades of research. The research on CE exhibits mixed trends with the peak evidences in the beginning of 1990s (i.e. 1990-95) and 2011 (i.e. 2011-2015). On the whole, rise in the number of publications, as evidenced in the trend mirrors the increased interest of researchers on the topic of CE in the top academic journals. The large percentage of these academic article were published in Journal of business venturing (43 articles), Entrepreneurship and Regional Development (13) and Entrepreneurship: Theory and Practice (11). Most of the studies among these used quantitative method (55) to analyze the data through survey or databases. Small portion of the studies carried out qualitative techniques to investigate their research questions. Remaining studies explore the field through developing propositions and conceptual models.

Figure 1: Trends in publication (1985-2022)



IV. STATE OF THE FIELD OF CORPORATE ENTREPRENEURSHIP

The state of field is classified into four major clusters, comprising of antecedents, mediators, moderators and consequences (detail given in table 2, appendix). Figure 2 provides an integrative framework of CE research.

IV.I. ANTECEDENTS OF CORPORATE ENTREPRENEURSHIP

The factors which drive corporate entrepreneurs towards creation, strategic renewal or innovative activities may take various forms. These are categorized in micro, meso and macro level determinants (figure 2). Micro level determinants are the personal values and ideals of an entrepreneur, meso-level determinants are market and industry related while macro-level determinants are based on legislation, politics and governmental factors.

IV.I. MICRO-LEVEL DETERMINANTS

CE is comprised of the collective nature of entrepreneurial acts (Van de Ven, 1993). Therefore, number of factors could influence an individual to possess entrepreneurial activities, ranging from their personality and risk perceptions, goals and motivation (Monsen, Patzelt and Saxton, 2010) to the information search (Kaish and Gilad, 1991). Knight (1989) also stated the importance of technical management background for the corporate entrepreneurs to excel in marketing, finance, manufacturing and other departments. For information acquisition, an entrepreneur must be alert of the changes in surrounding, by continuing the search for subtle sources to relate them appropriately with business opportunities (Kaish and Gilad, 1991). Micro foundations of CE intentions build upon individual behavior such as their skills and motivation (Fini et al., 2012), suggesting the importance of cognitive factors which facilitate an individual to pursue entrepreneurial behavior (Shane, Locke, and Collins, 2003). Such cognitive factors foster value formation for the firms ranging from technical skills (in case of academic entrepreneurs) and self-efficacy (in case of non-academic entrepreneurs) (Fini and Toschi, 2016). These cognitive factors can contribute to the learning outcomes of entrepreneurs (Ravasi and Turati, 2005) and the confidence therein, resulting in altered attitude such as higher levels of engagement in business (Gordon, Hamilton and Jack, 2012) on one hand and improvement in the product development performance on the other (Simon et al., 2002). Motivation to learn and make change come from the opportunity to grow and make an impact on the growth through influencing the behavioral disposition of an entrepreneur (Jarillo, 1989).

Personality characteristics are the key to understand entrepreneurial intentions as it is their personality that allows them to risk their personal asset, reputation, and time for the pursuit of exploiting business opportunities (Van Ness and Seifert, 2016). Hence risk propensity is another factor which differentiate CE form managerial role. Innovation being an essential aspect of corporate entrepreneur, suggests the need of self-efficacy (Douglas and Fitzsimmons, 2013) and risk to transform creativity into innovative outcomes (Stewart et al., 1999). Turbulent environment (i.e. environmental complexity and uncertainty), on the other hand instigates entrepreneurial behavior distinctly based on their cognitive schema. Corporate entrepreneurs with the sufficient experience to handle these complex environments could better

cope up with the need of innovative startups (Garrett and Holland, 2015), resulting in an institutionalization of entrepreneurship as a cultural norm (Kemelgor, 2002). Culture along these lines improve the overall participation of employees in risk taking and innovation, thus enable organizational competitiveness and sustainability through entrepreneurial acts (Kemelgor, 2002). All these factors contribute in an entrepreneur's behavior to perform certain actions that contribute to their entrepreneurial intentions and behaviors. Good balance of these characteristics foster value creation and opportunities for the organizational performance.

