

## **CORPORATE ENTREPRENEURSHIP: A REVIEW OF CONCEPTUAL AND THEORITICAL ISSUES**

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### **ABSTRACT**

The objective of this study is to review studies carried out on corporate entrepreneurship, to explore the concept/theories of organizational change in entrepreneurial organizations and to highlight important of such in research with a view to capture the conceptual and theoretical issues. Content analysis was used to analyze the reviewed concept and theories of corporate entrepreneurship for better understanding. The study reveals that in each theoretical perspective, the entrepreneur has a role to play. Organizational ecology perspective, the role of the entrepreneur is to fit the organization to its environment. In the evolutionary perspective, it is to find solutions to specific problems and direct organizational resources in such a way that the firm will not be selected out. In the continuous change perspective, the role of the entrepreneur is to make sense of his/her environment and redirect individuals as well as to enact change in the environment. The role of the entrepreneurship the cognitive perspective is to understand why individuals do the things they do, to create cultures conducive to change, and to provide opportunities for individuals to acquire knowledge and training. In conclusion the study has reviewed the theories of organizational change because corporate entrepreneurship is a process of organizational change and it applies to all levels.

**KEYWORDS:** Corporate Entrepreneurship, Organizational Change, Innovation and Strategy

### **INTRODUCTION**

#### **Background Context for the Research**

The corporate entrepreneur is the very person who cultivates an idea, a venture, or an enterprise, where they accept and assume responsibility for all risks, as well as the outcome of the venture (Ariail, Quinet and Thacker, 2010). Corporate entrepreneurship is about identifying, weighing up, choosing, and then organizing selected entrepreneurial opportunities. The resulting activities are entrepreneurial (Tajeddini and Mueller, 2011) and can give an organization a competitive advantage (Porter, 1985). Corporate entrepreneurship is needed to protect existing market share and also to grow the business. It is needed for survival (Pinchot, 2000; Kaplan, 2012). All organizations over time will need to innovate, create new products and services, or enter new markets (Kanter, 1987). In fact, it is argued that corporations must innovate or face inevitable disruption, and possible destruction (Ariail et al, 2010).

Schumpeter (1934, 2008); discusses the process of creative destruction where new products and services are created, resulting in the disruption and destruction of existing products and services. Entrepreneurs that focus on innovation and seek to create new products, services, and improved systems are a key element of innovation. Schumpeter (1934, 2008) firmly states that the corporate entrepreneur must reform or revolutionize systems and production to evolve the organization and disrupt the status quo.

Entrepreneurial programs can be crafted within organizations to create a culture of innovation that will create new processes, products or services. Such entrepreneurial programs are in fact a competitive strategy that can create new unique selling points and thereby give the organization a competitive edge (Bernier, 2013). There are potential downsides to corporate entrepreneurship, however, that must be given careful consideration. By its nature, corporate entrepreneurship inspires individuals to create new businesses (Ariail et al, 2010). Should a potential entrepreneur not be identified, the individual may leave the organization and become a competitor. Entrepreneurial programs therefore have the risk of creating new competitors for an organization.

Several gaps in research to date are evident and it is clear that research carried out on corporate entrepreneurship to date is lacking a detailed reviewed analysis of the entrepreneurial process and theories especially in the area of organizational change, more precisely the cognitive theory of corporate entrepreneurship (Hornsby, Naffziger, Kuratko and Montagno, 1993). Existing research is somewhat limited to management and owner managers (Clargo and Tunstall, 2011). There have been repeated calls for further research into the process of corporate entrepreneurship (Gartner, 1998; Gartner, 1989; Brown, & Eisenhardt, 1998)) and how organizations implement corporate entrepreneurship and behave entrepreneurially (Sharma and Chrisman, 1999). The research intends to review related literatures in the field of corporate entrepreneurship so as to suggest areas that need more investigation and research.

The main objective of this study is to review studies carried out on corporate entrepreneurship, to explore the concept/theories of organizational change in entrepreneurial organizations and to highlight important of such in research with a view to capture the conceptual and theoretical issues. Content analysis was used to analyze the reviewed literatures in the context of conceptual and theoretical perspectives of corporate entrepreneurship as that will provide a better understanding to corporate entrepreneurship.

