# STRATEGIC INNOVATION:

# A REVIEW AND A THEORETICAL FRAMEWORK

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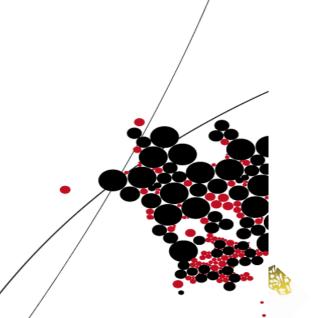
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# Abstract

Surprisingly, an important topic such as strategic innovation is built by a thin body of literature. Nevertheless, the concept of strategic innovation is an important topic to be reviewed. A lot of firms are dealing with highly volatile markets and have to re-define their market strategies. Strategic innovation is a concept that provides more insights on how firms compete in these volatile markets and sustain or create new competitive advantage. This paper reviews literature on strategic innovation and its related terms; strategic entrepreneurship, strategic change and value innovation. According to (Schlegelmilch, Diamantapoulos, & Kreuz, 2003), strategic innovation is the most commonly used term in the literature for applying innovation to corporate strategy. The authors argue that the other closely related terms, despite the variety of terms and definitions, there are key commonalities in the literature, including the fundamental questioning of mental models and tacit rules (Geroski, 1998); (Gilad, 1994); (Hamel, 1996); (Hamel, 1998b); (Johne, 1992); (Kim & Mauborgne, 1999b); (Lynn, Morone, & Paulson, 1996); (Markides C., 1997); (Markides C., 1998); (Martinsons, 1993), the establishment of growth-visioning and creative processes to formulating strategy (Hamel, 1996); (Hamel, 1998b); (Kim &

Mauborgne, 1999b) (Krinsky & Jenkins, 1997); (Martinsons, 1993), the redefinition of market space and industry boundaries (Hamel, 1996); (Johne, 1992); (Kim & Mauborgne, 1999a); (Kim & Mauborgne, 1999b), and the achievement of dramatic value for customers and high growth for companies (Krinsky & Jenkins, 1997); (Markides C. , 1999); (Seurat, 1999). Even though the quantity of literature is yet thin, it is important to review this concept at an early stage to bundle the findings and steer future research in the right direction.

This systematic literature review of 137 reviewed articles proposes critiques and identifies two typologies of strategic innovation (incremental and disruptive strategic innovation) and proposes a theoretical framework of the drivers of strategic innovation and can function as a map of strategic innovation and its related concepts. From the reviewed literature, it was found that the main drivers of strategic innovation are entrepreneurial leadership, diversified Top Management Teams and deliberate learning mechanisms, so that high growth can be achieved through value pioneering and not only by technology pioneering (Lindic, Bavdaz, & Kovacic, 2012).

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# INTRODUCTION

This paper is a systematic literature review aiming at outlining the meaning and the drivers of strategic innovation and its closely related concepts; strategic change, strategic entrepreneurship and value innovation (Schlegelmilch, Diamantapoulos, & Kreuz, 2003). According to (Schlegelmilch, Diamantapoulos, & Kreuz, 2003), strategic innovation is the most commonly used term in the literature for applying innovation to corporate strategy. The authors argue that the other closely related terms, despite the variety of terms and definitions, there are key commonalities in the literature, including the fundamental questioning of mental models and tacit rules (Geroski, 1998); (Gilad, 1994); (Hamel, 1996); (Hamel, 1998b); (Johne, 1992); (Kim & Mauborgne, 1999b); (Lynn, Morone, & Paulson , 1996); (Markides C. , 1997); (Markides C., 1998); (Martinsons, 1993), the establishment of growth-visioning and creative processes to formulating strategy (Hamel, 1996); (Hamel, 1998b); (Kim & Mauborgne, 1999b) (Krinsky & Jenkins, 1997); (Martinsons, 1993), the redefinition of market space and industry boundaries (Hamel, 1996); (Johne, 1992); (Kim & Mauborgne, 1999a); (Kim & Mauborgne, 1999b), and the achievement of dramatic value

for customers and high growth for companies (Krinsky & Jenkins, 1997); (Markides C. , 1999); (Seurat, 1999).

The aim of this paper is to provide a deeper understanding of strategic innovation and its meaning. On the same time this paper also aims to open a discussion on the controversies found in the literature by proposing critiques alongside. The findings and the discussion on the controversies should help to steer future research in the right direction. Furthermore, this paper will attempt to sketch an outlining of and a theoretical framework that maps out strategic innovation and its closely related concepts together with its important drivers so that it can function as a map for future research.

Starting off with the explanation of the research methodology of the systematic literature review, the paper will proceed with capturing the meaning of strategic innovation. Thereafter, the paper will follow with an elaboration on the findings on strategic innovation, which will open the debate of current findings and controversies in the literature. The paragraph thereafter, will illustrate an outlining and a theoretical framework. Subsequently, the paper will discuss

some managerial implications, followed by some recommendations for future research. Lastly, the paper will end with the discussion on the limitations to this study.



# RESEARCH METHODOLOGY

According to (Schlegelmilch, Diamantapoulos, & Kreuz, 2003), strategic innovation is the most commonly used term in the literature for applying innovation to corporate strategy. Other closely related terms (Schlegelmilch, Diamantapoulos, & Kreuz, 2003) that are included in the literature review are; strategic entrepreneurship, strategic change and value innovation. The authors argue that despite the variety of terms and definitions, there are key commonalities in the literature, including the fundamental questioning of mental models and tacit rules (Geroski, 1998); (Gilad, 1994); (Hamel, 1996); (Hamel, 1998b); (Johne, 1992); (Kim & Mauborgne, 1999b); (Lynn, Morone, & Paulson, 1996); (Markides C., 1997); (Markides C., 1998); (Martinsons, 1993), the establishment of growth-visioning and creative processes to formulating strategy (Hamel, 1996); (Hamel, 1998b); (Kim & Mauborgne, 1999b) (Krinsky & Jenkins, 1997); (Martinsons, 1993), the redefinition of market space and industry boundaries (Hamel, 1996); (Johne, 1992); (Kim & Mauborgne, 1999a); (Kim & Mauborgne, 1999b), and the achievement of dramatic value for customers and high growth for companies (Krinsky & Jenkins, 1997); (Markides C., 1999); (Seurat, 1999). The online database Web of Science by Thomson Reuters

(www.webofknowledge.com) was utilized for reviewing the articles for this paper. The articles were searched on topic with a timespan parameter from the year 2000, focusing on the research areas "business economics" and "operations research management science" fields. Furthermore, the search excluded non-relevant journals, which can be found in Appendix I: Journals.

Thereafter, the articles that resulted from the filtered database were carefully read and book reviews and non-accessible articles were eliminated, leaving 135 articles to be included for the literature review. Table 1: Number of articles reviewed is an overview of the quantity of reviewed articles per topic. The term "strategic change" resulted in more than 400 articles; because the aim of this paper is to provide a background picture on the different terms and the strategic innovation concept and not for the purpose of evaluating each and every article written, the most recent fifty (50) articles were included for the judgment of relevance. These fifty articles were the most recent published articles on the topic of "strategic change".



## TABLE 1: NUMBER OF ARTICLES REVIEWED

Term	<b>Reviewed</b> articles
Strategic Innovation	30
Strategic Change	50
Strategic Entrepreneurship	44
Value Innovation	11
Total	135

After carefully reviewing the articles, an overview was kept on different parameters, such as; purpose of research, findings and outcomes, discussed perspectives, discussed definitions and research methodologies. This overview functioned as the foundation for the conclusions and findings of this paper.



# MEANING OF STRATEGIC INNOVATION

Studies on the concept of strategic innovation have been initiated for more than a decade; however the quantity of articles written on the topic of strategic innovation has yet to grow. The search on the topic of strategic innovation only resulted in thirty (30) articles that were included for the review. Nevertheless, with a very thin body of literature it is found that the concept is mostly pinpointed around and subject to the creation and/or sustainment of competitive advantage. This paragraph will discuss the findings on the reviewed definitions of strategic innovation and its related concepts; strategic change, strategic entrepreneurship and value innovation.

# STRATEGIC INNOVATION

Already in the late nineties, Markides referred to strategic innovation as "the strategy of breaking rules" (Markides C. , 1997), implying that strategic innovation is an extreme on surviving in a volatile market. Charitou & Markides extended that support by stating that strategic innovation is a fundamentally different way of competing in an existing business and it starts with the innovation in one's business model leading towards a new way of playing the game (Charitou & Markides, 2003). While other academics agree that the organization's business model is at the hearth of strategic innovation, not all researchers go till the extent of strategic innovation aiming at the disruption of the industry.

Strategic innovation is about creation of new markets and leaps in customer value and reshaping the existing markets to achieve value improvements for customers (Gebauer, Worch, & Truffer, 2012) and (Schlegelmilch, Diamantapoulos, & Kreuz, 2003). Strategic innovation has a clear aim of achieving competitive advantage by creating customer value and new markets. However, the concept is drifting between the two extremes of creating customer value on existing markets or for new markets. Academics agree that strategic innovation is found at the re-definition of the business model of an organization; however the question between the two extremes of strategic innovation lies therefore in how organizations redefine their business model and how organizations link the redefinition to the strategic literature. In Appendix II: Overview -Definitions; Table 4: Definitions - Strategic Innovation an overview of definitions on strategic innovation can be found.