IV.II. MESO-LEVEL DETERMINANTS

Researchers' interest to study cultural setting of business strategies has augmented (Jeon et al., 2016), impacting the market and industry. It enables the need to provide some insights for the entrepreneurs regarding market dynamics (Jeon et al., 2016). For this, identification of market signals, cultural dynamics and expectations provide a clear message to entrepreneurs regarding their behavior. Perceptions of environmental dynamism based on an industrial-characteristics, for instance its growth rate, level of innovation over the year, technological life cycle (Fini et al., 2012), scope of investment, product market scope, source of financing (Gupta and Sapienza, 1992) trigger entrepreneurial behaviors. Furthermore, environmental dynamics modifies the product performance as well through introduction of new technology (Simon et al., 2002). Resource rich firms are less likely to start new ventures and bring innovation on facing dynamic environment because of the constraints to exploit the resources (Basu, Phelps and Kotha, 2011). This suggests that perceiving heterogeneity in market stimulates entrepreneurial intentions resulting in innovative ideas, product creation and renewal (Fini et al., 2012).

To decide about starting a new venture, consideration of industry dynamics and geographical location has been emphasized in literature. The decision to invest depends on the diverse nature of industry, where less diverse industry with narrow geographic scope is preferred for the early start ups (Gupta and Sapienza, 1992). For high tech industry, new startup/ creation of a project yields a high market share in succeeding years which do not guarantee the equal increase in financial performance (McDougall and Oviatt, 1996). Hence demanding the speculation of strategy not only in domestic but also at foreign market level. Regional characteristics can also determine entrepreneurial intentions through fear of failure (Stuetzer et al. 2014). As risk aversion enables entrepreneurial acts through innovation (Kemelgor, 2002), building a supportive climate to tolerate risk and supervisory support can enhance the climate for innovation (Turro, Alvarez, & Urbano, 2016). Despite supportive climate, fear of failure is a dominant liability among low income and less developed regions in an effort to develop CE (Turro et al., 2016).

IV.III. MACRO LEVEL DETERMINANTS

Degree of entrepreneurial orientation is a determinant of its national culture, as the culture provides the picture of the society at large regarding its attitude towards entrepreneurial activities (Busenitz, Gomez and Spencer, 2000). In order to cater the challenges of a specific country, entrepreneurs have to develop strategies in line with the country dynamics and based on their respective democratic and egalitarian values (Jeon et al., 2016). National culture determines the background of individuals and groups, therefore have potential to influence entrepreneurial acts at the country level through influencing the attitude of corporate individuals (Fayolle, Basso and Bouchard, 2010). National culture in form of Individualist or collectivist distinction has also been linked with entrepreneurial orientation. Individualists have been associated with the ability to explore breakthrough ideas while collectivists are linked to performance of CE (Tiessen, 1997). New ventures/startup, innovations or renewals suffer from legislations such as tax invasions in the countries. For instance, an empirical study in Switzerland suggests that the income tax rate influences the entrepreneurial behavior where low-income tax enables more new ventures. The lower purchasing power resulting from higher income taxes negatively influences the entrepreneurial intentions to start new ventures (Bergmann, 2011). Thus, based on this discussion, we propose that:

H1: Macro, meso, and micro level drivers of corporate entrepreneurship have a positive impact of firm's strategy

V. CONSEQUENCES OF CORPORATE ENTREPRENEURSHIP

Figure 2 presents the outcomes of CE research. The past studies have addressed several consequences of the phenomenon of interest, which we have categorized under micro, macro and meso-level outcomes. Micro level outcomes describe the factors where entrepreneurial acts influences individual level outcomes and benefit firm's performance and sustainability. Meso-level outcomes of CE concerned with the change in market and industry.

V.I. MICRO LEVEL OUTCOMES

Entrepreneur's training evokes learning outcomes as consequence of entrepreneurial acts and business promotion. These learning outcomes comprise of increase organizational knowledge, self-awareness, and new networks and enable individuals to engage in proactive behaviors (Byrne et al., 2016; Ali and Naeem, 2017; Ali, 2011; Ali, 2015; Ali, 2018; Ali and Bibi, 2017; Ali and Ahmad, 2014; Ali and Audi, 2016). The success of an entrepreneurial activity relies on the commitment and motivation of a management, despite the strong managerial commitment new project may fail (Shepherd, Covin and Kuratko, 2009). Failure in a new venture or start-up and the commitment to recover from them depends on high self-efficacy and social support. Social support facilitates in normalizing grief and re-commit individuals to the entrepreneurial activities through allowing them to deal with failures (Shepherd, Covin and Kuratko, 2009). CE also influences the family business through knowledge creation from top to bottom (i.e. support of top managers to educate and train juniors). Corporate ventures at the family level is beneficial to identify potential incumbents among next generations. The development of managerial and leadership skills through training and motivating positively affects the performance of business (Marchisio et al., 2010). Internal venture capital (IVC) manifests that "parent-venture un-relatedness is positively associated with venture autonomy" where the level of autonomy depends on the family business issues and decision-making autonomy (Brumana et al., 2017; Ali and Audi, 2018; Ali and Rehman, 2015).