The review is not completely inclusive of all the conceptual and theoretical perspectives. Rather, it highlights those perspectives of organizational change (organizational ecology, evolutionary, continuous change, and cognitive theory) corporate entrepreneurship strategy and innovation wherein the basis for change. Change is transformation through technology or product innovation and innovation is a primary way by which organizational change occurs (Burgelman, 1991; Eisenhardt & Tabrizi, 1995).

## **LITERATURE REVIEW**

### **The Nature of Corporate Entrepreneurship, Definition and Domain**

Schumpeter (1883 – 1950), an Austrian-American economist and political scientist, the first economist who determined entrepreneurs as main agents of economic growth which create new products, find and develop new methods of production, and allocate other innovations to stimulate economic evolution. Schumpeter (1934) introduced the term of "creative destruction" in economics. According to the "creative destruction" the entrepreneurs continually displace, substitute or destroy existing products or methods of production with the new ones. The positive outcomes of these processes are the opportunity to create new technologies and new products to satisfy the changes in customers' needs, and improvement of overall economic activities. Corporate entrepreneurship according to, Zahra, (1991) is a set of activities that enhance a company's ability to innovate, take a risk, and seize the opportunities that are allocated in the market. Corporate entrepreneurship is targeted on new business establishment, new market allocation with further business pursuing, or both. Robert & Burgelman (1983) refers corporate entrepreneurship to the company's activity in

diversification through internal development. The process of such diversification involves new resources to help the firm to extend its activity in the new spheres of opportunities. Such diversification through internal resources development represents the process of individual entrepreneurship in the corporate one. Thus, corporate entrepreneurship is a result of combining the entrepreneurial activities of multiple participants.

Corporate Entrepreneurship is the “process whereby an individual or groups of individual, in association with an existing organization, create new organization or instigate renewal or innovation within that organization” Sharma & Chrisman, 1999, as cited in Praveen, (2000, p.30). Corporate entrepreneurship can also be seen as the “process by which teams within an established company conceive, faster, launch and manage a new business that is distinct from the parent company, but leverages the parent’s assets, market position, capabilities or other resources. It differs from corporate venture capital, which predominantly pursues financial investment in external companies. Katz and Shepherd, (2004); Ireland et al, (2004), sees the concept of corporate entrepreneurship as a “process of pursuing entrepreneurial opportunities to innovate, by employees regardless of their level and nature of currently available resources. They believe that positive outcomes for firms are more likely to achieve with an entrepreneurial mind-set.

Corporate entrepreneurship can also be seen as the “efforts of promoting innovation from an internal organizational perspective, through the assessment of potential new opportunities, alignment of resources, exploitation and commercialization of the said opportunities. Corporate entrepreneurship activities can be internally or externally oriented (Ireland et al 2004). Internal activities are typified as the development within a large organization of internal markets and relatively small and independent units designed to create internal test- markets or expand improved or innovative staff services, technologies, or production methods within the organization. These activities may cover product, process, and administrative innovations at various levels of the firm (Zahra, 1991). Katz and Shepherd, (2004) has proposed that internal entrepreneurship expresses itself in a variety of modes on strategies - administrative (management of research and development), opportunistic (search and exploitation), imitative (internalization of an external development, technical or organizational), acquisitive (acquisitions and mergers, divestments) and incubative (formation of semi-autonomous units within existing organizations). External entrepreneurship is seen as the first phenomenon that consists of the process of combining resources dispersed in the environment by individual entrepreneurs with his or her own unique resources to create a new resource combination independent of all others (Kuratko, 2004). External efforts entail mergers, joint ventures, corporate venture, venture nurturing, venture spin-off and others. For instance the former First City Monument Bank so as to avoid distressed. The researcher sees the domain of corporate Entrepreneurship as creative activities of the managers that keep the organization’s business going.

From the foregoing, the researcher is of the view that corporate Entrepreneurship is sharing responsibilities which subsequently involve Innovation, planning and strategizing to develop a good business relationship.

