“Strategic entrepreneurship and intrapreneurial intensity”

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SECTION 3. General issues in management

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Strategic entrepreneurship and intrapreneurial intensity

Abstract

Problem: the concept of strategic entrepreneurship remains underdeveloped. Research question: how can various aspects of strategic entrepreneurship provide us with more insight into intrapreneurial intensity? Purpose: to shed some light on the concept of strategic entrepreneurship. The aim is to discuss three aspects of strategic entrepreneurship: risk, knowledge processes and value creation. Methodology: conceptual generalization. Findings: 1. A mini-theory is developed on the basis of the insights reached. 2. A development of Kirzner's concept of hidden knowledge as the foundation for entrepreneurship and innovation in organizations.

Keywords: entrepreneurship, strategic entrepreneurship, intrapreneurial intensity, knowledge processes.
JEL Classification: M50.

Introduction

The importance of entrepreneurship in established organizations has grown significantly in the last decades (Høglund, 2015), and is highlighted in the special issue of Strategic Entrepreneurship Journal (Demil et al., 2015, pp. 1-11). Strategic entrepreneurship is distinct from small business management (Wickham, 2006). It is a new concept, which fuses the notions of entrepreneurship and strategic management (Hitt et al., 2002). The new concept may be thought of as a new way of thinking about entrepreneurship in established organizations (Hitt, Camp & Ireland, 2002), for instance, like a knowledge spillover theory. In the knowledge spillover theory, one may think of organizations as a system of different types of knowledge (Ferreira et al., 2016). Thus, the question arises as to what constitutes strategic entrepreneurship (Luke, 2008).

We will, in this article, use aspects of risk, valuecreation and knowledge processes to show points of strategic entrepreneurship. We will also show the distinction between strategic management and strategic entrepreneurship. Our investigation will focus on how the latter can increase intrapreneurial intensity. It is not the case that an organization is either intrapreneurial or not, but rather that there is a degree of intrapreneurial intensity in any organization (Luke, 2008). Even in the most bureaucratic and conservative organizations, there will always be a certain level of intrapreneurial intensity, although it may be difficult for an outsider to see the visible results of these activities and processes (Ferreira et al., 2016).

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First, we introduce the knowledge foundation of the paper.

1. Knowledge foundation

According to Schumpeter, entrepreneur can operate either inside an enterprise or independently (Andersen, 2009, 2011). He writes: "The carrying out of new combinations, the individuals whose function is to carry them out we call entrepreneurs" (1934, pp. 74-75), and they are: "all who actually fulfil the function by which we define the concept, even if they are, as is becoming the rule, dependent employees of a company" (op. cit.).

The early Schumpeter (1934) was concerned with independent entrepreneurs, i.e., entrepreneurs who establish an enterprise outside established organizations, referred to as "Schumpeter Mark I". The later Schumpeter (1942) was more concerned with organizational entrepreneurship and the innovative entrepreneur, also known as "Schumpeter Mark II" (see Utterback, 1994, p. 193). Consequently, in this context, it appears that the link between innovation and entrepreneurship has an early theoretical foundation.

In practice, both innovation and entrepreneurship are related to creative processes and value creation. Independent entrepreneurs may work in teams; they may be novices or people with a lot of experience; and they may start up a business without having any connection to an existing business (see Sharma & Chrisma, 1999, p. 17; Westhead et al., 2003). While these innovative entrepreneurs drive the market out of equilibrium (Schumpeter, 1934), "classical" entrepreneurs restore the market back to equilibrium (see Kirzner, 1973).

There are two main branches of research on entrepreneurship: the first examines the individual entrepreneur who independently starts a business. This area of research has its historical roots in the early Schumpeter (Andersen, 2011). The second area of research is concerned with how entrepreneurship is fostered in established organizations (Andersen, 2009); this is often described as intrapreneurship, and, amongst others, finds its theoretical foundation in Burgelman (1983a, 1983b). Intrapreneurship and strategic entrepreneurship are closely related, but distinct concepts. Strategic entrepreneurship may be considered as a process of influence, where the purpose is to reveal, discover or create opportunities, and, then, evaluate and exploit them (see Finkelstein & Hambrick, 1996; Shane & Venkataraman, 2000).

Value creation, in this context, is closely related to Schumpeter's concept of creative destruction, because even if something is destroyed in the innovation process, value is created in other places, i.e., where something new and creative is flourishing. "Value" refers to the system of the activities and processes that meet human needs. The concept of strategic entrepreneurship relates to entrepreneurship's strategic position. Strategic entrepreneurship is concerned with discovering and exploiting opportunities within and beyond an organization, in order to promote value creation (Venkataraman & Sarasvathy, 2001: Ireland et al., 2003). It may be understood as the link between entrepreneurship and strategic thinking (Hitt et al., 2001).