V.II. MESO LEVEL OUTCOMES

Corporate entrepreneurship has been emerged as an antecedent of firm's performance. There is a variation in the degree to which these entrepreneurial act associate with the firm's growth and profitability (Zahra, 1993). Firms largely involve in entrepreneurial orientations with the intention to enhance firm's profitability and growth (Lin and Lee, 2011; Antoncic and Hisrich, 2001; Jarillo, 1989; McDougall and Oviatt, 1996; Ali and Senturk, 2019; Ali and Zulfqar, 2018; Ali et al., 2016; Ali et al., 2021), success in the new ventures (Thornhill and Amit, 2001) or maximize its strategic objectives (Winters and Murfin, 198). The growth of these new ventures varies on the basis of the firms' ability to network and use external resources. Fast growing firms employ relatively more external resources in comparison to small firms, as small firms hold less funds to exploit opportunities (Jarillo, 1989). The relationship between CE and firm's financial performance enables a firm to identify the need for entrepreneurial activity depending on environment (i.e. dynamic, hostile, static or hospitable) (Zahra, 1993). Firms in a dynamic growth environment emphasizes on new business creation while firms in fast tech environment focuses on pursuing technological innovations (Zahra, 1993). The focus on specialization increases the likelihood of success of the start-up and ultimately its growth (Iacobucci and Rosa, 2010; Ali et al., 2021; Ali et al., 2015; Arshad and Ali, 2016; Ashraf and Ali, 2018; Audi and Ali, 2017; Audi and Ali, 2017).

V.III. MACRO LEVEL OUTCOMES

International venturing activities determine organizational performance and profitability through the moderating role of absorptive capacity (Zhara and Hayton, 2008). These venturing activities influences the performance of firm when activities are carried out within the same industry. Absorptive capacity allow the firm to innovate and develop new products through knowledge (Zahra and George, 2002; Audi et al., 2021; Audi and Ali, 2016; Audi et al., 2021; Audi et al., 2021; Audi et al., 2021; Haider and Ali, 2015; Kaseem et al., 2019; Roussel et al., 2021; Senturk and Ali, 2021). The development of new products and process through increased knowledge and learning also increases a firm's growth. With the higher resources, knowledge and ability to exploit them through available opportunities resulted in growth of a firm (Zhara and Hayton, 2008). Based on the arguments we hypothesize that:

H2: Appropriate firms strategy has a positive impact on macro, meso, and micro level outcomes of corporate entrepreneurship.

V.IV. CHALLENGES IN CORPORATE ENTREPRENEURSHIP

Entrepreneurs, like others have to face challenge to deal with financial constraints such as limited access to financial resources (Zahra, 1993) and issues in financial returns (Adams et al., 2005). The other challenges they have to face is regarding training and education of entrepreneurs (Byrne et al., 2016). As the learning strategies and role schemas (Garrett and Holland, 2015) varies among entrepreneurs, it is hard to convince them on the importance of training education. Training of individuals benefit them in meeting entrepreneurial goals through polishing their skills (Culbertson et al., 2011), therefore holds the potential to positively influence entrepreneur's behavior. Innovation demands risk aversion to sustain competitive advantage, elimination of which can be detrimental to the entrepreneurs. Hence to provide supportive culture to innovate and accept risk is a challenging task for entrepreneurs (Turro et al., 2016; Kemelgor, 2002). Fear of failure hinders the innovational capabilities (Turro et al., 2016), hence demands social

support to mitigate the grief and continue entrepreneurial activities. Learn to deal with failure though is a challenge on its own but it provides entrepreneurs with sufficient ability.

The corporate entrepreneurs have to face extensive challenges to cope with the competitive advantages and ensure their success. The core of their success therefore lies in their ability to cope with these challenges in order to ensure their sustainability and growth in today's diverse and fast pacing environment.