### **Corporate Entrepreneurship Strategy**

Firms choose from among several strategic options for use at the corporate level when deciding how to respond to the realities (i.e. threats and opportunities) brought forth by external environmental triggers (Boeker, 1997). In each instance, the purpose of a selected option is to help the firm transform or adapt to increase its likelihood of competitive success. In general, transformational models focus on metamorphic changes in organizations that evolve through a series of fundamentally different periods or stages. Some writing about organizational transformation postulate a predictable set of developmental stages. Others, however, argue the existence of non-deterministic patterns in organizational transformations

(Fillee & Aldag, 1980; Mintzberg & Waters, 1982).

The choice of the firm's strategy or strategies is a critical organizational decision – a decision that has a major influence on organizational performance (Borch et al., 1999). Strategies available as strategic adaptation options include diversification (Davis & Duhaime, 1992, & Kim, 1997), acquisition (Ireland, 1994), restructuring (Ireland, 1994), turnaround (Robbins & Pearce, 1991), and cooperative arrangements (e.g. strategic alliances, joint ventures) (Dyer & Singh, 1998). Each of these strategies (e.g. diversification, acquisition and so forth) can be an appropriate adaptation mechanism to use to meet the challenges posed by external environmental conditions. Consistent with the arguments presented herein, a strategy for corporate entrepreneurship is another option that a firm can choose to pursue once triggers from the external environment denote the need for organizational change and strategic adaptation (Kuratko, Ireland & Hornsby, 2001).

A strategy for corporate entrepreneurship is a set of commitments and actions that is framed around entrepreneurial behavior and innovation in order to develop current and future competitive advantages that are intended to lead to competitive success. The choice of using a strategy for corporate entrepreneurship as a primary means of strategic adaptation reflects the firm's decision to seek competitive advantage principally through innovation and entrepreneurial behavior on a sustained basis (Russell, 1999). Increasingly environmental triggers are interpreted by today's decision makers as ones that call for the formation and use of corporate entrepreneurship as the core of the firm's efforts to adapt strategically. Lumpkin and Dess (1996) suggested that organizations facing a rapidly changing, faster-paced competitive environment might be best served by implementing corporate entrepreneurship actions as an adaptation mechanism. Labels have been attached to organizations relying on entrepreneurship actions as the core of their commitments, decisions, and strategies. Examples of these labels include entrepreneurial firms (Mintzberg, 1973), prospectors (Miles & Snow, 1978), and adaptive, innovative, and impulsive firms (Miller & Friesen, 1980a). The operational essence of using a strategy for corporate entrepreneurship as the foundation of a firm's adaptation responses is the call for an organization's employees to rely on entrepreneurial behavior as the source of adjustments required to assure current and future marketplace success. In this context, corporate entrepreneurship strategy encompasses the full set of commitments, decisions, and entrepreneurial behavior required for the firm to improve the likelihood of achieving current and future competitive success. As noted previously, when using corporate entrepreneurship as the source of strategic adaptation to the realities of a firm's external environment, the intention is to rely on innovation as the foundation for creating new businesses or reconfiguring existing ones. In general, corporate entrepreneurship calls for firms to innovate boldly and regularly and to be willing to accept considerable, though reasonable levels of risk in doing so (Miller & Friesen, 1982). To Sykes and Block (1989), reasonable risks are "affordable" to the organization in terms of its current and future viability as an operating entity. Resulting from successful use of corporate entrepreneurship firms may deliberately reposition themselves within their environment, including the main arena(s) in which they compete (Covin & Slevin, 1991). For success to be recorded by using corporate entrepreneurship, those within the firm must be aware of it and encouraged and nurtured in their use of it. Without awareness, encouragement, and nurturing, the entrepreneurial behavior that is linked to use of corporate entrepreneurship will not surface or be used consistently throughout the firm (Kuratko et al., 2001).