# STRATEGIC CHANGE

The definition of strategic change considers different elements in the stage that an organization transfers itself to a new strategy from its current one. Some academics refer to strategic change as the change from for example a defender position to a prospector position (Abernethy & Brownell, 1999); (Miles & Snow, 1978); (Shortell & Zajac, 1990). Others mention that strategic change involves the organization's alignment to its environment (Hutzschenreuter, Kleindienst, & Greger, 2012). The organization's market environment could be one of the main motivators for an organization to engage in strategic change. (Rajagopalan & Spreitzer, 1997) describe a much more elaborated definition of strategic change: "the combination of changes in the content of strategy as well as changes in environmental/organizational conditions brought about by managerial actions in the process of change" (Rajagopalan & Spreitzer, 1997). From this last definition we determine that next to the environmental changes, the individual dimension of managerial actions taken in the decision-making process is also an important contributor to strategic change. Appendix II: Overview - Definitions; Table 5: Definitions - Strategic Change is an overview of the definitions found in the literature on strategic change.

# STRATEGIC ENTREPRENEURSHIP

Strategic entrepreneurship is a more commonly agreed upon term; the term puts more emphasis on the internal part of the organization (e.g. resources and routines) and the decision maker. (Mathews, 2010) defined strategic entrepreneurship as "the activity that drives the economy in new directions, through recombination of resources, activities and routines by firms, and the entrepreneur as the economic agent who in principle lacks resources (but knows where to find them), who becomes aware of opportunities that can be turned into profit, and acts to realize these opportunities through resource mobilization and activation in the pursuit of profit" (Mathews, 2010). Most literature is built on the definition of (Hitt, Ireland, Camp, & Sexton, 2001), also implying that strategic entrepreneurship considers internal the organizational activities as well as the dynamic external environment; "Strategic entrepreneurship (SE) involves simultaneous opportunity-seeking and advantage seeking behaviors and results in superior firm performance" (Hitt, Ireland, Camp, & Sexton, 2001). The conclusion that can be drawn from the gathered definitions is that strategic entrepreneurship also aims at gaining competitive advantage and the entrepreneur within the firm plays a key role in

decision making. In Appendix II: Overview - Definitions; Table 6: Definitions - Strategic Entrepreneurship an overview of the definitions found in the literature on strategic entrepreneurship is given.

# VALUE INNOVATION

For the concept of value innovation, the definition is quite clear that the concept revolves around creating value. However, academics seem to have different thoughts, whether the concept of value innovation is about creating value for the most important customer or creating competitive advantage by creating new markets.

This last element of gaining competitive advantage is strategized in a market driven versus the market driving perspective. One may also refer to these opposite perspectives of gaining competitive advantage to Blue Ocean strategy versus Red Ocean strategy and Conventional logic versus Value Innovation logic. The market driving perspective on creating competitive advantage explains that firms are more successful when they overcome their competitors by not considering them (Kim & Mauborgne, 2004). While the research is focused on the value innovation process, in terms of creating more value for the customer and perhaps changing the rules of the industry it will be interesting if future research can link the market driving perspective to disruptive innovation and the market driven perspective to incremental innovation. Also, the academics should find a common ground on the definition of value innovation; the current research is directed towards the value innovation logic in terms of gaining competitive advantage by changing the rules of the industry, but organizational dynamics that make the value innovation ability possible should not be disregarded. Appendix II: Overview - Definitions; Table 7: Definitions - Value Innovation is an overview of the definitions found in the literature on value innovation.



# FINDINGS ON STRATEGIC INNOVATION

Clearly, there is a growing body of work on the concept of strategic innovation and its related concepts, allowing this section of the paper to bundle and present the main findings on current literature so far.

# STRATEGY FORMULATION PROCESS

Elaborating on the previous paragraph, strategic innovation starts with the re-definition of the business model. While this statement is widely agreed upon it is disappointing how much attention is devoted to research how organizations actually re-define their business models and the conducted research on strategic innovation is quite widespread. Studies by (Charitou & Markides, 2003) (Govindarajan & Trimble, 2005) (Markides & Oyon, 2010) have made a considerable contribution to the research of business models, however their research is concerned with organizations responding to disruptive innovations but do not necessarily cover the organizations that are the disruptive innovators themselves. The disruptive typology so to say of strategic innovation can be assumed to be the disruptive innovator. Also the studies by aforementioned authors are concerned with the the

integration of a second business model alongside the existing one. Notwithstanding that the research provides a deeper understanding of the integration of business models and not aiming at criticizing the conducted studies by the aforementioned academics, we have to conclude that there is still a gap in the research on organizations that only have one business model; that of disrupting the entire market.

The strategy formulation process is further elaborated by the concept of Value Innovation. As discussed earlier, value can be created by making incremental improvements on existing value or by creating complete new and uncontested markets. This distinction is also made in the literature by the perspectives "market driving" versus "market driven", also referred to as Blue Ocean Strategy versus Red Ocean Strategy (Lindic, Bavdaz, & Kovacic, 2012) and Value Innovation Logic versus Conventional Logic (Mauborgne & Kim, 2004). In their study to investigate the value of an entrepreneurial perspective on opportunities in the business environment for the foundation of economic policy, they found that the creation of a new market space leads to higher growth. They also found that high growth can be achieved through value

pioneering and not only by technology pioneering (Lindic, Bavdaz, & Kovacic, 2012). Also (Mauborgne & Kim, 2004) found in their study that high growth companies are more successful when they apply the Value Innovation Logic, rather than just staying ahead of competition. In other words, they make competition irrelevant through Value Innovation (Mauborgne & Kim, 2004).

The strategy process is also addressed by (Govindarajan & Trimble, 2004) who discuss the topic on strategic innovation planning, proposing that managers should shift from the conventional mindset of planning towards a theory-focused planning to stimulate strategic innovation on a frequent base (Govindarajan & Trimble, 2004). They also imply that it is key to learn from strategic experiments (Govindarajan & Trimble, 2004), leaving a very thin line between the strategic innovation planning and decision-making concept and that of value innovation ability. Appendix III: Overview - Main Findings; Table 8: Main findings - Strategy Formulation Process presents the most important findings on the strategy formulation process.

# DELIBERATE LEARNING MECHANISMS

Value Innovation (VI) ability is often addressed in the literature and mostly related to the discussion of deliberate learning mechanisms. The topic of learning mechanisms is derived from the learning perspective of absorptive capacity also referred to as deliberate learning mechanisms or the knowledge based view. The literature devotes a widespread attention to the research of deliberate learning mechanisms within the organization to stimulate and create new value and market. One of the key challenges for an organization is to generate value innovations on a frequent base. In the literature this challenge is often referred to as the value innovation ability: an organization's propensity to generate VI initiatives systematically (Berghman, Matthyssens, & Vandenbempt, 2012). The same authors studied the organization's ability to systematically generate value innovation initiatives and found that deliberate learning mechanisms and VI ability are enhanced by the information customers and suppliers provided by (Berghman, Matthyssens, & Vandenbempt, 2012).



Interestingly, learning mechanisms are of strong influence on the disruptive strategy; empirical evidence was found that as well as organizational as entrepreneurial competences were essential for increasing new customer value capacity (Berghman, Matthyssens, & Vandenbempt, 2006). They found that (1) competences, referred as marketing practices for external knowledge absorption: recognition, assimilation and transformation, (2) general organizational competences, i.e. culture, cross-functional coordination and structure and (3) embedded competences in the supply chain/network, referring to information from customers and suppliers and innovation are stimulus from customers and suppliers (Berghman, Matthyssens, & Vandenbempt, 2006).

Also (Gebauer, Worch, & Truffer, 2012) find support in their empirical study for positive outcomes of deliberate learning mechanisms on strategic innovation, suggesting that out of explorative, assimilative, transformative and exploitative learning processes, transformative learning processes specifically play a key role in strategic innovation (Gebauer, Worch, & Truffer, 2012). The study by (Balsano, Goodrich, Leek, & et al., 2008) go even further studying the organization's cultural enablers for innovation and determine that the Value Innovation Assessment Tool is a central point of communication in stimulating innovations (Balsano, Goodrich, Leek, & et al., 2008).

One of the key characteristics of strategic innovation is that it is stimulated within an organization when the organizational culture is engrained on creating competitive advantage. (Govindarajan & Trimble, 2004) in their study state that strategic innovation can be pursued when strategic experiments are planned and organizations should shift from a conventional planning mindset towards a theory-focused planning and proposed six steps to make this shift. Others proposed the use of the Value IQ tool, which is an assessment tool that assesses the level of an organization's Value Innovation potential (Aiman-Smith, Goodrich, Roberts, & Scinta, 2005). The Value IQ instrument can help organizations to understand their ability to value-innovate and identify those areas where changes in behavior and company culture may be required (Dillon, Lee, & Matheson, 2005). Appendix III: Overview - Main Findings; Table 9: Main Findings - Learning Mechanisms presents the main findings in the literature on learning mechanisms.