VI. CORPORATE ENTREPRENEURSHIP: NEXT STEPS

The research on CE has flourished over the years. With the turn of a century, the scholars' interest to uncover and explore new directions have raised. With this increasing interest, number of researchers have explored new avenues and research questions in past. The area still holds great potential for future researchers. The directions for the future researches are discussed below.

VII. BEHAVIORAL ASPECTS AND CE INTENTIONS

Corporate entrepreneurial intentions are not only driven by the individuals' attitude and behavioral influences (Fini et al., 2012) but also through their skills, risk taking abilities (Fini and Toschi, 2016) and motivation (Shane, Locke and Collins, 2003). Education of entrepreneurs also shapes their ability to make decisions related to entrepreneurial acts which advances benefits not only for the managers but for the whole region (Gordon, Hamilton and Jack, 2012). Cognitive factors, individual attitudes and skills are dominantly associated as strongest drivers of entrepreneurs operating small level firms (e.g. Fini et al., 2012, Gordon et al., 2012). It is therefore important to identify the need for these cognitive resources as essential not only for small and medium sized firms but also for the large-scale firms. Considering the organizational structure such as mechanistic, where the chain of commands give rise to final decision regarding venture. The need of skills and behaviors which give rise to the entrepreneurial intentions are of equal importance to be explored for the large-scale firms. The need to advance research on CE underlying the importance of behavioral changes is essential to investigate their role inside the organization. Despite this potential of behavioral aspects as a predictor of entrepreneurial intentions, an extensive exploration to link the CE with behavioral aspects is still lacking. Therefore, it is an interesting area for future researchers to integrate the CE and individuals behavioral and cognitive states which influences it. For instance. How are individual's intrinsic motivation and entrepreneurial contributions associated? Does the relationship is important for only small firms? Such questions can facilitate in theory development.

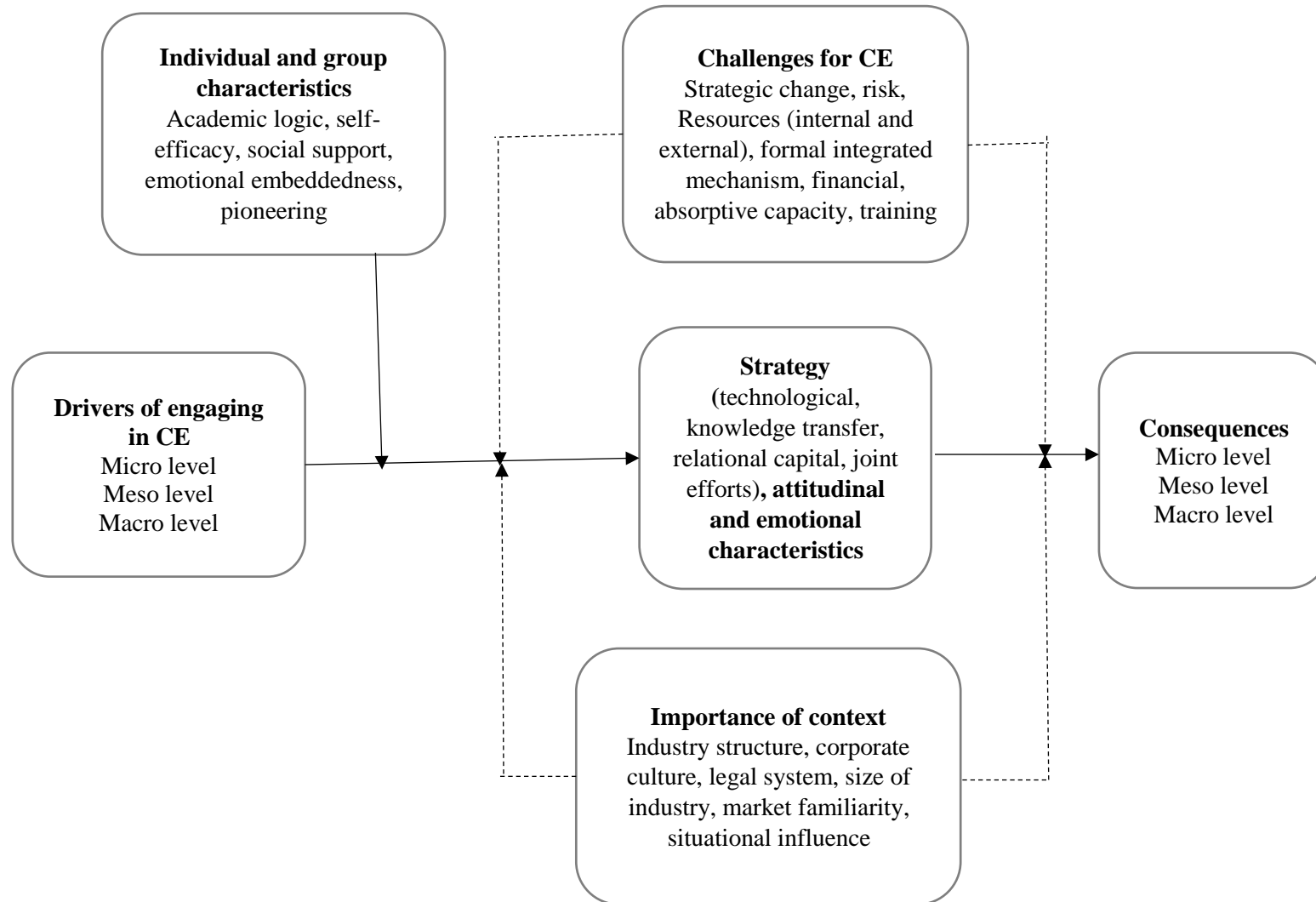
Considering the importance of learning for start-ups (MacMillan, Block and Narasimha, 1986), the role of self-reinforcing cycles have evidenced as determinant of entrepreneurial learning (Ravasi and Turati, 2005). The factors related to knowledge enhancement that envisage and contribute to the innovation process need to be identified. The role of learning and experience can be analyzed as a moderator between an individual level characteristics and CE propensity. Other questions which can be explored further are: How absorptive capacity interact with the individual characteristics in shaping entrepreneurial acts to develop new venture, innovation or strategic renewal? How training can ensure innovation in startups and strategic renewal venture? To what extent fear of failure influences an entrepreneurial intention, is it specific to the region on the basis of low per capita income (as stated by Turro, Alvarez and Urbano, 2016) or is it an outcome of behavioral or cognitive state? Based on the arguments, we may develop a proposition that:

P1: Individual level characteristics positively moderate the relationship between drivers of corporate entrepreneurship and firm's strategy.

VII.II. CORPORATE ENTREPRENEURS AND MARKET/ ENVIRONMENTAL DYNAMICS

The extant literature suggests the need to provide insights regarding market dynamics to inform entrepreneurs (Jeon et al., 2016). Dynamic environment interest entrepreneurs through allowing them to create and discover opportunities (Fini et al., 2012). These favorable perceptions on the part of environment i.e. market heterogeneity and opportunities within industry, trigger entrepreneurial orientated acts (Fini et al., 2012). For instance, the technological shifts and alteration in customers need (Zahra, Neubaum and Huse, 1997) along with fast and rapidly mutable environment (Lambkin and Day, 1989) opens the way for pioneering products in form of start-ups and new ventures. The evidence that new ventures in a dynamic and rapidly changing environment enable the success of a firm is found in a previous study conducting by Hambrick (1983). But the relationship between pioneering products and its performance and success is less explored.

Figure 2: An Integrative Framework of CE



The need to explore the relationship of pioneering product with other factors have also raised in the past (e.g. Simon et al., 2002). We identified the need to explore this area specifically in the context of small firms. How do the firms manage to sustain innovation in pioneering products? How do market dynamics in the form of changing demand of customers and suppliers influence entrepreneurial firms? Either the functioning of small firms to tackle the challenges vary from the large and complex firms? Does the strategy adopted by corporate entrepreneurs varies from independent entrepreneurs in highly uncertainty environments? There is a considerable need to inform environmental characteristics through comparatively analyses of the both. (i.e. independent and corporate entrepreneurs). Highly innovative firms with the potential to manage innovation in highly dynamic industries feel confident to start new ventures (Fini et al., 2012; Audi et al., 2022). In order to enable sustainability in their entrepreneurial behaviors, firms need to build the knowledge base of the market dynamics. In addition, to further extend their ventures, knowledge regarding unfamiliar markets is also a key to progress (Covin et al., 2015). The literature poses a great deal of attention on the need to learn market dynamics for starting a new venture, while giving little attention to explore it in the context of process or product renewal stage. Strategic renewal, being one of the essential elements of CE hence gained limited attention, considering the need to explore it further. How do entrepreneurs manage to increase their market knowledge base? To what extent does entrepreneurs need to get familiarity in order to corroborate and sustain the changes and transformations in markets and industry dynamics? Under what conditions strategy renewal will be a better option and under what conditions entrepreneurs should go for new ventures and innovations? How much weight should be attached to market familiarity by an entrepreneur? Do smaller firms need to develop distinct strategy for gaining familiarity than large firms? The research on these issues will allow to enhance understanding of entrepreneurs. Based on the arguments provided, it is fair to propose that:

P2: Environmental dynamics such as industry structure, legal system, market forces positively moderate the relationship between drivers of corporate entrepreneurship and firm's strategy

P3: Environmental dynamics such as industry structure, legal system, market forces positively moderate the relationship between firm's strategy and consequences of corporates entrepreneurship

VI.III. CORPORATE ENTREPRENEURS AND CHALLENGES

One of the major challenges that may obstruct entrepreneurial orientation within an economy is the limited access to finance (Turro et al., 2014; Phan et al., 2009; Zahra, 1996). Limited financial equity is a central concern specifically for the underdeveloped financial sectors. Nature of ownership i.e. state control or privatized owned state differently influence entrepreneurial propensity (Zahra, 1993). Future studies could seek to inform the practitioners operating in such distinct sectors. The policy implications of strategies to educate entrepreneurs can be a next step to provide them with sufficient understanding to develop strategies while start new ventures or renew it. For instance, how would state control or privatized ownership hinders the entrepreneurial activities? How will corporate entrepreneurs formulate strategies to enhance their competitive advantage and legitimacy under privatized ownership? How governmental policies can facilitate the initiation of new ventures and innovations in uncertainty? These questions can be addressed with the help of agency theory. Thus, we propose that:

P4: Challenges such as strategic risks, financial structure, and absorptive capacity negatively moderate the relationship between drivers of corporate entrepreneurship and firm's strategy.

P5: Challenges such as strategic risks, financial structure, and absorptive capacity negatively moderate the relationship between firm's strategy and outcomes of corporate entrepreneurhsip.

VI.IV. CORPORATE ENTREPRENEURS AND NETWORKS

Entrepreneurship intentions and behavior rely on social capital (Fini and Toschi, 2016; Baron and Markman, 2003) and personal ties (Fini et al., 2012). The number of studies have begun to investigate the role of individual networks including; centrality, frequency of interactions and the extent of relations on the individual's motivation, perception of environment and external support (Fini et al., 2012). Despite the importance of networks, small set of studies have examined its relationship. Hence the identification of intra-organizational and social strategic networks could benefit not only in creation of new venture but can also facilitate them in sustaining competitive advantage (Butler and Hansen, 1991).

We posit that further clarity in the relationships can be found through exploring the indirect effect of networks to open a black box. 40% of the exchanges results from social ties (Ellis, 2011), this demands further empirical attention from future researchers. How much does the social ties and networks matter? Does the variety of social ties largely impact entrepreneurial success and ongoing competitive advantage for SME's only? What are the challenges for entrepreneurs in developing ties in turbulent and fast pacing environment? These issues can be further analyzed through borrowing the construct from strategic management i.e. inter-organizational networks (Powell et al., 2005),

to comprehend that how third party influences the entrepreneurial success. Literature has largely drawn on the network theory to understand the network influence on performance outcomes (McIntyre and Srinivasan, 2017). Similarly, future studies can use network theory to explore these research questions.

VII. CONCLUSION

The paper aimed to consolidate the concept of corporate entrepreneurship from literature review's standpoint, clearly highlighting the keys areas of research in the field so far, and further exploring the potential of research in the nascent field of corporate entrepreneurship. Conducting a systematic review of literature, we have summarized the overall trend of publication in the area of CE. Further, we have also tried to capture the future research direction by providing three hypotheses and five propositions that can be explored further on the basis of empirical data. Overall, the field of CE has grown in its importance and further environmental challenges are pushing the firms towards establish entrepreneurial mindset.