Furthermore, an awareness of what corporate entrepreneurship calls for in terms of behavior on the part of individuals permits an analysis of choices. Typically, organizational members compare and evaluate the opportunity cost of engaging in entrepreneurial behavior with those of either not doing so or displaying still other behaviors. Lower

opportunity costs, relative to the costs of other behavior, engender a commitment to engaging in entrepreneurial behavior (Amit, Mueller & Cockburn, 1995; Shane & Venkataraman, 2000). In comprehensive arguments, Burgelman (1983, 1984) argued that organizational innovation as well as other strategic activities surface through two models – induced strategic behavior and autonomous strategic behavior. Of the two models, induced strategic behavior occurs more frequently in organizations. Comparatively, induced strategic behavior captures formal entrepreneurial behavior while autonomous strategic behavior is concerned with entrepreneurial behavior that surfaces informally in the firm. The more resource rich is the firm the greater is the likelihood that autonomous strategic behavior will emerge. Burgelman's (1983) induced strategic behavior approach is a top-down process whereby the firm's strategy and structure provide the context within which entrepreneurial behavior is elicited and supported. The responsibility for establishing a strategy and forming a structure that can induce entrepreneurial behavior rests with top-level managers. Induced strategic or entrepreneurial behavior is shaped by the firm's structural context. Thus, in this instance, structure follows strategy.

### **Innovation**

Various definitions have been developed to explain innovation, and as a result the term has gained greater ambiguity (Kuratko, Ireland 2004). Examination of the innovation literature confirms that there is enormous diversity in views and approaches to what actually constitutes innovative activity, and also highlights some of the confusion that exists within the discipline itself. Confusion seems to stem from the fact that many definitions introduce peripheral concepts, which may deflect attention from the core components of innovation and make its application difficult. For example, Gurteen (1998) introduce paradigmatic change and creative thinking. While Rogers (1995) concentrates on perception, Henderson et al. (1996) feature invention, and Wehrich (1990) and Zahra (1995) put forward definitions that highlight marketing and entrepreneurial philosophies.

A number of process models have been developed in the literature suggesting that innovation consists of a variety of different phases: idea generation, research design and development, prototype production, manufacturing, marketing and sales (Dooley and O'Sullivan, 2001; Knox, 2002). However, theorists have suggested that there is more to innovation than the process (Amabile, 1996; Couger, 1995). Considerations must also be given to the product so that organizations can evaluate their success (or failure) (Tidd et al., 2001; and von Stamm, 2003). In fact, the most important, as well as consistent factors to emanate from the innovation literature focuses on the product; that is, new ideas and the potential for improvement through change. New ideas can be placed on a novelty continuum. Lumpkin and Dess, (1996) suggests that the least novel and risky form of innovation is to incrementally change the style of a product. This tends to be predictable and the effect on the market is likely to be slight. In contrast, at the other end of the continuum, major innovation is held to radically influence the market place.

In addition, major innovations have the potential to create new markets and new industries. This in turn can place considerable strain on all the functional areas within an organization, and can be highly risky and uncertain (Brown, 1992; von Stamm, 2003). Between these two points in the continuum, Lumpkin and Dess, (1996) specifies four other types of innovation: product line extensions, product improvements, new products for the current market, and new products for another established market in which the vendor is currently not involved. Consequently, innovation can be defined as a process that provides added value and a degree of novelty to the organization and its suppliers and customers through the development of new procedures, solutions, products and services as well as new methods of commercialization (Covin and Slevin, 1991; Lumpkin and Dess, 1996 Knox, 2002)

### **Corporate Entrepreneurship and innovation**

In this brief review, corporate entrepreneurship and innovation have been defined. What has become clear, however, is that without the presence of some form of entrepreneurial activity to exploit opportunities as they arise within organizations, innovation remains little more than an aspiration, rather than a tangible destination (Pinchot, 1985; Amit et al. 1993, p. 816; Zahra, 1995). Therefore, state that the two concepts must be linked together. In a business setting, it appears that the process of endowing resources with new wealth-production capacity [innovation] is central to any conceptualization of entrepreneurship.