# ENTREPRENEURIAL LEADERSHIP

The absorptive capacity perspective is extended in the literature with the upper echelon's theory's and the realoption theory by researching the individual level within the organization. Antioco et al., 2010, researched the factors influencing strategic innovation decisions made by managers. The authors determined four factors; (1) the business opportunity, (2) the feasibility, (3) the competitiveness and (4) the leverage opportunities provided by the strategic option, with the factor competitiveness of a strategic option being the most important predictor of new project success (Antioco, De Schamphelaere, Moenaert, Robben, & Roks, 2010).

The individual level within the organization is also referred to as the entrepreneur and is mainly addressed by the strategic entrepreneurship and strategic change literature. The entrepreneur within an organization is often considered to be the organization's CEO and/or top level manager(s) that are in charge and liable for the organizational performance but also for organizational changes. (...) leaders, in particular CEOs, are charged with determining strategic choices and setting organizational context (Child, 1972). The dynamics between the entrepreneurial and the organizational dimension is also differentiated as the exploration perspective (opportunity-seeking behavior) versus the exploitation perspective (advantage-seeking behavior). This means that strategic entrepreneurship involves actions taken to exploit current advantages while simultaneously exploring new opportunities that sustain an entity's ability to create value across time (Hitt, Ireland, Sirmon, & Trahms, 2011). The leader of the organization should be compatible to the organization's culture of high pressure to generate value systematically but should also be resistant to the volatile environment and leading the organization to a strategic change. A strategic entrepreneur or one possessing this dominant logic must embrace the uncertainty surrounding the innovation and diffusion process and at the same time inspire intra-preneurship within the organization (Kuratko & Audretsch, 2009) and (Dunlap-Hinkler, Mudambi, & Kotabe, 2009).

The literature on the leaders covers some of the personal characteristics that an entrepreneur should possess, such as opportunity-seeking (Hitt, Ireland, & Sirmon, 2003) and (Hitt, Ireland, Sirmon, & Trahms, 2011), risk-taking (Dunlap-

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Hinkler, Mudambi, & Kotabe, 2009), responsiveness to change (Dunlap-Hinkler, Mudambi, & Kotabe, 2009) and management of scarce resources (Kyrgidou & Petridou, 2011).

(Kyrgidou & Petridou, 2011) in their study also show that the two constructs of strategic entrepreneurship (exploitation and exploration), although characterized by different features in theory, can benefit from similar enabling mechanisms (Kyrgidou & Petridou, 2011). (Hitt, Ireland, & Sirmon, 2003) established finding earlier; this "The strategic entrepreneurship construct (which includes opportunity- and contributes advantage-seeking behaviors) to our understanding of how organizations create wealth. Organizations that identify potentially valuable opportunities but are unable to exploit them to develop a competitive advantage will not create value for their customers or wealth for their owners. Organizations that build competitive advantages but lose their ability to identify valuable entrepreneurial opportunities are unlikely to sustain those advantages over time. As such, they will discontinue creating wealth for their owners. Therefore, all organizations, new and established, small and large, must engage in both opportunity-seeking and advantage-seeking behaviors (Hitt, Ireland, & Sirmon, 2003)".

The leader of the organization is considered as the entrepreneur that constantly pioneers for new opportunities that can create substantive competitive advantage. In other words, the organization has to exploit the existing advantages with the new opportunities. The execution of competitive advantage component represents the extent to which an organization is able to create a defendable position over its competitors by deploying current advantages in conjunction with new bundles when pursuing opportunities (Hitt, Ireland, & Sirmon, 2003). Appendix III: Overview - Main Findings; Table 10: Main Findings – Entrepreneurial Leadership presents the main findings in the literature on learning mechanisms.

# TOP MANAGEMENT TEAMS

The upper-echelon's theory elaborates further on the impacts of top managers and top management teams (TMT) on strategic innovation. Kock et al., 2011 researched how TMT characteristics affect strategic innovation orientation, concluding that TMT diversity has a positive effect on strategic innovation orientation (Talke, Kock, & Salomo, 2011). The study suggests that TMT diversity has a positive outcome on strategic innovation orientation, which results in a

proactive focus on emerging customer needs leading to a portfolio of new products with higher market and technology newness, both increasing organization performance (Talke, Kock, & Salomo, 2011).

Interestingly, this is one of the few articles that researched on the organizational performance through empirical evidence for the effects of TMT diversity. Their study suggests that TMTs should be diversified on their educational, functional, industrial and organizational background (Talke, Kock, & Salomo, 2011).

Another study also found support for TMT diversity being a positive effect on strategic innovation. The study by Barkema and Shvyrkov (2007) researches the effect of TMT diversity on the likelihood of organizations entering new geographical regions. According to the outcome of their study, TMT tenure diversity has a positive outcome; however they were not able to find support for TMT educational diversity. According to them, a possible explanation for this would be that by the time managers reach higher echelons in their multinational corporations, they have gained so much experience in different work settings that their formal education, which typically took place decades before, is no longer a good proxy for differences in cognitive characteristics (Barkema & Shvyrkov, 2007). While there is a clear indication of positive outcomes of TMTs on strategic innovation, the research methodologies of these studies are too dispersed and too thin to draw best practices for the stimuli on strategic innovation. More research is necessary in widespread settings and there is yet a gap to be researched on which extent the TMT diversity enables strategic innovation, taking organizational resources in to consideration for the effect on the organization's financial performance. Appendix III: Overview - Main Findings; Table 11: Main Findings - Top Management Teams presents the main findings in the literature on learning mechanisms.

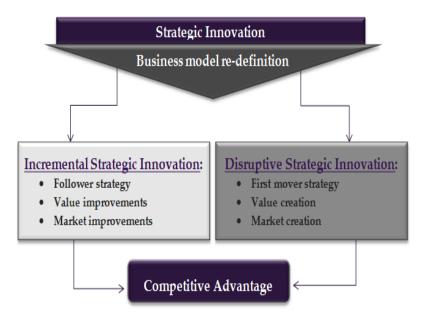
# STRATEGIC INNOVATION TYPOLOGIES

We find two extremes within the strategic innovation literature both on the type of competitive advantage, allowing us to make a distinction between incremental strategic innovation and disruptive strategic innovation. Within the incremental typology, value improvements are made on the existing customers and markets while organizations engaging in disruptive strategic innovation compete in such way that the newly developed markets do not contain any competitors yet and competitive advantage is therefore automatically created. This typology is reflected in the distinction made by

Kumar et al. (2000); they distinguish the difference between "market driven" from "market driving" organizations. Market driven organizations follow market developments, and introduce new products and services accordingly; their approach is evolutionary and incremental. Market-driving organizations, on the other hand, take actions that redefine their industry, offering novel, outstanding value propositions to the market, through unique activity systems; their approach is revolutionary and disruptive. Fundamental strategic innovations by market-driving organizations are often associated with new entrants to an industry such as Charles Schwab, Dell, or Amazon (Kumar, Scheer, & Kotler, 2000).

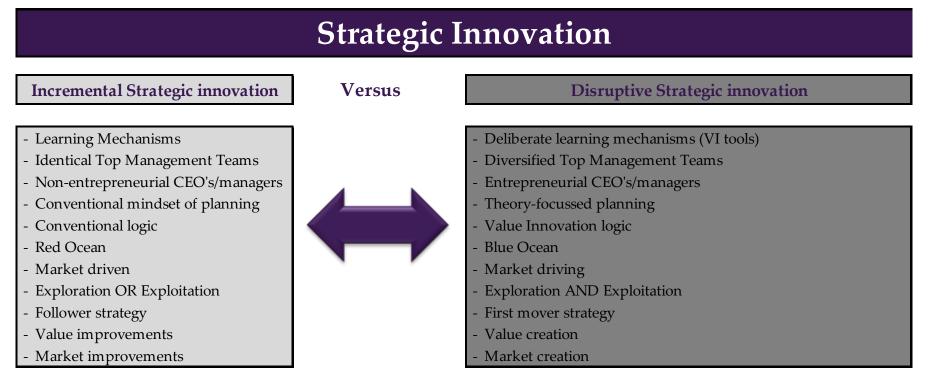
In summary, strategic innovation is strongly stimulated by deliberate learning mechanisms, entrepreneurial leadership and diversified TMT's. The organization needs an effective entrepreneurial and organizational culture, often carried by the managers and/or the CEO allowing the organization to constantly pioneer for value and market creation. The resilient dynamics between the organizational drivers and individual drivers are represented by the exploration and the exploitation perspective, aiming at achieving competitive advantage through exploring and exploiting opportunities simultaneously (Ireland, Hitt, & Sirmon, 2003). Figure 1: Illustration of Strategic Innovation typologies and Figure 2: Incremental Strategic Innovation vs. Disruptive Strategic Innovation present the differences between the two typologies and includes the above found drivers of strategic innovation:

# FIGURE 1: ILLUSTRATION OF STRATEGIC INNOVATION TYPOLOGIES



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## FIGURE 2: INCREMENTAL STRATEGIC INNOVATION VS. DISRUPTIVE STRATEGIC INNOVATION



The disruptive strategic innovation is clearly the more aggressive strategy for creating competitive advantage. Incremental strategic innovation is also aimed at creating competitive advantage but does not aim to disrupt the existing market. The organizational culture may perhaps also not be engrained around stimulating the creation of competitive advantage. In organizations that are engaged in the more disruptive typology of strategic innovation shape the organizational culture that creating competitive advantage is key goal.