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APPENDIX

Table 1. Discipline	Frequency
1. General management, ethics and social responsibility	
Academy of Management Journal	3
Administrative Science Quarterly	4
Journal of Management	3
Journal of Management Studies	7
2. Entrepreneurship and small business management	
Entrepreneurship: Theory and Practice	13
Journal of Business Venturing	55
Strategic Entrepreneurship Journal	5
3. Innovation	
Journal of Product Innovation Management	3
Research policy	5
4. Strategy	
Strategic Management Journal	8
5. Finance	
Journal of Corporate Finance	2
Journal of Financial Intermediation	2
Journal of Money, Credit and Banking	2
6. Economics	
Quarterly Journal of Economics	2
7. HRM and employee studies	
Human Resource Management	4
8. International business and area studies	
Journal of World Business	3
9. Operations research and management science	
Management Science	2
10. Organization Studies	
Organization Science	6
11. Regional studies, planning and environment	
Environment and Planning A	2
12. Sector studies	
Tourism Management	2

Table 2. Extracted from literature

ID	Author	Year	Antecedent	Consequences	Mediator	Moderator
10	Abetti	1997	culture and organizational context	success of CV		
27	Amit et al.	1995	opportunity cost	entrepreneurial activity		
70	Begley & Boyd	1987	psychological attributes	Firm performance		
72	Bell et al.	2012	institutions and corporate governance	Foreign IPO success		
75	Benson et al.	2015	Camouflage	greater IPO activity, market concentration		
77	Bergmann	2011	culture and tax	new business activity		
87	Biniari	2012	entrepreneurial affect	social embeddedness		emotional embeddedness (envy)
91	Birley & Norburn	1987	identified characteristics of leaders	intra industry financial performance		
128	Byrne et al.	2016	Action learning approach	learning outcomes for entrepreneur		training, situational influence
135	Carland et al.	1991	gender	preference for innovation		
182	Corbett & Hmieleski	2007	Role schema	Event schema		corporate context
183	Corbett et al.	2007	Termination scripts: (1) undisciplined termination, (2) strategic termination, and (3) innovation drift.	org learning		
250	Fayolle et al	2010	national culture	E orientation/ performance		industry and corporate culture
258	Filatotchev et al	1999	incentives and constraints in country	development of corporate entrepreneurship		

ID	Author	Year	Antecedent	Consequences	Mediator	Moderator
259	Fini et al.	2012	Individual behavior, Perceived environmental support/ dynamism	corporate entrepreneurial intention (CEI)	Attitude toward entrepreneurial behavior	
260	Fini, & Toschi.	2016	Individual skills, Psychological skills, Perceived environmental support	Corporate Entrepreneurial Intention (CEI)		Academic logic
282	Garrett & Holland	2015	Environmental uncertainty/complexity	Opportunity exploitation.		
304	Gordon et al.	2012	Entrepreneurship education	Factors growth and development of SME		
316	Gupta & Sapienza	1992	Industry diversity and geographic scope	investment in venture capital		
369	Jarillo	1989	Ability and willingness to use external resources	Sustainable growth		
372	Jeon et al.	2016	Demographics (age, education, Egalitarianism & Democratization)	Consumer patronage		
375	Johannisson et al.	1994	CE	Firm performance/ network activity		
382	Kaish & Gilad	1991	Information-seeking behavior	Entrepreneurship behavior		
400	Kemelgor	2002	Societal (cultural) Factors	1)Number of Patents, 2)no of new innovation, 3) no of sales	Degree of Corporate Entrepreneurship	
409	Knight	1989	General management and technical problems	Financing and production		
478	Marchisio et al.	2010	CV	Family cohesion		Financial impact, Non-active family members'
484	Marvel et al.	2007	Five conditions	Support corporate entrepreneurship		

ID	Author	Year	Antecedent	Consequences	Mediator	Moderator
493	Mazzanti et al.	2011	Embeddedness	Entrepreneurial decision		
494	McDougall & Oviatt	1996	Technology-based new ventures, internalization	Performance		Strategic change
495	McDougall et al.	1992	New venture strategy/ origin	Profitability and growth		Industry structure
514	Monsen et al.	2010	Profit sharing	New corporate venture		Risk, extra effort
565	Patterson & Mavin	2009	Quit corporate career	Self-employment		
602	Ravasi & Turati	2005	Learning cycles	Entrepreneurial innovation		
642	Schenkel et al.	2009	Cognitive need for closure (NfC)	Entrepreneurial judgment formation		
654	Sexton & Bowman	1985	Psychological traits	Decision to enter entrepreneurial occupations/ entrepreneur life style		
658	Shepherd et al.	2009	Project failure	Recovery (learning from failure, commitment to entrepreneurial projects)	Grief	Self-efficacy, social support
665	Siegel et al.	1988	Corporate venture capital (CVC)	Success		
667	Simon et al.	2002	Commitment and adaptability	New product Performance		Pioneering
690	Stewart et al.	1999	Psychological preferences (motivation, need for achievement)	Venture performance of entrepreneurs/ corporate managers		
701	Sykes & Block	1989	Impact of established practices	New ventures		
702	Sykes & Dunham	1995	New businesses	Risk management		
724	Tiessen	1997	National culture (individualist and collectivist orientations)	Entrepreneurship		