A number of authors have argued that there are different types of innovation. For example, Zahra, (2002, p. 1268) suggest that innovation can range from incremental to frontier: BMW may be viewed as a frontier innovator, choosing not to introduce a new model until it is very different from the previous models and is at the leading edge of the technology frontier. In comparison, Japanese automobile manufacturers may be viewed as incremental innovators, frequently introducing new models that are only slightly different from the previous ones and do not incorporate all possible technological advances. Kirton (2003) believes that people solve problems and develop solutions in different ways. He suggests a continuum of thinking styles ranging from adaption to innovation. Many new innovations have been created through adaption. For example, the word processor is a combination of three existing instruments: the typewriter, the computer and a display screen (Ireland, 2004). Likewise, the internet has been developed from the computer and the telephone. Another form of adaption is what Ireland, (2004) calls “creative imitation”: Creative imitation is a contradiction in terms. What is “creative” must surely be “original.” If there is one thing imitation is not, it is being “original.” Yet the term fits, it describes a strategy which is “imitation” in its substance. Here, the entrepreneur does something somebody else has already done. It is “creative” because the entrepreneur who applies this strategy understands what the innovation represents better than the people who made the innovation.

### **Theoretical Framework**

Guth and Ginsberg (1990) described corporate entrepreneurship as comprising two types of change: 1. At birth of the new business within existing organization, that is (internal innovation or venturing and (2). The transformation of organization through strategic renewal. Corporate venturing is an activity which seeks to generate new business for the corporation in which it resides through the establishment of external or internal ventures (van Hippeli, 1977, p. 163). The second change which is transformation through strategic renewal Guth & Ginsberg (1990) “is to revitalization of the company’s operation, by changing the scope of its business, its competitive approach or both”. Stopford and Baden-Fuller (1994) found that troubled firms in hostile environment can adopt policies fostering entrepreneurship, thereby strategically renewing their organizations and significantly impacting the industry rules and structures. Another form of change according to Covin and Miles (1999) is the entrepreneurial philosophy. An entrepreneurial philosophy permeates the organization entire outlooks and operations. Organizations that seek to develop entrepreneurship philosophy as a way to permanently transform their business rather than to regularly implement some change ideas. From the three types of corporate entrepreneurship listed above innovation plays a critical role. Most researchers centred their argument and accept that all types of entrepreneurship are based on innovation that requires changes in the pattern of resource deployment and creation of the new capabilities (Stopford and Baden-Fuller 1994, p. 522). Some researchers has the view on which of the constructs should come first? Is it corporate entrepreneurship or innovation? From their point of view corporate entrepreneurship is the automobile vehicle of change in an organization, as it allows the organization to get from point A to

B, (a desired future state). Corporate entrepreneurship allows the organization to get to some desired future state. The type of vehicle you choose is dependent on the destination/needs/desire, the same applies for change in an organization or corporate entrepreneurship. Despite the type of vehicle you choose, you still need a driver of the change (Tienne, 2000). Without innovation, corporate entrepreneurship would be analogous to a beautiful automobile without a driver- attractive, appealing, and useless to move in the desired direction.

### **Theory of Organizational Ecology**

The theory of organizational Ecology has been defined as “sociology’s quantitative study of organization vital rates (founding, growth, and mortality) that emphasizes the force of external selection over internal adaptation” (von wilteloostuijn, 2000) this perspective “argue that organizational survival is determined by environmental selection, while managers develop and implement strategies, these strategies do not directly success. Instead, they are one of many sources of random variation that will be selected for, or against by the environment” (tsai, Macmillan & law 1991). Researches such as (Carroll, 1998) contend that the organizational econology movement began with Hannan and Freeman’s (1977) revolutionary article on the population ecology of organization, the earlier work by campbell (1969) and on impact on theoretical development. According to Campbell (1969), three generic processes occur as organizations struggle over scarce resources variation, selection and retention. In the organizational ecology perspective, the process of variation occurs at the birth of the organizations. However, organizational ecology is primarily a selection model of organization change, wherein selection processes are the result of a hit between organization and environment (Carroll, 1988).

Moreover, the theory of organizational ecology can be traced to Hawley (1950, 1968) who questioned why there are so many kinds of organization and contends that the diversity of organizational forms is isomorphic to the diversity of environment, and population studied must have unitary character. Other major component of organizational ecology ( O E) theory include the unitary characteristics of population wherein members of a given population are affected similarly by changes in environment (Hawley, 1968) and the inability of organization to change form at least quickly or routinely (Hannan & Freeman,1988). Others are competitive interdependence (Hawley, 1988) a long term perspective (Dess & Beardi 1984). The current issue in organizational ecology that is whether the theory should evolve to include other concepts or whether it is sufficient as it stands and this has also be a subject of debate.