# THEORETICAL FRAMEWORK OF STRATEGIC INNOVATION

This paper has carefully discussed and reviewed existing literature on strategic innovation. Considering the tightly related concepts; strategic change, strategic entrepreneurship and value innovation has allowed us to capture an umbrella view of the meaning and developments of strategic innovation. Table 2: Outlining Topics/Theories/Perspectives is an outline of the aforementioned addressed by the academics in the reviewed literature:

# TABLE 2: OUTLINING TOPICS/THEORIES/PERSPECTIVES

Level	Topics/Theories/Perspectives	Strategic change	Strategic entrepreneurship	Strategic innovation	Value Innovation
	Absorptive capacity	х	х	x	х
	Agency theory	х	x		
	Dynamic capability	х	x	x	x
Organizational	Information processing theory			x	
U U	Knowledge based view	x	х	x	x
	Resource based view	x	x	x	x
	Behavioral theory	х			
Entrepreneurial	Real option theory	x	х	x	
	Upper echelon's theory	х	x	x	
	Blue Ocean vs. Red Ocean				х
Strategy/Market	Exploitation vs. Exploration	х	x		
approach	Market driving vs. Market driven			x	x
	Value Innovation logic vs. Conventional logic			х	x



As previously concluded and as can be seen from the above outlining; the learning mechanisms are consistently mentioned in all inter-related concepts. The individual dimension is dominant in the strategic entrepreneurship and strategic change concept. Strategic innovation also covers the individual dimension, especially the upper echelon's theory. The last category which is inter-organizational interconnected explains the two extremes within the strategic innovation literature of incremental or disruptive strategic innovation. The exploitation versus exploration perspective covers the role of the entrepreneur within the organization. It questions whether the entrepreneurial role and the organizational role are mutually independent. Studies by (Hitt, Ireland, & Sirmon, 2003) and (Kyrgidou & Petridou, 2011) clearly show that both dimensions are inter-related. The other three perspectives within the same category consider the two extremes of strategic innovation. Table 3: Dimensions for pursuing Strategic Innovation shows the different dimensions for pursuing strategic innovation and shows the differences between the exploration and the exploitation perspective.

	Strategic Innovation		
Level	Incremental	Disruptive	
Individual	Employee/identical TMTs	Entrepreneur/diversified TMTs	
Organizational	Learning mechanisms	Deliberate learning mechanisms	Exploration
Aim	Value improvements/Market improvements	Value creation/Market creation	
Strategy	Red Ocean/Market driven/Conventional Logic	Blue Ocean/Market driving/Value Innovation	Exploitation

# TABLE 3: DIMENSIONS FOR PURSUING STRATEGIC INNOVATION

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Figure 3: Theoretical Framework of Strategic Innovation is an effort of sketching a theoretical framework of strategic innovation. The framework captures in a short manner which indicators trigger strategic innovation and presents the differences in the strategic innovation typologies leading to competitive advantage and organizational performance.

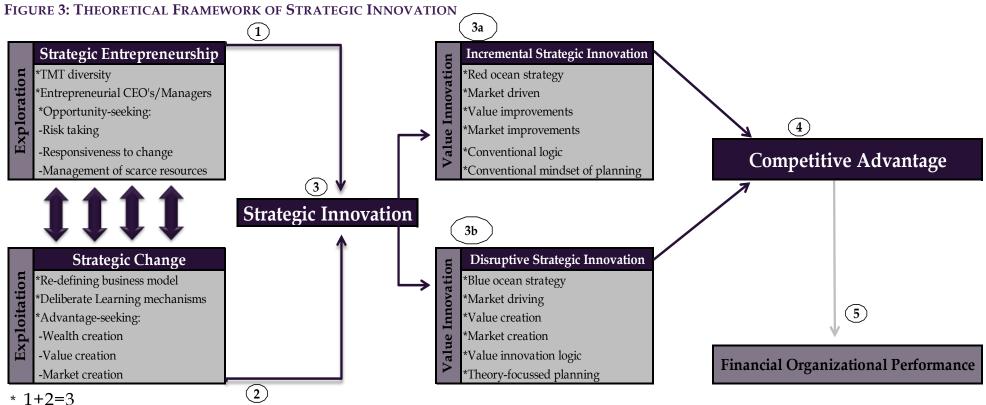
The framework clearly points out the dynamics between the exploration and the exploitation perspective. From the literature it appears that strategic entrepreneurship is more focused on the individual dimension, while strategic change leans more towards the organizational resources. However, if both elements fail to work together, it cannot lead to strategic innovation. Only the interaction between the existing organizational resources and the entrepreneurial leadership of the management can lead to strategic innovation.

Strategic innovation has the clear aim of creating competitive advantage, which can be achieved through either value and market improvement (incremental strategic innovation) or value or market creation (disruptive strategic innovation).

Both typologies show a different market approach, really reflected in their aggressiveness of creating competitive advantage. While organizations engaging in incremental strategic innovation aim at leaps in value for customers and follow the competition with other organizations (Red Ocean Strategy, Market driven and Conventional Logic), organizations engaging in disruptive strategic innovation pioneer for value while disregarding their competitors. These organizations set the rules in the new markets and create competitive advantage by leaving their competitors far behind (Blue Ocean Strategy, Market driving and Value Innovation Logic).

The theoretical framework expresses the dependence of the different dimensions; Strategic Entrepreneurship (exploration perspective) + Strategic Change (exploitation perspective) equals to Strategic Innovation. Strategic Innovation is than divided in two typologies: incremental strategic innovation or disruptive strategic innovation. In any case, they both aim at creating competitive advantage. The last dimension of creating competitive advantage has the ultimate aim of achieving a positive financial organizational performance. This however, may not always be positive as organizational resources needed to be spent on achieving creating competitive advantage may not outweigh the financial performance of the organization.

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- \* 1 without  $2 \neq 3$
- \* 2 without  $1 \neq 3$
- \* 3=3a or 3b
- \* 3a leads to 4
- \* 3b leads to 4
- \* 4 leads to 5



# MANAGERIAL IMPLICATIONS

The aim of this paper was to provide a deeper understanding of the meaning of Strategic Innovation. Taking strategic innovation and its related concepts into consideration, this paper has made an effort to sketch a theoretical framework of the findings on strategic innovation. Management engaging on the path of discovering strategic innovation can use this paper as an insight and guideline. The theoretical framework and the outlining of the strategic innovation typology allow the management to decide which triggers to integrate in to their organizational culture to foster strategic innovation. The strategic innovation typologies will help the management to identify their organizational culture accordingly for the near future.

More importantly, managers should consider the essential dynamics between their individual added value and the organizational existing organizational resources, also referred to as the exploration versus exploitation perspective. The exploration perspective clearly indicates the importance of the skills and competences of the entrepreneurial management. The entrepreneurial management should however consider that the existing organizational resources are not only complementary but also required to achieve competitive advantage.

Extending on the dynamics of the exploration and the exploitation perspective, managers should contemplate that the organizational culture should be shaped around nurturing strategic innovation. Literature reveals clearly that deliberate learning mechanisms and diversified Top Management Teams are important enablers of strategic innovation. In order to pursue strategic innovation it is therefore important that the management carefully considers Value Innovation tools and instruments that can shape the organizational culture for the constantly value pioneering routines.

The TMTs should be diversified on different aspects, such as the cultural backgrounds, educational backgrounds and professional backgrounds and experiences. The diversity will allow new geographical market penetrations and may achieve competitive advantage throughout.



When managers engage themselves in the strategy formulation process, the distinction of the strategic innovation typology can help to set other strategic decisions that aim at value and/or market improvements or creation. In either case, whether the value and market creation lead to incremental market changes or disruptions in the market, we expect that the organizational culture shall differ and the managers should use this paper as a starting point for setting out strategic decisions in terms of shaping the organizational culture around strategic innovation.

At last, granted that this paper aims at providing a deeper understanding of strategic innovation, not many articles researched the extent of strategic innovation leading to positive financial and organizational performance. The integration and the implementation of the aforementioned strategic decisions that positively influence strategic innovation may involve costly organizational resources. Managers should carefully consider and outweigh the financial costs of pursuing strategic innovation against the financial gains of competitive advantage through value and/or market creation.