2. Research question

The article asks the following question: How can various aspects of strategic entrepreneurship provide us with more insight into intrapreneurial intensity?

There are three aspects of the research question we will investigate further:

1. How is risk related to strategic entrepreneurship and intrapreneurial intensity?
2. How are knowledge processes related to strategic entrepreneurship and intrapreneurial intensity?
3. How is value creation related to strategic entrepreneurship and intrapreneurial intensity?

Figure 1 shows a conceptual model that illustrates aspects of strategic entrepreneurship.

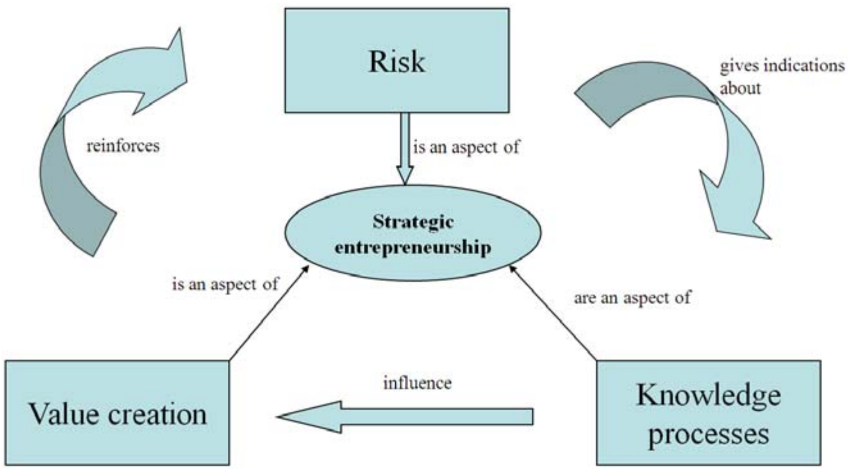

Fig. 1. Aspects of strategic entrepreneurship

3. Organizing of the paper

The article is structured in relation to Figure 1. First, strategic entrepreneurship is discussed. Second, strategic entrepreneurship is discussed from a risk perspective. Third, knowledge processes are discussed in relation to strategic entrepreneurship. Finally, strategic entrepreneurship is discussed from a value creation perspective. In conclusion, policy implications for strategic entrepreneurship are examined on the basis of the concept of intrapreneurial intensity.

4. Methodology: conceptual generalization

We will here very shortly present the methodology used. For further investigation into the methodology named conceptual generalization, we recommend the paper by Adriaenssen & Johannessen (2015), and Bunge (1998, 1999).

Research falls into two main categories: conceptual generalization and empirical generalization (Bunge, 1998, pp. 3-50, 51-107, 403-411). Conceptual generalization is an investigation, whereby the researcher uses other researchers' empirical findings in conjunction with his or her own process of conceptualization in order to generalize and identify a pattern. This contrasts with empirical generalization, where the researcher investigates a phenomenon or problem that is apparent in the empirical data, and only thereafter generalizes in the light of his or her own findings (Bunge, 1998, pp. 403-411). The starting point for the researcher in case of both empirical and conceptual generalization will be a phenomenon or problem in the social world.

Conceptual generalization and empirical generalization are strategies that are available for answering scientific questions. Which of these strategies one chooses to use will be determined largely by the nature of the problem and "the subject matter, and the state of our knowledge regarding that subject matter" (Bunge, 1998, p. 16).

Conceptual generalization, which is the subject of our investigation here, is "a procedure applying to the whole cycle of investigation into every problem of knowledge" (Bunge, 1998, p. 9).

Assumptions, the system of propositions and their consequences are here regarded as a theory (Bunge, 1977, 1985).

5.1. Strategic entrepreneurship and intrapreneurial intensity. Entrepreneurship may be understood as the processes in which "opportunities to create future goods and services are discovered, evaluated and exploited" (Shane & Venkataraman, 2000, p. 218). Some of the enterprises the entrepreneur engages in are innovative, while others are not. Some enterprises are started up independently of other organizations, while others occur within established organizations. While established organizations may be adept at creating competitive advantages, they are less skilled at developing new opportunities, say Ireland et al. (2003). However, it is the development of new opportunities that is crucial to the idea of strategic entrepreneurship.

Strategic entrepreneurship concerns discovering and exploiting opportunities, while strategic management is related to creating sustainable competitive advantages (see Venkataraman & Sarasvathy, 2001; Hitt et al., 2005). The former is important for both entrepreneurs and intrapreneurs. Entrepreneurship is divided here into classic entrepreneurship and innovative entrepreneurship. Intrapreneurship is divided into "corporate" entrepreneurship and "corporate venturing". "Corporate" entrepreneurship may be understood as the system of company's innovative processes, its willingness to take risks, as well as its proactive behavior (Miller, 1983). We see a clear connection between "corporate" entrepreneurship and Gratton's term (2007) of "hot spots" in companies. "Corporate" entrepreneurship has proven to be very important for both financial and non-financial performance (Zahra et al., 1999). "Corporate venturing" concerns the process by which a company enters new markets (Venkataraman et al., 1992). This process may be internal or external. External processes here are related to alliances and acquisitions. Internal "corporate venturing" is synonymous here with "corporate" entrepreneurship (intrapreneurship) (Scholthammer, 1982).