ID	Author	Year	Antecedent	Consequences	Mediator	Moderator
732	Tsai et al.	1991	Environment and strategy	CV success		
735	Turro et al.	2016	Internal (opportunity, social capital) and environmental (fear of failure, education) factors	Intrapreneurship		
749	Van Ness & Seifert	2016	Work ethic, positive affect and personality	Entrepreneurial propensity		
782	Winters & Murfin	1988	Creation of a formal venture development	Maximize the strategic objectives.		
803	Zahra, S. A.	1996	CV	Performance (growth, sales, ROE, satisfaction with per).	Technology strategy (external R&D, patenting, no of new products, R&D spending)	
817	Adachi & Hisada	2017	Gender gap	Startup activities		
832	Antoncic & Hisrich	2001	Intrapreneurship	Growth		
878	Douglas & Fitzsimmons	2013	Self-efficacy	Entrepreneurial and intrapreneurial intentions		
916	Iacobucci & Rosa	2010	Business group formation	Growth		
966	Pearce & Robbins	1994	Entrepreneurial recovery strategies	Turnarounds		
1037	Basu & Kotha	2011	Diverse venturing experience	CVC activity		
1038	Basu et al.	2016	External venturing units	Valuable knowledge generation		
1045	Bierwerth et al.	2015	CE (creation, innovation, renewal)	Performance		Size, industry, country of origin
1047	Biniari et al.	2015	CV	CV logic		

ID	Author	Year	Antecedent	Consequences	Mediator	Moderator
1053	Brumana et al.	2017	Ownership development	Venture autonomy	Parent-venture un relatedness	Legal system, external board members, Family-CEO tenure
1055	Burgers et al.	2009	Structural differentiation	CV		Formal/informal integration mechanism
1069	Covin et al.	2015	Internal CV evaluation;	Internal CV performance		Market familiarity
1077	Desarbo et al.	1987	Managers' decision (experienced or not)	Evaluation of venture		
1106	Hatfield & Pearce	1994	Strategic intent	Success of joint venture		
1127	Kuratko et al.	2015	CE	Entrepreneurial behavior		
1135	Lin & Lee	2011	CV investment	growth		
1139	Macmillan at al.	1986	Role of experience, learning, failure	Avoid obstacle initiation of acquisition, joint venturing, or corporate start-up activities		
1140	MacMillan & Day	1987	Aggressive entry	New industry market		
1146	McGrath, R. G.	1995	Internal and external marketplace, competitive arena	Venture performance		
1148	McGrath et al.	1994	Venturing	Routines		
1149	McNally	1994	Number and size of investments, investment type, Location of investees, Fund performance	Characteristics of funds		
1161	Minola et al.	2016	Motivation	CV		Family development

ID	Author	Year	Antecedent	Consequences	Mediator	Moderator
1170	Park & Dongcheol	1997	Abnormal returns	Performance of joint ventures		
1188	Schildt et al.	2005	Corporate venturing mode and technological relatedness	Explorative learning		
1197	Sorrentino & Williams	1995	Relatedness	Venture performance, promotional effort, product quality		Intangible assets; aggressiveness of entry
1206	Thorgren et al.	2012	Partner fit	CE	Knowledge transfer, interdependence, relational capital, joint combinatory efforts	
1207	Thornhill & Amit	2001	Parent venture	Venture success		
1234	Yiu, & Lau	2008	Corporate entrepreneurial activities	Performance		
1235	Zahra, S. A.	1993	Firm's external environment, CE	Creation and innovation; financial performance/ growth		
1236	Zahra, S. A.	1995	Entrepreneurial behavior	Financial performance		
1238	Zahra, Hayton	2008	International venturing activities	Performance benefits		Absorptive capacity