# FUTURE RESEARCH AGENDA

The literature on strategic innovation is quite dispersed but yet academics seem to agree on particular dimensions that are of positive influence on strategic innovation. The focus of the research is mostly organizational based. The perspectives on organizational and individual dimensions mostly depart from the resource-based view. An explanation for this departure could be that strategic innovation is founded at the redefinition of the business model. When reviewing the different definitions of strategic innovation in the literature, the re-definition of the business model was the only dimension that was commonly agreed upon. While academics agree on this matter, during the review hardly any literature addressed how organizations engage themselves in this strategic process. While the term strategic innovation clearly indicates a strategic role and aspect, the literature is rather focused on smaller dimensions of triggering strategic innovation. It appears that the concept of strategic innovation is an accumulation of diversified researched topics all aimed at creating competitive advantage, but only researching a minor dimension within the organization that can be of influence.

Current research address the strategies taken by organizations as Red ocean strategy versus Blue ocean strategy, or the market driving versus market driven approach. While these statements are legit and interesting, there is still a link to be made towards the traditional strategic typologies, such as first-mover, follower, defender strategies, etc. Future research should make an effort to address these typologies as it may give more insight to organizational leaders to engage in strategic change to achieve strategic innovation and it may provide more insight to the decision-making process.

Another note for future research is that the aim of creating or sustaining competitive advantage is directly aimed at the organizational financial performance. Strategic innovation creates competitive advantage by creating value disregarding the question of existing markets or new markets. However, creating competitive advantage through the aforementioned triggers requires substantial organizational resources. Managers have to consider whether the investment in these organizational resources are suitable for their organization in its volatile market and have to carefully monitor in which timeframe the investments may turn into financial

advantages. Future research should investigate how these drivers of strategic innovation affect the organization's financial performance on the base of a longitudinal study, comparing the investments made and the performances achieved in organizations engaging themselves on the path of strategic innovation.

Current research departs mostly from the resource-based view, considering the entrepreneurial management and organizational mechanisms and resources. Future research should also consider the external environment and research whether organizations in certain industries are more subject to engage in strategic innovation.

Than at last, one of the main recommendations for future research is to consider the strategic innovation typology of incremental and disruptive innovation. There is a clear indication that organizational dynamics clearly differ when the organization engages in incremental strategic innovation or in disruptive strategic innovation.



# LIMITATIONS TO THE STUDY

In general, the concept of strategic innovation is an important topic to gain understanding of how organizations shape their organizational culture to create competitive advantage. Current research is not yet complete and rather widespread, but clearly the literature is growing. Research on different aspects is still necessary leaving enough research areas for the future. The aim of this paper was to gain a deeper understanding of the concept of strategic innovation and determining gaps in the literature. By bundling tightly related concepts, an umbrella view was provided to discuss the different meanings and findings and to sketch a theoretical framework of strategic innovation, however like every study also this paper is subject to some limitations;

The journals reviewed for this paper were results from the database of webofknowledge.com. After systematically performing the same search criteria and filters on the topics: strategic innovation, strategic entrepreneurship, strategic change and value innovation; the remaining articles were subject to review. Even though the search and elimination was carefully performed, only one database was used for the review of articles, making it possible that some literature may

not have been included in the review. While the database is commonly used and known for including significant published articles, yet no guarantees can be given that all relevant articles are included for the review. Also the timespan used for the selection method was from the year 2000 and onwards. Research conducted before this timespan are not included for the review and might have not considered relevant articles that could be of influence on the outcome of this paper.

While the literature review was quite extensive, yet it may be very well possible that not all related concepts are included in this review. The reviewed articles were carefully read, therefore allowing an in-depth analysis. Nonetheless, future reviews could consider more tightly related concepts to extend the current findings and enlarger the umbrella view.

And at last; as most literature reviews; the findings in this paper are completely subject to the writer's own interpretations. The goal however of this review was to provide a complete objective view on the reviewed articles. While systematic review serves the purpose of accumulating

knowledge, identifying gaps, developing new perspectives and setting out future research guidelines, the method is still questioned by some academics whether systematic reviews will lead to greater reliability, and by inference greater accuracy (Mulrow , 1994). Also accumulating the findings does not necessarily imply the statistical significance of the research (Slavin, 1986).



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# APPENDIX I: JOURNALS

## Relevant Journals

RELEVANT JOURNALS - INCLUDED		
ACADEMY OF MANAGEMENT EXECUTIVE	JOURNAL OF MANAGEMENT ORGANIZATION	
ACADEMY OF MANAGEMENT JOURNAL	JOURNAL OF MANAGEMENT STUDIES	
ACADEMY OF MANAGEMENT LEARNING EDUCATION	JOURNAL OF MARKETING	
ACADEMY OF MANAGEMENT PERSPECTIVES	JOURNAL OF ORGANIZATIONAL BEHAVIOR	
ACADEMY OF MANAGEMENT REVIEW	JOURNAL OF ORGANIZATIONAL CHANGE MANAGEMENT	
ACCOUNTING ORGANIZATIONS AND SOCIETY	JOURNAL OF PRODUCT INNOVATION MANAGEMENT	
ADMINISTRATIVE SCIENCE QUARTERLY	JOURNAL OF SMALL BUSINESS MANAGEMENT	
ADVANCES IN STRATEGIC MANAGEMENT A RESEARCH ANNUAL	JOURNAL OF WORLD BUSINESS	
ASIA PACIFIC JOURNAL OF MANAGEMENT	LEADERSHIP	
BRITISH JOURNAL OF MANAGEMENT	LEADERSHIP QUARTERLY	
BUSINESS SOCIETY	LONG RANGE PLANNING	
CALIFORNIA MANAGEMENT REVIEW	MANAGEMENT DECISION	
CORPORATE GOVERNANCE AN INTERNATIONAL REVIEW	MANAGEMENT LEARNING	
ENTREPRENEURSHIP AND REGIONAL DEVELOPMENT	MANAGEMENT SCIENCE	
ENTREPRENEURSHIP THEORY AND PRACTICE	MIT SLOAN MANAGEMENT REVIEW	
EUROPEAN MANAGEMENT JOURNAL	ORGANIZATION	
GROUP ORGANIZATION MANAGEMENT	ORGANIZATION SCIENCE	
HARVARD BUSINESS REVIEW	ORGANIZATION STUDIES	
HUMAN RELATIONS	ORGANIZATIONAL DYNAMICS	
INDUSTRIAL AND CORPORATE CHANGE	ORGANIZATIONAL RESEARCH METHODS	

INDUSTRIAL MARKETING MANAGEMENT	R D MANAGEMENT
INTERNATIONAL JOURNAL OF HUMAN RESOURCE MANAGEMENT	RESEARCH IN ORGANIZATIONAL BEHAVIOR
INTERNATIONAL JOURNAL OF MANAGEMENT REVIEWS	RESEARCH IN ORGANIZATIONAL BEHAVIOR VOL 25
INTERNATIONAL JOURNAL OF TECHNOLOGY MANAGEMENT	RESEARCH POLICY
INTERNATIONAL SMALL BUSINESS JOURNAL	RESEARCH TECHNOLOGY MANAGEMENT
JOURNAL OF APPLIED BEHAVIORAL SCIENCE	SMALL BUSINESS ECONOMICS
JOURNAL OF APPLIED PSYCHOLOGY	STRATEGIC ENTREPRENEURSHIP JOURNAL
JOURNAL OF BUSINESS ETHICS	STRATEGIC MANAGEMENT JOURNAL
JOURNAL OF BUSINESS RESEARCH	STRATEGIC ORGANIZATION
JOURNAL OF BUSINESS VENTURING	STRATEGY PROCESS
JOURNAL OF ENGINEERING AND TECHNOLOGY MANAGEMENT	TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE
JOURNAL OF INTERNATIONAL BUSINESS STUDIES	TECHNOLOGY ANALYSIS STRATEGIC MANAGEMENT
JOURNAL OF MANAGEMENT	TECHNOVATION



IRRELEVANT JOURNALS - EXCLUDED		
ACADEMIC MEDICINE JOURNAL OF THE ASSOCIATION OF	JOURNAL OF PUBLIC POLICY MARKETING	
AMERICAN MEDICAL COLLEGES		
AFRICAN JOURNAL OF BUSINESS MANAGEMENT	JOURNAL OF SPORT MANAGEMENT	
ARGUMENTA OECONOMICA	JOURNAL OF TECHNOLOGY TRANSFER	
BALTIC JOURNAL OF MANAGEMENT	MANAGEMENT DECISION	
BUSINESS HORIZONS	MEDICAL CARE RESEARCH AND REVIEW MCRR	
CANADIAN JOURNAL OF ADMINISTRATIVE SCIENCES REVUE	MIS QUARTERLY	
CANADIENNE DES SCIENCES DE L ADMINISTRATION		
CHINESE MANAGEMENT STUDIES	MIS QUARTERLY EXECUTIVE	
CONSERVATION BIOLOGY THE JOURNAL OF THE SOCIETY FOR	MODERN HEALTHCARE	
CONSERVATION BIOLOGY		
CUADERNOS DE ECONOMIA Y DIRECCION DE LA EMPRESA	PERSONNEL REVIEW	
DECISION SUPPORT SYSTEMS	PHYSICIAN EXECUTIVE	
ECOLOGY AND STRATEGY	POPULATION HEALTH MANAGEMENT	
ECONOMIST NETHERLANDS	PRODUCTION PLANNING CONTROL	
EUROPEAN ACCOUNTING REVIEW	PROJECT MANAGEMENT JOURNAL	
EUROPEAN FINANCIAL MANAGEMENT	PUBLIC MANAGEMENT REVIEW	
EUROPEAN JOURNAL OF INTERNATIONAL MANAGEMENT	RADIOGRAPHICS A REVIEW PUBLICATION OF THE	
	RADIOLOGICAL SOCIETY OF NORTH AMERICA INC	
EUROPEAN JOURNAL OF MARKETING	REGIONAL STUDIES	
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH	SAFETY SCIENCE	
EUROPEAN MANAGEMENT JOURNAL	SCANDINAVIAN JOURNAL OF ECONOMICS	