Pinchot (1985) coined the phrase intrapreneur in order to focus on internal entrepreneurship in organizations. However, we also make the distinction here between innovative intrapreneurship and classical intrapreneurship. This classification is consistent with Zahra (1995) who uses the term incubation activities, where we use the term innovative intrapreneurship (for pedagogical reasons).

Entrepreneurs and intrapreneurs transform knowledge into new opportunities. Recent research shows that it is the human resources that the entrepreneur and intrapreneur possess and which are essential for success, rather than their financial resources, although the latter are, obviously, important (see Heneman et al., 2000; Brush et al., 2001). Their human resources are linked to knowledge processes and leadership.

Entrepreneurial leadership, or what we term here strategic entrepreneurship, is described by McGrath & MacMillan (2000) as the main resource in an organization. This type of leadership has no official function in an organizational hierarchy. Entrepreneurial leadership may be practiced by many people in an organization, and consists of persons who alone, or together with others, create the "hot spots" in organizations (Gratton, 2007) referred to above. A "hot spot" may briefly be described as the centre of the creative energy fields in an organization, where new ideas are developed and put into practice in order to promote economic growth. The result of these creative energy fields is a high degree of intrapreneurial activity (Morris, 1998), which may be used to measure the extent of strategic entrepreneurship. The level of intrapreneurial intensity may be understood in relation to the number of "hot spots" in an organization.

The management of creative fields may be considered as the dominant logic that must exist in an organization, if it is to promote intrapreneurial intensity. The dominant logic is the system of prevailing mental models or maps, which guide the way of thinking in an organization (see Prahalad & Bettis, 1986, p. 485). Without this dominant logic in an organization, there will be a movement towards bureaucratization and rigidity, which may result in the organization's becoming prey to the destructive element of Schumpeter's "creative destruction".

Assumption 1: If organizations aim to promote strategic entrepreneurship and intrapreneurial intensity, they must develop "hot spots".

Consequence: Organizations that intend to develop strategic entrepreneurship must be based on the development and distribution of highly creative teams.

Strategic entrepreneurship and strategic management are related, but distinct concepts; they are related in the sense that top management must retain control.

However, they are distinct in their outcomes. Strategic management focuses, largely, on long-term competitive advantages (Hitt et al., 2002, 2005). Strategic entrepreneurship centres on organizational entrepreneurship and intrapreneurial intensity (Ireland et al., 2003; Gratton, 2007; Morris, 1998). The main focus of strategic entrepreneurship is to identify and exploit new opportunities for value creation (Venkataraman & Sarasvathy, 2001). Strategic management and strategic entrepreneurship differ in focus, and, partly, in relation to results. For instance, it is not a condition of strategic management that it must develop an entrepreneurship culture in an organization. However, it is an absolute condition of strategic entrepreneurship that management encourages and participates in driving forward an entrepreneurial culture in the organization (Alvanez & Barney, 2002). An entrepreneurial culture is "one in which new ideas and creativity are expected, risk taking is encouraged, failure is tolerated, learning is promoted, product, process and administrative innovativeness are championed, and continuous change is viewed as a conveyor of opportunities" (Ireland et al., 2003, p. 975). To develop this kind of entrepreneurial culture is not a necessary condition for strategic management; a situation may occur in strategic management where entrepreneurship and innovation must be limited; this will never occur in entrepreneurship-related development. In other words, strategic management and strategic entrepreneurship represent two different ways of thinking.

Although there is no great similarity between the two ways of thinking, Venkataraman & Sarasvathy (2001) attempt to integrate them by using an analogy to Shakespeare's *Romeo and Juliet*. Strategic entrepreneurship, they say, is like Romeo without Juliet on the balcony; and strategic management is like Juliet on the balcony without Romeo. Although the comparison is interesting, it lacks a significant element, namely, an analogy to the final scene of the play. They argue that the integration of strategic management and strategic entrepreneurship is analogous to Romeo meeting Juliet in the sense that "love" will flower. However, if we follow the analogy to the final scene, then the meeting (or integration) will end in the death of both. It seems that Venkataraman & Sarasvathy (2001) have chosen to ignore the final scene in order to fit the analogy to their way of thinking. However, if we follow Shakespeare's text more faithfully, the result of the meeting of the two will result in the worst situation imaginable. In other words, we believe that strategic entrepreneurship and strategic management should be allowed to exist independently of each other in an organization, and not be integrated.