### **Evolutionary Theory**

Evolutionary theory provides a generic framework for understanding social change by focusing on process of variation, selection, retention and struggle (Aldrich 1999). Campbell (1969) the first to bring evolutionary theory to the social science, explains the theory. “It is technology, language, social organization and culture that are evolving,” through processes of variation, selection and retention. He goes on to point out the importance of evolutionary theory to our understanding of innovation. Campbell’s work was followed by Nelson & Winter’s (1982) application of evolutionary theory to economic change. They were primarily concerned “with the dynamic process by which firm behavior patterns and market outcomes are jointly determine over time.” Their view of evolutionary theory (E T) was designed as a major reconstruction of orthodox Economics. Evolutionary theory and ecology theory are closely related, there are viewed as having distinct DNA strain – more of a “cousin.” Evolutionary theory borrows from population ecology no more than if borrows from other theoretical perspective (e.g. organizational learning institutional theory and resource dependence theory). Van witteloostuim (2000, p.vii) contends that organizational ecology is a “branch of evolutionary tree” and is in the center of evolutionary approaches. Aldrich (1999) argues that the different perspective between Evolutionary theory (E

T) and population ecology theories are based upon how the different perspective view the four generic process of variation, selection, retention and struggle over scarce resources.

The evolutionary theory has been the most used theory in the recent organizational studies; however, very few articles addressed the issue of corporate entrepreneurship or innovation. Evolutionary theory was used to explain the technological position of the ten largest Japanese semiconductor producers from 1982- 1992 (Stuart & Podolny, 1996), a study of the U.S bicycle industry from 1880 to 1918 (Dowell & Swaminathan, 2000), an evolutionary perspective of corporate restructuring including entry and exist (Chang, 1996), and a study into how initial resource endowments affects organizational life chances (Shane & Stuart, 2002). It is therefore surprising that little research in entrepreneurship utilizes the evolutionary theory while there are a lot of topics to be explore using the evolutionary theory. Detienne, (2004) has conceptualizes four value of evolutionary theory to entrepreneurship, that is in the arena of variation, how firm can create new entrepreneurial ventures-“is it primarily through external alliances”? (Legnh, 1990); acquisition (Zahra, 1995); spin-offs, venture incubation (lee, 2003), or management buy-out (Signh, 1990), especially selection and retention and entrepreneurial philosophy. As identified above many of these areas need to be exploring by future researches of corporate entrepreneurship using evolutionary theory. As evolutionary theory is and will continue to be an important theoretical perspective to guide our thinking about innovation and corporate entrepreneurship.

### **Theory of Continuous Change**

Continuous change is a theoretical framework used to describe organizational changes that are ongoing and cumulative. “Continuous change is driven by alertness and the inability of organization to remain stable. “Change is an ongoing mixture of reactive and proactive modification guided by purposes at hand” Weick & Quinn, (1999). Pettigrew, Woodmen, and Cameron (2001, p. 704) describe continuous change as “small uninterrupted adjustments, created simultaneously across units, which create cumulative and substantial change”. For example, Hewlett Packard transformed from an instrument company to a computer company through continuous change in new product development. Covin and Miles, (1999), use the term “sustained, regeneration” to describe the type of change in which corporate entrepreneurial firms regularly and continuously introduce new product or services. Continuous change should not be constructed to imply incremental innovation, on the contrary. According to Maruyama (1963), small change does not stay small. Continuous change can in fact be quite paradigm breaking if it occurs to the edge of chaos.

An organization that is poised to change continuously is associated with many of the following characteristics; task authority rather than hierarchal authority; self organizing rather than fixed system; ongoing job redefinition transformation through continuous altering of product; and mindful construction of responses in the moment rather than mindless application of past routines (Burgelman, 1991; Brown & Eisenhardt 1997 and Weick & Quinn, 1999). Brown & Eisenhardt (1998) referred to those firms that are able to continuously innovate as firms that are able to balance the structure necessary to be functional with the agility required to change continuously, for instance Dell, GE and 3M.