EXPERT SYSTEMS WITH APPLICATIONS	SCANDINAVIAN JOURNAL OF MANAGEMENT
FINANCIAL MANAGEMENT	SCIENCE AND PUBLIC POLICY
FUTURES	SERVICE BUSINESS
GLOBAL ECONOMIC REVIEW	SERVICE INDUSTRIES JOURNAL
GROUP ORGANIZATION MANAGEMENT	SUPPLY CHAIN MANAGEMENT AN INTERNATIONAL
	JOURNAL
HEALTH POLICY AMSTERDAM NETHERLANDS	SURGICAL INNOVATION
HUMAN RELATIONS	SYSTEM DYNAMICS REVIEW
IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT	SYSTEMIC PRACTICE AND ACTION RESEARCH
INNOVATION MANAGEMENT POLICY PRACTICE	SYSTEMS RESEARCH AND BEHAVIORAL SCIENCE
INTERNATIONAL BUSINESS REVIEW	THE INTERNATIONAL JOURNAL OF HEALTH PLANNING
	AND MANAGEMENT
INTERNATIONAL JOURNAL OF MANPOWER	TOTAL QUALITY MANAGEMENT BUSINESS EXCELLENCE
INTERNATIONAL JOURNAL OF OPERATIONS PRODUCTION	TRAINING DEVELOPMENT
MANAGEMENT	
INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS	WORK AND OCCUPATIONS
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH	ZBORNIK RADOVA EKONOMSKOG FAKULTETA U RIJECI
	PROCEEDINGS OF RIJEKA FACULTY OF ECONOMICS
JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT	ZEITSCHRIFT FUR PERSONALFORSCHUNG
JOURNAL OF MONETARY ECONOMICS	



# APPENDIX II: OVERVIEW - DEFINITIONS

## STRATEGIC INNOVATION

### TABLE 4: DEFINITIONS - STRATEGIC INNOVATION

Strategic Innovation – Definitions:	Reference:
Strategic innovation aims at a re-conceptualization of business models, the creation of uncontested market spaces,	(Gebauer, Worch, & Truffer,
and leaps in customer value.	2012)
Strategic innovation is a creative and significant departure from historical practice in at least one of three areas. Those	(Markides & Oyon, 2010)
areas are design of the end-to-end value chain architecture; conceptualization of delivered customer value; and	
identification of potential customers. Strategic innovation involves exploring the unknown to create new knowledge	
and new possibilities. It proceeds with strategic experiment to test the viability of new business ideas.	
Strategic innovation takes place when a company identifies gaps in an industry positioning map, goes after them, and	(Anderson & Markides, 2007)
these gaps grow to become big markets. By "gaps" we mean: (a) a new WHO - customer segments emerging or	
existing customer segments that other competitors have neglected; (b) a new HOW - customer needs emerging or	
existing customer needs not served well by other competitors; and (c) a new HOW - ways of promoting, producing,	
delivering or distributing existing (or new) products/services to existing (or new) customer segments (Hamel and	
Prahalad, 1991).	
Strategic innovation is "the strategy of breaking the rules" (Markides, 1997, pp. 11-12). Strategic innovators can try to	(Jacobs & Heracleous, 2005)
redefine their business, or, following Abell's (1980) framework, more specifically the who, what and how aspects of	
their business.	
Strategic innovation means an innovation in one's business is model that leads to a new way of playing the game.	(Charitou & Markides, 2003)



## STRATEGIC CHANGE

## TABLE 5: DEFINITIONS - STRATEGIC CHANGE

Strategic Change - Definitions:	Reference:
Strategic change is defined as the change of strategic stance from defender position to prospector position or vice	(Naranjo-Gil & Hartmann,
versa in conformity with previous studies (Abernethy & Brownell, 1999; Miles & Snow, 1978; Shortell & Zajac, 1990).	2007)
Strategic change can be defined as a difference in form, quality, or state in an organizational entity over time that	(Hutzschenreuter,
alters the company's alignment with its environment.	Kleindienst, & Greger, 2012)
Rajagopalan and Spreitzer (1997: 57) defined strategic change as "the combination of changes in the content of	(Narayanan, Zane, &
strategy as well as changes in environmental/organizational conditions brought about by managerial actions in the	Kemmerer, 2011)
process of change" and established the existence of a cognitive lens (in addition to rational and learning) in this	
literature. They identified several features of this lens: recognition of the role of managerial actions and noneconomic	
outcomes, and change as an iterative process.	
Strategic change refers to changes in the strategy content and in environmental and organizational conditions as a	(Sackmann, Eggenhofer-
corollary of the change initiative.	Rehart, & Friesl, 2009)
Strategic change is the extent to which a firm is moving along the prospector/defender continuum (Miles and Snow,	(Naranjo-Gil, Hartmann, &
1978; Shortell and Zajac, 1990; Shortell, Morrison and Friedman, 1990). Following Golden (1992) and Abernethy and	Maas, 2008)
Brownell (1999), managers were presented with two descriptions, one of a defender organization and another of a	
prospector organization.	
We define radical strategic change as major shifts in the most critical exchanges between the organization and its	(Wischnevsky & Damanpour,
environment, encompassing large changes in a firm's business focus or mix, competitive and collaborative strategy	2008)
choices and long term goals.	



## STRATEGIC ENTREPRENEURSHIP

### TABLE 6: DEFINITIONS - STRATEGIC ENTREPRENEURSHIP

Strategic Entrepreneurship – Definitions:	Reference:
Strategic entrepreneurship (SE) is defined as "the integration of entrepreneurial (i.e., opportunity-seeking behavior)	(Urban, 2012)
and strategic (advantage-seeking behavior) perspectives in developing and taking actions designed to create wealth"	
(Hitt et al. 2002: 481)	
The question of how firms create and sustain a competitive advantage (strategic management) while simultaneously	(Sirén, Kohtamäki, &
identifying and exploiting new opportunities (entrepreneurship) is at the heart of strategic entrepreneurship research	Kuckertz, 2012)
(Hitt et al., 2011; Hitt et al., 2001; Ireland et al., 2003).	
Strategic entrepreneurship refers to the connection between the entrepreneurship and strategic management	(Dunlap-Hinkler, Mudambi,
literatures (Kuratko and Audretsch, 2009). It refers to the second component of Guth aand Ginsberg's (1990)	& Kotabe, 2009)
definition and further elaborates on how firms must enhance their responsiveness to change, increase their	
willingness to take risks and engage in innovative decision-making (Phan, Wright, Ucbasaran and Wee-Liang, 2009).	
A strategic entrepreneur or one possessing this dominant logic must embrace the uncertainty surrounding innovation	
and diffusion process and at the same time inspire intra-preneurship within the firm.	
We may define strategic entrepreneurship as the activity that drives the economy in new directions, through	(Mathews, 2010)
recombination of resources, activities and routines by firms, and the entrepreneur as the economic agent who in	
principle lacks resources (but knows where to find them), who becomes aware of opportunities that can be turned	
into profit, and acts to realize these opportunities through resource mobilization and activation in the pursuit of	
profit.	
"Strategic entrepreneurship is entrepreneurial action with a strategic perspective" (Hitt et al., 2001, p. 480) and	(Monsen & Boss, 2009)
"results from the integration of entrepreneurship and strategic management knowledge" (Ireland et al., 2003, p. 966).	
More specifically, "entrepreneurial action using a strategic perspective is helpful to identify the most appropriate	
opportunities to exploit and then to facilitate the exploitation" of these opportunities in order "to continuously create	
competitive advantages that lead to maximum wealth creation" (Hitt et al., 2002, pp. 2, 13). Strategic	
entrepreneurship addresses how to combine and synthesize "opportunity-seeking behavior and advantage-seeking	

behavior" to promote wealth creation (Ireland et al., p. 966). Beyond benefiting simply the organization itself,	
strategic entrepreneurship can create advances from which society can benefit "through new value propositions that	
better serve the needs of some segment, or the whole, of society" (Schendel & Hitt, 2007, p. 1).	
Strategic entrepreneurship can be described as simultaneous opportunity seeking and advantage seeking. Younger	(Steffens, Davidsson, &
firms are generally more flexible and therefore enjoy "discovery advantages," whereas established firms tend to be	Fitzsimmons, 2009)
resource rich and more experienced and consequently enjoy "exploitation advantages.	
Strategic entrepreneurship involves simultaneous opportunity-seeking (i.e., entrepreneurial) and advantage-seeking	(Audretsch, Lehmann, &
(i.e., strategic) behaviors (Ireland, Hitt, & Sirmon, 2003). Strategic entrepreneurship includes those "organizationally	Plummer, 2009)
consequential" innovations, "representing the means through which opportunity is capitalized upon" while "in	
pursuit of competitive advantage."	
Strategic entrepreneurship (SE) involves simultaneous opportunity-seeking and advantage-seeking behaviors and	(Hitt, Ireland, & Sirmon, 2003)
results in superior firm performance.	