Assumption 2: If an organization aims to develop strategic entrepreneurship and increase intrapreneurial intensity, it should develop an intrapreneurial culture.

Consequence 1: Organizations need to distinguish between strategic management and strategic entrepreneurship.

Consequence 2: Organizations need to scale up strategic entrepreneurship so that it is on the same functional level as strategic management.

5.2. How is risk related to strategic entrepreneurship and intrapreneurial intensity? Opportunities create both uncertainty and risk. Uncertainty can, to a certain extent, be clarified by obtaining additional information. Risk presupposes knowledge. This distinction between risk and uncertainty related to entrepreneurship activities was first highlighted by Knight in 1921[2].

Risk is the trigger effect that encourages the entrepreneur to act. Where others retreat, the entrepreneur goes forth and puts all his/her heart into it, because he/she is challenged by taking risks and the potential rewards that lie at the end of the road.

Entrepreneurs and intrapreneurs are experts in dealing with risks and interpreting risk maps, which describe the uncertainty that exists in the external world (Foester, 1986). Skilled entrepreneurs and intrapreneurs are able to discern patterns in uncertainty and place themselves where the potential reward is the greatest. It is reasonable to assume that it is not chance or luck that cause one person to succeed where many others fail. In other words, those who succeed are able to see patterns others cannot to see. A pattern, in this context, is not always something that is visible on the surface, but rather something "beneath the surface", which skilled entrepreneurs and intrapreneurs are able to interpret. They are able to see opportunities where others see only hindrances. This is where strategic entrepreneurship is important – employing pattern recognition and mental risk maps.

The inexperienced entrepreneur and intrapreneur are unable to discern these patterns. They develop business plans, create strategies, and take the necessary time to apply for funding through public and other channels (funding agencies require the submission of such plans). Time passes, of course, and the scope of opportunities may change in the meantime. Although the business plans and strategies may be well drafted, they are less applicable once the scope of opportunities has

[2] Risk is an epistemological construct, while uncertainty is an ontological construct. One obtains information about uncertainty from the external world. Risk, however, is related to decision making and must be conceptually clarified.

changed or disappeared. In other words, when the rate of change is great, business plans and strategies rarely coincide with emerging opportunities. Thus, when the plans and strategies are finally implemented, the scope of opportunities is often changed: the plans and strategies, thus, become historical documents of only peripheral interest.

Entrepreneurial activities involve the use of mental maps of risk and insight into patterns to varying degrees. The approaches chosen will also differentiate the accomplished entrepreneur and intrapreneur from those less skilled and experienced. The use of mental risk maps and skills in pattern recognition is closely related to strategic entrepreneurship.

Mental risk maps and pattern recognition are essential at a time when the rate of change and turbulence is great; when this is not the case, it may be appropriate to apply business plans and strategies to a greater extent.

When the rate of change and turbulence is great, and there is, consequently, considerable uncertainty, accumulated experience will become less useful when adapting to a new and unknown situation. However, it may be possible to "create" one's own future and that of others by acting on the basis of ideas and perceptions (but not accumulated experience).

When acting on the basis of ideas and perceptions, reality will be "constructed", because the entrepreneur and intrapreneur have chosen to select some elements, while discarding others. Therefore, the mental risk map that is developed will be simultaneously both dynamic and flexible; dynamic in relation to one's adapting to what has been selected, and flexible in that certain aspects of ideas and perceptions have been discarded.

This dynamic flexibility involves shutting out parts of the scope of opportunities, thus, establishing a "studio" in which the entrepreneur and intrapreneur are able to develop their ideas in the limited scope of opportunities they have created by selecting some elements from the external world, while discarding others. It is in this limited scope of opportunities that strategic entrepreneurship emerges, which, to some extent, is influenced by Schoemaker (2002), Courtney (2001) and DeMeyer et al. (2002).

When mental risk maps are developed, it is important to be aware that we tend to underestimate risk, although we may be aware of it (Kahneman & Lovallo, 1993). Scenario thinking, training and planning may be one way to deal with risk, by taking into account the possible underestimation of risk (Van der Heijde, 1996; Sterman, 2000).

A simplification of Knight's (1921) understanding of risk may be described as a function of three dimensions: exposure, rewards and time. If we take into consideration Kahneman & Lovallo's (1993) insights concerning the underestimation of risk, together with Knight's concept of risk, and relate this to the entrepreneur as a constant factor regarding the search for new opportunities, then, risk may be theoretically understood as a potential downside and corresponding lack of upside in relation to rewards and time. The point here is that we tend to overestimate the upsides and underestimate the downsides of risk in relation to entrepreneurial activities (Kahneman & Lovallo, 1993). When this happens, the scope of opportunities will be greater than it ought to be from the perspective of risk assessment. In practice, this means that our mental risk maps have a tendency to amplify risk simply due to the way they are constituted, which may be understood when we consider Kahneman & Lovallo's (1993) insights.