In the continuous change view, organizations change through both reactive and proactive modifications that are guided by individual within the organization. This view suggests that processes can be put into place that help the organization monitor environmental changes (e. g economics, technological, competitors etc). In order to be able to react to unexpected changes. This might include environmental scanning and time-paced transitioning. Moreover, each of the processes listed above must be explored within the context of corporate entrepreneurship, that is the proactive processes which includes, improvisation, experimental and translation; learning and time-paced transition. The theory of continuous



change is relatively new to the organizational literature, yet researchers are optimistic that the view of organizations as continuously changing is consistent with actual practice within organization.

### **Cognitive Theory**

Cognitive is “the process of knowing or perceiving” Webster, s 20<sup>th</sup> century Dictionary, (1979). The word is more complex than human brain and human have limited information processing capabilities (Simon, 1947). In order to cope with the magnitude of stimuli coming into the brain, individuals develop schemas, cognitive maps, mental models or knowledge structures that organize the stimuli into manageable components. Mintzberg, Ahlstrand and Lampel (1998), sees cognitive as objectivist, whose work focuses on biases and heuristics, viewing the mental limitations of human cognition as the most important perspective and scholars with an information processing view, who suggest that decisions within firms are the result of a process of attention, encoding, storage, retrieval and choice (corner, kinichi &Keats, 1994; Simon & Houghtan, 2002).

How does cognitive theory relate to corporate entrepreneurship? Huff and Huff (2000, p. 14) content that cognitive theories are uniquely equipped to ask ‘how do individuals and collectives uniquely interpret complex and changing environment’. At the organizational level, researchers are seeking to understanding the impact that organizational cognition (social cognition) has on decisions of the firms. According to Fiske and Taylor (1984), social cognition refers to how people make sense of other people and themselves within organization. It is the way in which individuals within an organization think about that organization which “lies at the heart of decision making, communication, strategic action and virtually every important organizational process”. Sims and Giola, (986) are of the view that “social artifacts of shared, cognitive maps or enactment of a collective mind, rarely a simple combination of the individual members”.

What then has cognitive theories to inform corporate entrepreneurship? Huff (2000, pr 20) contend that there are four types’ cognitive theories which are: - (1) decision making and choice (2) culture (3) knowledge acquisition and use (4) sense making. The relevance of decision making and choices to corporate entrepreneurship; these question are important under what condition do corporate entrepreneurs rely upon heuristics for decision making? Busenitz and Barney (1997) found that entrepreneurs were much more likely than managers to use at least two types of biases and heuristics-overconfidence and representativeness-as simplifying mechanisms. Secondly, “can entrepreneurs be taught to recognize their own inherent biases and these bestowed upon them by the firm? Research has shown that individual are bounded rational and their decision ultimately affect all aspects of the organization. Therefore, it is critical to understand why an individual makes a particular decision, despite the decision made the economic evidence which suggested an alternative decision. Ross & staw, (1993) contends that decision makers will continue to fund project even though economic indicates.

Another important area is how should organization develop an entrepreneurial culture? Burns & Stalker (1961) suggests that an organizational “code and conducts” is important to organizational managers and policy makers because it “anchors individuals inside organization to a dependably constant system of shared belief”. Russell and Russell (1992, p. 644) was of the view that “in uncertain contexts innovation, norms and shared belief becomes the primary source of guidance because formal organizational procedures become ineffective”. In the area of knowledge acquisition and use, an important question was posed by Huff and Huff (2000, p. 20) what needs to be known in order to act and how can firms effectively acquire, store, update, and use knowledge? Siniler (1997) argues that learning is central to entrepreneurship because effective entrepreneurship is exceptional learners. Researches had shown that successful leaders are “better learners” than the general population. How does individuals within the firms interpret stimuli, why is it interpreted this

way, was another question posed in the area of sense making. Detienne (2004), contents that information are tends to be interpreted differently and this impact the decision they make.

Cognitive theories in corporate entrepreneurship are relatively unexplored and much of the leading edge research by entrepreneurship scholars is engaged in exploring these new avenues as seen from the above reviewed literature.

## **METHODOLOGY**

For the purpose of the review, content analysis has been used to analyze the reviewed literature on conceptual and theoretical issues, especially the theories of technological change.