## VALUE INNOVATION

### TABLE 7: DEFINITIONS - VALUE INNOVATION

Value Innovation - Definition	Author(s)
Companies try to redefine the industry by searching for new customers and creating a new value proposition for	(Lindic, Bavdaz, & Kovacic,
customers instead of relying on imitation or incremental improvement over competitors. Thus, a company can create	2012)
an uncontested market space, in which the company is the first in the market, which gives it temporary monopoly	
power; it can quickly create economies of scale and exploit positive feedback effects, which offers the company an	
opportunity to grow more quickly.	
Value innovation is defined as delivering exceptional value to the most important customer in the value chain.	(Balsano, Goodrich, Leek, &
	et al., 2008)
Value innovation is a re-invention strategy for growth.	(Goodrich & Aiman-Smith,
	2007)
Value creation capacity as the capacity to (1) create fundamentally different and/or new business model (incl. market	(Berghman, Matthyssens, &
approach) and (2) change the roles and (power) relationships in industry/supply chain.	Vandenbempt, 2006)
Efforts to sustain competitive advantage through the creation of new markets and new ways of competing (as such,	(Matthyssens, Vandenbempt,
we do not focus on product and/or technology innovation). The aim is the creation of new market space enabling	& Berghman, 2006)
companies out-competencing rather than out-performing competitors.	
Value Innovation: creating exceptional value for the customer, most effectively when that customer is the most	(Dillon, Lee, & Matheson,
important customer in the value chain.	2005)
Value innovation to identify the innovation that occurs when organizational members are working on identifying	(Aiman-Smith, Goodrich,
better (new) ways to serve their current customers, and are identifying new markets.	Roberts, & Scinta, 2005)
Value innovation: creating products or services for which there are no direct competitors	(Mauborgne & Kim, 2004)



# APPENDIX III: OVERVIEW - MAIN FINDINGS

## STRATEGY FORMULATION PROCESS

### TABLE 8: MAIN FINDINGS - STRATEGY FORMULATION PROCESS

Research purpose	Findings	Reference
Mapping out common finding and characteristics	There are too many companies involved in Red ocean strategies and companies	(Kim &
on firms engaging in Blue Ocean Strategies and	are trying to break out of the competition by creating new markets (blue ocean).	Mauborgne, 2005)
developing an analytic tool on the evaluation of	The frameworks and tools introduced here are essential analytics that can be	
the blue or red ocean strategy in order for	applied to allow companies to break from the competition and open up blue	
companies to break out of the competition.	oceans of uncontested market space.	
How innovative companies break free from the	High growth companies are more successful when they apply the Value	(Kim &
pack by staking out fundamentally new market	Innovation Logic, rather than just constantly staying ahead of competition, they	Mauborgne, 2005)
space.	make competition irrelevant through Value Innovation.	
In this paper, we examine whether organisations	Our findings suggest that the use of SPMSs (as opposed to other forms of PMS)	(Gimbert, Bisbe, &
that use SPMSs engage in strategy formulation	by an organisation's top management team translates into a more	Mendoza, 2010)
processes differently from those that use	comprehensive strategic agenda. Prior studies have shown that strategic	
performance measurement systems (PMSs) which	agendas shape the extent and direction of corporate strategic change	
do not qualify as strategic performance		
measurement systems (SPMSs), or those which do		
not use any type of PMS.		



Developing a new design for dual purpose for the organization explaining how to separate the new business from the core business.	Organizations struggle when trying to manage a mature business and a related strategic experiment simultaneously. The endeavor is fraught with contradiction and paradox. In order to succeed, leaders must deal with two conflicting pressures. NewCo needs to forget much of what has made CoreCo successful, and this argues for isolating NewCo from CoreCo. However, NewCo also needs to borrow resources from CoreCo, and this argues for integrating the two units. To forget, NewCo must have a much different DNA than CoreCo. To borrow, NewCo must be linked to CoreCo.	```
In order to precede a strategic innovation, strategic experiments are required and come with a planning. This article focuses on the strategic experiments of an organization and proposes six changes to the conventional planning mind-set.	From conventional planning mind set towards a theory-focused planning work require six changes: (1) level of detail; instead of demanding a lot of detail, limit focus to a small number of critical unknowns. (2) Communication of expectations; instead of focusing on the predictions themselves, focus on the theory used to generate predictions and the theory's underlying assumptions. (3) Nature of predictions; instead of making specific numerical predictions for specific dates, predict the trends. (4) Frequency of strategic reviews: instead of reviewing outcomes annually to re-evaluate fundamental business assumptions, do so monthly – or more frequently as necessitated by new information. (5) Perspective in time; instead of reviewing only current-period outcomes consider the history of strategic experiment in its entirety and look at trends over time. (6) Nature of measures; instead of relying on a mix of financials and nonfinancial to measure outcomes, focus on leading indicators.	
How do firms respond to disruptive innovation to beat their competitors	Firms responded to disruptive innovation, either by setting up a separate organizational unit or by using the existing organizational infrastructure. Five key responses to disruptive innovation: 1. focus on and invest in the traditional business. 2. Ignore the innovation; view it as a completely new business. 3. Attack back - disrupt the disruption: build success by emphasizing new, nontraditional product or service attributes that, by definition, become attractive new customers. 4. Adopt the innovation by playing both games at once. 5. Embrace the innovation completely and scale it up.	



Investigate the value of an entrepreneurial perspective on opportunities in the business environment for the foundation of economic policy. This study proposes a new approach to the design of high-growth economic policies that stems directly from the entrepreneurial perspective and is using evidence to inform economic policy.	Companies achieve high growth through value pioneering, not only through technology pioneering (confirmed). 4. Fast growth is independent of company size (confirmed).	(Lindic, Bavdaz, & Kovacic, 2012)
Most companies are unsuccessful in their efforts to	Responding to a disruption by adopting a second business model in the same	(Markides &
compete with two business models at once	market can be an effective marketing strategy Your second business model should be different from your existing one and different from that of the disrupter Keep the two separate enough to avoid conflicts, but leverage potential synergies Companies operating with two business models use a variety of integrating mechanisms to exploit synergies between the models (see document).	Oyon, 2010)
How do firms respond to disruptive innovation to	Firms responded to disruptive innovation, either by setting up a separate	(Charitou &
beat their competitors	organizational unit or by using the existing organizational infrastructure. Five key responses to disruptive innovation: 1. focus on and invest in the traditional business. 2. Ignore the innovation; view it as a completely new business. 3. Attack back - disrupt the disruption: build success by emphasizing new, nontraditional product or service attributes that, by definition, become attractive new customers. 4. Adopt the innovation by playing both games at once. 5. Embrace the innovation completely and scale it up.	Markides, 2003)



## DELIBERATE LEARNING MECHANISMS

### TABLE 9: MAIN FINDINGS - LEARNING MECHANISMS

Research purpose	Findings	Source
In this paper, the focus is on an organization's ability to systematically generate value innovation initiatives. This paper focuses on the relationship between learning mechanisms that an organization establishes deliberately and its value innovation ability. More specifically, we focus on deliberate learning mechanisms that firms establish to stimulate the different dimensions of absorptive capacity. We study whether and how the effectiveness of deliberate managerial efforts for absorptive capacity is determined by supply chain relations.	Our research shows that supply chain characteristics have an important impact on the effectiveness of deliberate learning mechanisms that firms establish in an effort to generate VI ability. Developing strong partnerships with supply chain parties may replace to some degree internal mechanisms to stimulate value innovation ability. This calls for more deliberate and strategic customer and supplier selection processes	(Berghman, Matthyssens, & Vandenbempt, 2012)
The authors seek to identify what competences are needed to increase this new customer value capacity.	Competences: (1) Marketing practices for external knowledge absorption: recognition, assimilation and transformation. (2) General organizational competences, i.e. Culture, cross-functional coordination and structure. (3) Competences embedded in the supply chain/network: referring to information from customers and suppliers and innovation stimulus from customers and suppliers.	(Berghman, Matthyssens, & Vandenbempt, 2006)