Exposure can be reduced by making adjustments to risk models when the rate of change increases. This involves a procedure, whereby one, first, tests the model, then, operates the model in practice, and, then, re-tests the model again before implementing the project. This may be understood as the scientific model TOTE (test, operate, test, execute). This model may be used by the entrepreneur and intrapreneur to reduce risk when the rate of change is great, thus, minimizing the tendency to overestimate the upsides and underestimate the downsides. In this way, strategic entrepreneurship is related to the scientific TOTE model.

In Figure 2, we have constructed what we choose to term risk maps.

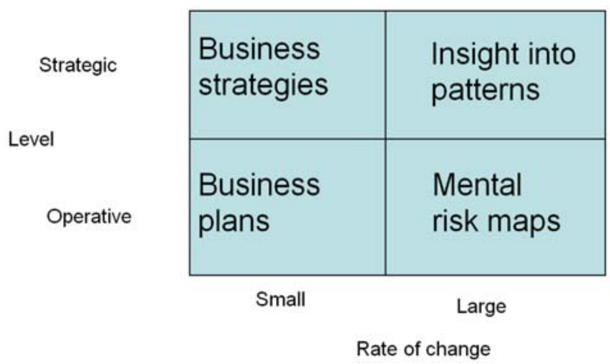

Fig. 2. Risk maps

Proposition 1: If the rate of change in the external world is great, then, risks are high, and business plans and business strategies will be counterproductive.

Consequence: If the rate of change is great, the entrepreneur and intrapreneur ought to be evaluated on the basis of their fundamental ideas, and their personal qualities, i.e., their mental risk maps and their insight into patterns. If this happens, then, intrapreneurial intensity will emerge.

No matter how we view strategic entrepreneurship, it is, generally, agreed that risks are taken in order to gain advantages. This is an extension of North's action theory (1968, 1981, 1990, 1993, 1994, 1996, 1997) and Asplund's (2010) motivation theory. North's action theory is, in short, that one acts on the basis of the system of rewards in the institutional framework which one is a part of. Asplund's motivation theory is, in short, that one is motivated by social responses.

Proposition 2: If an organization aims to foster strategic entrepreneurship and increase intrapreneurial intensity, the system of rewards in the organization's culture must reflect this.

Consequence: People are motivated by the relationship between social responses and reward systems, which, in turn, relates to the norms and values of a culture.

5.3. How are knowledge processes related to strategic entrepreneurship and intrapreneurial intensity? According to Schumpeter, entrepreneurs are not the ones that create new inventions; these people he calls "inventors". Schumpeter's entrepreneur is an innovator in the sense that he/she "is carrying out new combinations" (1934, p. 75). The creative knowledge process that leads to an invention belongs to the domain of innovation, while the creative process of knowledge as "carrying out new combinations" belongs to the entrepreneurial domain. Both knowledge processes are integrated, however, in the value creation process.

Schumpeter (1934, pp. 88-89) says of the entrepreneur: "Although entrepreneurs may be inventors…, they are inventors not by nature of their function…". The entrepreneur is more like an "implementer" who seizes an opportunity, combining and utilizing various areas of knowledge in order to create value. The entrepreneur is always looking for new opportunities to create value; he/she "carries out new combinations" (Schumpeter, 1934, p. 78). The result of the entrepreneur's activities and processes is creative destruction: "This process of creative destructions is the essential fact about capitalism", Schumpeter argues (1942, p. 83).

Innovation and entrepreneurship are integrated through value creation. The creative process is the basis of both entrepreneurship and innovation, and value creation is the end result for both of these processes.

In the same way that Schumpeter says (1942, p. 133) that innovation can easily be reduced to a routine, and, thereby, inhibit creative processes, entrepreneurship may be reduced to "bureaucracy", and reduce creative processes as well. Routinization and bureaucratization are the innovative and entrepreneurial paradox. It is an offspring of the philosopher Zapfe's paradox that seems to occur: in other words, that which one is good at, becomes one's downfall. This entrepreneurial assassination has, in recent times, been described by Chandler (1962, p. 12) and Greiner (1972), amongst others, in addition to Schumpeter (1942).

Innovation and entrepreneurship become integrated through the creative process. This process may easily be dampened and disrupted through routine, procedures, bureaucracy, rigid structures and predictable processes. The reason is that the creative process always operates along the boundaries of established knowledge (see Kanter, 1985, p. 138; Kanter, 2006); this knowledge is here called hidden knowledge. This is an area where "you do not know what you do not know". Kirzner expresses this as: "Entrepreneurial profit opportunities exist where people do not know what they do not know, and do not know that they do not know it" (Kirzner, 1982, p. 273). Hidden knowledge may be understood as the theoretical knowledge foundation for creativity, entrepreneurship and innovation.