### **Theories of Technological Change**

The organizational ecology theory, are of the view that corporate entrepreneurship is all about transformations, and disbanding within populations (Baum & Singh, 1994). Therefore, this perspective looks at populations of organizations that have a unitary characteristic – primarily industries, but also might revolve around organizational structure, size, age, or dominant designs. For example, a population might be described as those organizations that use a particular dominant technology rather than those that are in the same industry. The evolutionary theory, in its all-encompassing approach, has been used at the intraorganization, organization, population, and community levels. The primary levels of analysis in continuous change theory are the organization and the individual. In cognitive theory, the primary level of analysis is the individual, his or her cognitive structures and how individual cognition affects social (group) cognition.

Another distinction among theories is the time frame for change. In the organizational Ecology (OE) theory change occurs to populations over long periods of time. Longitudinal analysis can be use to explore how these populations change. In the evolutionary perspective, the time frame varies from moderate to long depending upon how long of an evolutionary period we are investigating. In the continuous change perspective, change is constant and cumulative. In the cognitive view, change varies depending upon the theoretical perspective.

A third varying distinction of the theoretical perspectives is the initiator of change, or what causes changes to occur. In the organizational ecology perspective, change occurs in the environment and firms that best fit to the changes will survive. In the evolutionary perspective, change can occur from random events as well as deliberate problem-solving efforts. In the continuous change perspective, change occurs from within the organization as decision makers anticipate and even enact change in the environment. In the cognitive perspective, change occurs as individuals make sense of the environment and can include the impact of culture, knowledge acquisition and learning.

A final distinction is the role of the entrepreneur in each theoretical perspective. In the organizational ecology perspective, the role of the entrepreneur is to fit the organization to its environment. In the evolutionary perspective, it is to find solutions to specific problems and direct organizational resources in such a way that the firm will not be selected out. In the continuous change perspective, the role of the entrepreneur is to make sense of his/her environment and redirect individuals as well as to enact change in the environment. The role of the entrepreneurship in the cognitive perspective is to understand why individuals do the things they do, to create cultures conducive to change, and to provide opportunities for individuals to acquire knowledge and training.

## **CONCLUSIONS**

Corporate entrepreneurship has variety of definition ranging from those that sees it as an “agent for economic

growth” Schumpeter (1883-1950); a “process where individuals and groups within an existing organization create new business or instigate or innovate or renewal within the same organization (Praveen, 2000); others still sees it as a “process where teams within the organization conceive, faster, lunch and manage business that is distinct from the parent company by leveraging the parents’ assets, market position and capabilities” Ireland et al (2004). Antoncic, et al (2013), view the concept of corporate entrepreneurship as a “process of pursuing entrepreneurial opportunities to innovate, by employees regardless of their level and nature of currently available resources”. Broadly it can be viewed as the “development of new business ideas, and opportunities within large and established corporations. This definition has four basic schools of thought which are corporate venturing, intrapreneurship, entrepreneurial transformation, and “bringing the market inside”.

Corporate entrepreneurship is a strategy; a strategy is a plan for interacting with the competitive environment to achieve organizational goals. The choice of the firm’s strategy is a crucial organizational decision that has a major influence on the organizational performance Borch et al (1999). Organization can achieve a cost advantage by efficiency in operation, economics of scale, technological innovation, low cost of labour, or preferential access to raw materials.

In the review, the theory of technological change has also been considered, where the theory of evolutionary theory and other theories has been used to explain the technological position of change within and outside the organization. In the review evolutionary theory has been used to explain the technological position of some largest Japanese semiconductor producers firm from 1880 to 1998 (Dowell and Swaminathan (2000). But surprising very little research in entrepreneurial activities utilizes the evolutionary theory while there are a lot of topics to be explore using the evolutionary theory. For instance, applying the Aldrich and Martinez’s (2001) in the areas of variation, acquisition, venture incubation and management buy-outs. Therefore, the main objective of the study is to review studies carried out on corporate entrepreneurship, to explore the concept/theories of organizational change in entrepreneurial organizations and to highlight important of such in research with a view to capture the conceptual and theoretical issues.

This research has limitations which should be considered when interpreting the results as not all the concepts and theories has been explored and analyzed, for instance signal detection theory and many others.

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