This study proposes that the process of strategic learning, through its intra-organizational elements that enable the dissemination, interpretation, and implementation of strategic knowledge, enables firms to capitalize on the benefits of both exploration and exploitation strategies. Research question: to what extent does strategic learning	Results from 206 Finnish software firms indicate that strategic learning fully mediates the relationship between exploration, exploitation, and profit performance. Furthermore, the study demonstrates that the effect from exploration to strategic learning is moderated by the level of exploitation. This moderation effect suggests that the strategic learning is limited, being a path dependent capability that favors exploitation over exploration when stretched.	(Sirén, Kohtamäki, & Kuckertz, 2012)
mediate the relationships between opportunity seeking strategy and advantage seeking strategy and a firm's profit performance?	However, strategic learning effectively allows both types of strategies to improve profit performance. 3. Analytical results: Our empirical study of 206 software companies reveals that exploitation and exploration does not directly affect profit performance, whereas strategic learning fully mediates these relationships. Furthermore, we found evidence that exploitation moderates the exploration-strategic learning relationship. Indeed, it seems that strategic learning tends to favor exploitative learning initiatives at the cost of opportunity exploration. This result provides evidence for the constrained nature of the strategic learning capabilities of a firm (Levinthal and March, 1993).	
The study examines the relationship between absorptive capacity and strategic innovation.	By using the learning-process perspective of absorptive capacity (exploratory, assimilative, transformative, and exploitative learning processes), we suggest that transformative learning processes in particular, play a key role in strategic innovation. In addition, a follower strategy and participative role in the knowledge network, instead of a first-mover strategy and a dominant role in the knowledge network, do indeed promote strategic innovation	(Gebauer, Worch, & Truffer, 2012)
This paper seeks to examine the relationships between knowledge capability, strategic change, and firm performance in the US airline industry from regulation to deregulation.	Time series statistics with fixed effects are used to examine the relationships between the variables. The results support the theoretical model: knowledge capability influences change in strategy, which, in turn, influences firm performance. The results also indicate that the environment serves as a moderator in the relationship between strategic change and firm performance.	(Goll, Johnson, & Rasheed, 2007)

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The information obtained from this assessment	Each of the three case studies relates to the use of the VI potential assessment	(Balsano, Goodrich,
tool allows managers to understand the cultural	tool as an innovation-specific vehicle for the communication od needs from the	Leek, & et al., 2008)
drivers for innovation within their organization	respondents to management, with the secondary benefit of creating a common	
and guide the creation of a more effective Value	language for the subsequent improvement activities that are launched.	
Innovation culture.		
and guide the creation of a more effective Value		

## ENTREPRENEURIAL LEADERSHIP

### TABLE 10: MAIN FINDINGS - ENTREPRENEURIAL LEADERSHIP

Research purpose	Findings	Source
Investigate the value of an entrepreneurial	1: Creating a new market space leads to higher growth (partly confirmed). 2.	(Lindic, Bavdaz, &
perspective on opportunities in the business	Fast growing companies can be found in a variety of industries (confirmed). 3.	Kovacic, 2012)
environment for the foundation of economic	Companies achieve high growth through value pioneering, not only through	
policy. This study proposes a new approach to the	technology pioneering (confirmed). 4. Fast growth is independent of company	
design of high-growth economic policies that	size (confirmed).	
stems directly from the entrepreneurial		
perspective and is using evidence to inform		
economic policy.		
Our analysis examines cases of contender,	While previous research suggests that CEO turnover correlates with strategic	(Barron, Chulkov, &
follower, and outsider succession and reinforces	changes in firm's operations such as discontinuation of operations, we	Waddell, 2011)
the key role of non-CEO departures in strategic	demonstrate that such findings apply only to specific types of CEO turnover,	
change at a firm	and only if non-CEO members of the top management team also exit the firm.	
	The results support an integration of the upper echelons perspective and the	
	power circulation theory view of top management team turnover.	



This research attempts to (1) identify the factors that influence strategic decision making (i.e., a choice made among various strategic options), and (2) establish their relative importance in the context of new product development.	Managers' choices are determined by the assessment of (1) the business opportunity, (2) the feasibility, (3) the competitiveness, and (4) the leverage opportunities provided by the strategic option.	(Antioco, De Schamphelaere, Moenaert, Robben, & Roks, 2010)
The connection between strategic change and managerial turnover is studied within a model where managers decide on a firm's strategy. In this paper, we investigate the connections between strategic change, managerial turnover, and managerial reputation within an economic model.	Managers as well as firm owners care for the long-term success of a company, but managers are also interested in their own reputation. Due to reputational concerns, managers are reluctant to alter strategic decisions they themselves made in the past even when internal accounting information indicates that they should do so. It is shown that it may well be optimal in some cases to dismiss managers of higher ability while someone less talented may be kept in office when strategic change has to be enforced.	(Sliwka, 2007)
Herein, we examine the contributions of strategic management and entrepreneurship to SE. Building on a previous model of SE, we develop an input-process-output model to extend our understanding of the SE construct. We examine the resource inputs into SE, such as individual knowledge and skills. In addition, we explore the resource orchestration processes that are important for SE and the outcomes, including creating value for customers, building wealth for stockholders, and creating benefits for other stakeholders, especially for society at large.	Individual entrepreneurs also benefit through financial wealth, but other outcomes such as personal satisfaction and fulfillment of personal needs (e.g., self-actualization) may be of equal or even greater importance. Therefore, we incorporate in the model of SE multilevel outcomes that motivate entrepreneurs The SE construct (which includes opportunity- and advantage-seeking behaviors) contributes to our understanding of how firms create wealth. Firms that identify potentially valuable opportunities but are unable to exploit them to develop a competitive advantage will not create value for their customers or wealth for their owners. Firms that build competitive advantages but lose their ability to identify valuable entrepreneurial opportunities are unlikely to sustain those advantages over time. As such, they will discontinue creating wealth for their owners. Therefore, all firms, new and established, small and large, must engage in both opportunity-seeking and advantage-seeking behaviors.	(Hitt, Ireland, Sirmon, & Trahms, 2011); (Hitt, Ireland, & Sirmon, 2003)
Drawing on the twin concepts of competence exploration and competence exploitation, we study their effects on strategic entrepreneurship.	Theoretically, the entrepreneurial components of strategic entrepreneurship (an entrepreneurial mindset and creating innovation) should benefit from competence exploration while its strategic components (managing resources strategically and executing competitive advantages) should benefit from	(Kyrgidou & Petridou, 2011)

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competence exploitation, but not vice-versa. Our findings, however, suggest that this theoretical dichotomy does not hold up in practice. We demonstrate that strategic entrepreneurship's two sides, although characterized by different features in theory, can benefit from similar enabling mechanisms. Competence exploration and exploitation, serving as the two enabling mechanisms, create the substructure of routines and processes through which strategic entrepreneurship can be deployed. we find that both competence exploration and exploitation positively influence all four components of strategic entrepreneurship as proposed by Ireland, Hitt, and Sirmon (2003). Thus, we find no evidence that the dysfunctional effect that can occur between exploration and exploitation in theory (March 1991) materialised with respect to strategic entrepreneurship. Although competence exploration and exploitation do not appear to have the negative effects on their expected antithetical constructs (strategy and entrepreneurship respectively) as theory led us to believe, we can be sure that the type of activities they promote are different.

## TOP MANAGEMENT TEAMS

#### TABLE 11: MAIN FINDINGS - TOP MANAGEMENT TEAMS

Research purpose	Findings	Source
In particular, the paper investigates how top	We find significant effects of top management team heterogeneity on the extent	(Naranjo-Gil &
management team heterogeneity affects strategic	and direction of strategic change, and find that the use of the management	Hartmann, 2007)
change both directly, and indirectly, through the	accounting system partially mediates the relationship between top management	
design and use of the management accounting	team heterogeneity and strategic change.	
system.		



This study investigates how TMT characteristics	Results indicate that TMT diversity, measured as heterogeneity in educational,	(Talke, Kock, &
affect a firm's strategic innovation orientation, and	functional, industry, and organizational background, has a strong positive	Salomo, 2011)
how this relates to innovation outcomes and firm	effect on a firm's innovation orientation. A strong proactive focus on emerging	
performance.	customer needs and on novel technologies then lead to a portfolio of new	
	products with higher market newness and technology newness, which both	
	increase firm performance. The results suggest that the effect of TMT diversity	
	on performance is partially mediated by a firm's strategic innovation	
	orientation. Contrary to expectation, a direct but rather weak positive effect of	
	TMT diversity on firm performance can be observed. Results further show that	
	a proactive strategic innovation orientation increases market and technology	
	newness of the new product portfolio.	
This study examines the role of top management	We argue that heterogeneous management teams are better able to handle the	(Naranjo-Gil,
team (TMT) heterogeneity in facilitating strategic	simultaneous and conflicting demands of refocusing the organization	Hartmann, & Maas,
change	strategically and keeping up operational performance. We expect this to be true	2008)
	only for teams that are heterogeneous with respect to factors directly related to	
	job requirements, however. In support of our hypotheses, the results show job-	
	related TMT heterogeneity moderates the relation between strategic change and	
	operational performance. No moderating effect is found for non-job-related	
	TMT heterogeneity.	
Find out of TMT tenure diversity and educational	Consistent with our predictions, we found that TMT tenure diversity increased	(Barkema & Shvyrkov,
diversity increases the likelihood that a firm will		2007)
enter new geographic areas rather than familiar		
ones.	time managers reach higher echelons in their multinational corporations, they have gained so much experience in different work settings that their formal	
	education, which typically took place decades before, is no longer a good proxy	
	for differences in cognitive characteristics.	