That which one does not know what one knows is related to tacit knowledge (Polanyi, 2009). That which one knows is often referred to as explicit knowledge (Collins, 2010). That which one knows what one does not know is defined as the domain of research (Collins & Evans, 2009).

In Figure 3, we have constructed what we choose to term the knowledge window.

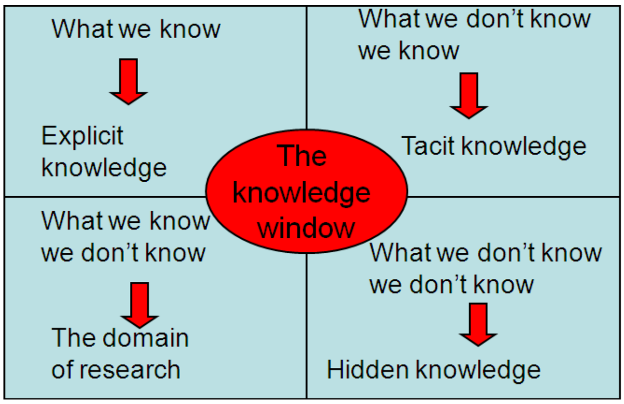

Fig. 3. The knowledge window

It is in this knowledge window that strategic entrepreneurship takes place. In all four domains of knowledge there are opportunities which strategic entrepreneurship is able to use. However, it is mainly in the domain of hidden knowledge that entrepreneurial opportunities occur; this is where strategic entrepreneurship should concentrate its focus.

There are many indications that the development of simple risk maps based on risk strategies has positive consequences for the entrepreneur. Increased revenues that exceed expectations by 35-45% and reduced costs of 15-45% have been reported (see Carter et al., 1996). One of the explanations may be that the entrepreneurs' mental risk maps are harmonized with the uncertainty of the external world, and the tendency to underestimate risks documented by Kahneman & Lovallo (1993) is clarified to a greater extent.

Proposition 3: Strategic entrepreneurship and intrapreneurial intensity develop in the domain of hidden knowledge.

Consequence: If organizations aim to establish strategic entrepreneurship, then, it is the area defined as "you do not know what you do not know" that must be developed.

5.4. How is value creation related to strategic entrepreneurship and intrapreneurial intensity?

Entrepreneurship and innovation create two separate processes in the economy. Entrepreneurship fills gaps in the market and pushes the economy towards equilibrium. Innovation often results in creative destruction that leads to disequilibrium. Both processes, however, foster value creation (see Bruyat & Julien, 2000). Value creation, though, leads to value destruction for some through the destructive processes which are a practical consequence of Schumpeter's creative destruction.

Value creation is central to the understanding of both entrepreneurship and innovation, because it is the goal of both processes. But what is meant exactly by the term value creation?

One meaning of value creation may be understood from different perspectives. On the most general level, one may consider it to be the value of all the activities and processes that meet human needs. On the system level, one may see value creation as those results that benefit, financially and non-financially, the members of the system in question and the environment (see Habbershon et al., 2003). On the individual level, one can say that value creation is any outcome that increases an individual's wellbeing.

The activities and processes that are the prerequisites for economic growth are referred to by Porter (1980, 1985) as the value chain. Stabell & Fjellstad (1998) term the processes value network and value shop. Johannessen et al. (1997, 1999) term the processes value community and value dialogue. All these five types of processes – valuechain, valuenetwork, valueshop, valuecommunity and valuedialogue are assumed to be important for understanding value creation in the global knowledge economy.

Within the academic literature on strategy in the 1980s and, to some extent, the 1990s, there is a strong focus on the value chain. In particular, this was reflected in Michael Porter's books (1980, 1985, 1990, 1996, 2004). Value chain thinking has focused on a linear and sequential understanding of value creation. This school of thought defines value creation as consisting of inbound logistics, operations, outbound logistics, marketing/sales and service. On the business level, value chain thinking has been linked to a linear understanding related to supplier – customer activities. From this perspective, value chain thinking is closely related to strategic management.

Value chain thinking has been increasingly criticized in recent years (e.g., Stabell & Fjellstad, 1998). The first wave of criticism argued that value chain thinking was only suitable for describing and understanding traditional manufacturing companies, and could not be applied to the same extent when examining knowledge production. Further criticism pointed out that a linear understanding, for instance, on the level of a business, is rarely valid. We, therefore, now see a stronger emphasiz on "prosumer systems" (Toffler, 1980), where suppliers, businesses and customers are seen as a holistic system, continually interacting. Various types of companies will, however, have a different emphasiz on the different types of value creation processes, as well as all the processes which are found (or should be found) in most businesses. This means that the value chain is still relevant; however, one must also simultaneously focus on other value creation processes.

Within traditional manufacturing companies, the value chain has focused on the transformation of materials into some product, whereas the focus for most businesses in the knowledge economy is related to the transformation of information into knowledge. In other words, the transformation of materials is not the central focus in the knowledge economy, although it is often systemically linked to knowledge processes.

In a world that increasingly emphasizes the flexibility of a modular logic (Garud et al., 2002) information, knowledge and communication are key elements in relation to the value chain (Brynjolfsson & McAfee, 2014). The value chain transforms rawmaterials, data, information and knowledge, amongst other things, into output consisting of components that can be assembled into solutions to satisfy customer demands. This type of economy can be compared to one composed of Lego parts; these Lego parts are assembled in relation to cost, quality, skills and innovation logic in the global knowledge economy (Baird & Henderson, 2001; Brynjolfsson & McAfee, 2014; Haag et al., 2012)

Within the value network, the focus is on communication and external relations (Stabell & Fjellstad, 1998). Primarily, this communication is targeted at customers, but it is also aimed at suppliers, competitors, etc. While the value chain focuses on information, the value network focuses on communication. But, both value creation processes – the value chain and the value network – operate mainly in relation to an industrial logic (Porter, 1980, 1985, 1990, 1996; Stabell & Fjellstad, 1998). One can say that, while value chain thinking is closely related to strategic management, the value network is more closely related to strategic logistics (Dittman, 2012). In order to create value for customers through communication, an important feature of the value network is the coordination and integration of information. Roughly speaking, one can say that the value network receives information about the solution elements from the value chain. This information is coordinated and integrated by the value network to provide value to customers through customer solutions.

The value shop operates within a knowledgelogic, and is committed to facilitating efficient performance on the operational level. This means first and foremost ensuring that the operational level has access to resources, and an organization of operations that contributes to an efficient utilization of these resources. The value shop is closely related to strategic competence development (Tidd, 2012). This means skills related to both material and immaterial resources, but with a strong emphasiz on immaterial resources. Immaterial resources are primarily related to the knowledge, skills and attitudes required for efficient operation. Somewhat simplified, one can argue that the value shop receives information from the operational level, value chain and value network, and ensures that they have access to the necessary expertise resources for efficient operation. Operational efficiency is understood here as a focus on productivity.

The value community is based on the organization's needs regarding communication with the external world, and the organization's external legitimacy and reputation. This implies an emphasiz on value creation processes related to the values, norms and attitudes which are communicated externally; these may include social responsibility, the third bottom line, ethics, etc. Reputation and reputation management are critical processes in the value community. The value community may be understood as strategic corporate social responsibility (Werther & Chandler, 2010).

The value dialogue focuses primarily on creativity, innovation, new ideas, etc; success, in this instance, requires a focus on both information and communication. The value dialogue is the area of business where the scope of opportunity unfolds. It is also here that mental risk maps are developed and transformed into value for an organization, i.e., strategic entrepreneurship is linked to the value dialogue.

The implications for strategic entrepreneurship of the five value creation processes are to be found in any organization in the knowledge economy. Some organizations, however, will have a greater emphasiz on one or several of the five value creation processes. However, it is our view that all five value creation processes must be fostered, if an organization is to be viable in the global knowledge economy. The course of action that forms the basis of this analysis is that organizations in the knowledge economy must have a greater degree of variation internally than externally, which is a simplified rewriting of "the law of requisite variety" (Ashby, 1956). Consequently, it is reasonable to assume that the five value creation processes must exist in every organization in the global knowledge economy, if the organization is to be a viable one. We have illustrated the five value creation processes and their focus on strategy in Figure 4.

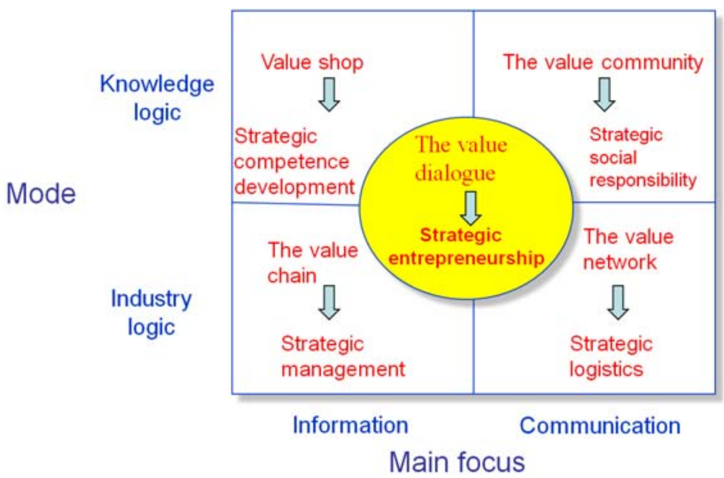

Fig. 4. The five value creation processes

Proposition 4: It is primarily within the value dialogue that strategic entrepreneurship unfolds.

Consequence: It is within the value dialogue that the scope of opportunities for the creative and new emerges, and it is here at the potential for intrapreneurial intensity is to be found.

Proposition 5: If an organization finds a balance between the five value creation processes, it will develop strategic entrepreneurship within the organization and increase intrapreneurial intensity.

Consequence: In the knowledge economy, the focus should be on promoting the productivity of knowledge workers, because they will develop strategic entrepreneurship and increase intrapreneurial intensity.

Conclusion

The research question was: How can various aspects of strategic entrepreneurship provide us with more insight into intrapreneurial intensity?

The answer is linked to the assumptions and propositions developed in the paper. The theory that emerges through the system of propositions set out in this paper is the outline of a theory for the development of strategic entrepreneurship and intrapreneurial intensity in organizations.

Policy implications for strategic entrepreneurship and intrapreneurial intensity.

As mentioned above, Gratton (2007) has shown that it is possible to identify zones of creative energy fields (hot spots) in all types of organizations.

We call the degree of intrapreneurship here “intrapreneurial intensity”. We have constructed intrapreneurial intensity on the basis of two main dimensions. One is connected to the frequency of creative energy fields (hot spots) in an organization. The second is the degree of innovation in relation to products, services and processes. The idea of using the degree of innovation to establish the type of intrapreneurship in an organization may also be found in Krieser et al. (2002). Others have used both risk and productivity to evaluate the degree of intrapreneurship (Covin & Slevin, 1989). We incorporate risk and productivity in the concept of ‘degree of innovation’, because a higher degree of innovation will mean that an organization takes greater risks. Similarly, a low level of innovation involves a low degree of risk.

Intrapreneurial intensity in an organization may be described as a function of creative energy fields and the degree of innovation. Both of these dimensions (constructs) can be operationalized. We describe four types of intrapreneurial intensity, as illustrated in Figure 5. Intrapreneurial intensity indicates the level of activity in the value dialogue and the level of strategic entrepreneurship within an organization.

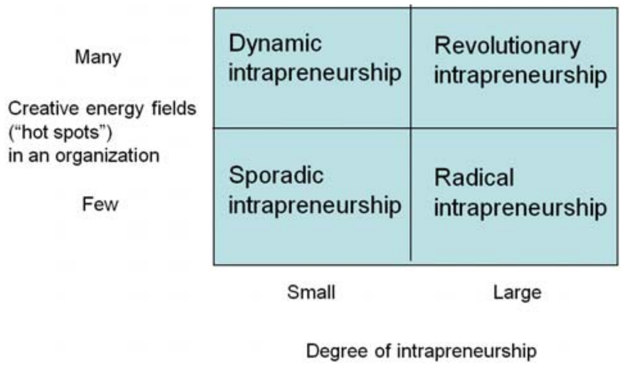

Fig. 5. Strategic entrepreneurship and intrapreneurial intensity

Organizations with a flatter structure have a greater degree of intrapreneurial intensity than those with a bureaucratic and hierarchical structure (Zahra & Covin, 1995). Organizations that balance individual and team performance will also have a larger degree of intrapreneurial intensity (Morris et al., 1994). Research also supports the idea that a certain degree of flexible resources promotes intrapreneurial intensity (Morris & Jones, 1993). It is also suggested by Miles (2005, p. 93) that when the organizational assessment emphasizes innovation and risk, intrapreneurial intensity increases. We also know that when job descriptions are relatively broad, this may also promote intrapreneurial intensity (Miles, 2005). A good deal of research supports the hypothesis that the stronger the degree of market orientation an organization has, the greater the intrapreneurial intensity (see Miles & Arnold, 1991).

An obvious question in this discussion is: Do organizations with greater intrapreneurial intensity perform better than organizations with lower levels of intrapreneurial intensity? Morris, who has done a great deal of research in this area, says: “The answer is an unequivocal yes” (Morris & Kuratko, 2002, p. 53). However, further research is required to examine empirically the propositions that are presented here.

Some management examples which support Morris & Kuratkoss’ statement are found:

1. Acordia’s corporate entrepreneurship strategy shows how firm performance can be improved by entrepreneurial actions (Kuratko et al., 2001, pp. 60-71).
2. Sterkoder’s intrapreneurial strategy shows how productivity and innovation increase by entrepreneurial action (Johannessen et al., 1993, pp. 23-38).
3. In large, knowledge intensive firm shows how various factors promote intrapreneurship (Christensen, 2005).

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