

ENTREPRENEURIAL LEADERSHIP IN SE ACCOUNT MANAGED FIRMS

A discussion paper for Scottish Enterprise

by Eleni Kesidou, PhD Candidate, Hunter Centre for Entrepreneurship

March 2017

CONTENTS

EXECUTIVE SUMMARY	3
INTRODUCTION	4
A REVIEW OF EXISTING ACADEMIC KNOWLEDGE	5
RESEARCH QUESTIONS & METHOD	9
QUALITATIVE RESEARCH FINDINGS	12
QUANTITATIVE RESEARCH FINDINGS	30
DISCUSSION/ IMPLICATIONS	46
REFERENCES	51

EXECUTIVE SUMMARY

This study focuses on entrepreneurial leadership, its presence in SE account managed firms and its impact on business performance and growth. Data were collected using a mixed method approach. First, qualitative data from six case studies of SE account managed firms formed the basis for delineating the profile of the entrepreneurial leader and describing entrepreneurial leadership as a process. Second, information received via a company survey of 133 SE account managed firms were used to model entrepreneurial leadership and measure both its presence and impact.

Data from the case studies unravelled qualitative characteristics of entrepreneurial leadership from the perspective of using entrepreneurship as a strategy for business development and growth. Components of a model were identified describing what entrepreneurial leadership within organizations looks like, what variables affect and explain the different levels of entrepreneurial leadership amongst organizations and how being an entrepreneurial leader can improve business performance and growth through opportunity exploration and exploitation. Specific behaviours and attitudes of the leader regarding visioning, innovativeness, creativity, passion, risk taking and tenacity/ flexibility were recognized as indicative by the leaders interviewed. Access to and quality of entrepreneurial capital, as well as the levels of dynamism and hostility within the external environment, have been identified as potential explanatory variables of entrepreneurial leadership.

Statistical modelling of the survey data confirmed that innovativeness and creativity, being passionate and sharing that passion to motivate followers, being a risk taker and encouraging risk taking for opportunity exploration and exploitation as well as being the evangelist of the company's vision by ensuring its clear communication and connection with respective strategies are important for leaders who identify their style of leadership as being entrepreneurial. Satisfaction in accessing capital, and the role of the quality of human, social and financial capital shed light on the importance of resource deployment in realizing a vision of business growth via entrepreneurial activities. External environmental effects revealed that a dynamic environment may enhance entrepreneurial leadership whereas a hostile, competitive environment may discourage it.

Finally, quantitative findings suggest the potential of entrepreneurial leadership as a business development strategy in helping to create business growth conditions. Business growth indicators were found to be affected by behaviours and attitudes that constitute entrepreneurial leadership suggesting the need to cultivate relevant leadership behaviours and attitudes.

INTRODUCTION

Our understanding of the various factors affecting the degree of entrepreneurship of businesses as well as how it affects business development and growth has increased over the last two decades¹. Yet, we still have limited understanding of the contextual and circumstantial conditions under which business leaders decide to use entrepreneurship as a business development and growth strategy. For any business, development and growth requires leaders to engage in leadership behaviours that result subsequently specific management practices. If leadership decides to adopt a strategic posture towards entrepreneurship as their business development and growth strategy, the adoption and development of the entrepreneurial leadership style is considered essential for success²

Scottish Enterprise has been investing resources to help Scottish companies and their leaders to cultivate their entrepreneurial attitudes and characteristics in order to produce useful change. The current research has been commissioned to study leadership within entrepreneurial organizations in order to identify those prevailing characteristics, attitudes and behaviours associated with taking an organization into the future, through the identification and exploitation of opportunities. To examine these issues further, a mixed method approach including a qualitative and a quantitative study was conducted.

The current report summarizes the overall investigation and its key findings. The first section includes a literature review which introduces and discusses the main theoretical underpinnings of entrepreneurial leadership and its connection to business development and growth. Next, the research questions are defined and a short description of the research methods used is included. Two paragraphs presenting and summarizing key findings from both studies follow. The report concludes with a discussion of the findings and their implications for business leaders and consultants as well as for research in the field.

¹ Davidsson et al., 2006; Gilbert et al., 2006

² McGrath and MacMillan, 2000; Ireland et al., 2003; Gupta et al, 2004; Renko et. al, 2015

A REVIEW OF EXISTING ACADEMIC KNOWLEDGE

Background

The concept of entrepreneurial leadership has been discussed widely within entrepreneurship, leadership and strategic management disciplines where it has been associated with the notion that under highly competitive circumstances, innovative and entrepreneurial mind-sets capable of implementing rapid change are required to ensure business success³. Studies on the intersection of entrepreneurship and leadership have seen entrepreneurial leadership as either a distinctive style of leadership or as a strategic approach to entrepreneurship⁴. Both approaches have explored various attributes and behaviours to build the profile of entrepreneurial leaders while agreeing on their strategic approach to entrepreneurship; their focus on opportunity-seeking and advantage-seeking; their ability to articulate and realize a vision; and their role as strategic managers of resources.

Researchers have identified opportunity exploration/exploitation as the continuous process in which the entrepreneurial leader engages to realize his visions of strategic importance for the firm⁵. While literature on entrepreneurial vision generally focuses on its role in venture creation and growth⁶. On this basis, when opportunity exploration/exploitation becomes a process in which the leader engages the company to realize his strategic vision⁷, resource mobilization, development and strategic management is considered an integral part of the entrepreneurial leadership process.

Scholars studying entrepreneurship, leadership and strategy have worked intensively to identify these different components of entrepreneurial leadership; however, the contextual, conditional and circumstantial effects on visioning, opportunity exploring/exploiting and resource deployment is missing. Therefore, the role of entrepreneurial leadership behaviours and attitudes, the asset base, resource mobilization and management in the entrepreneurial leadership process are of particular interest. Attention around these relations is based on their potential implications to business development and growth since prior research has shown that leading a business “entrepreneurially” enhances the likeliness of opportunities to be recognized and pursued⁸.

³ McGrath and MacMillan, 2000; Ireland et al., 2003; Gupta et al, 2004; Renko et. al, 2015

⁴ Covin & Slevin, 2002; Cogliser & Brigman, 2004; Gupta et al, 2004; Fernald et. al, 2005; Renko et. al, 2015

⁵ Dees, 1998; Ensley et. al, 2003; Baum & Locke, 2004; Gupta, et. al, 2004; Ireland et. al., 2009

⁶ Dees, 1998; Baum et. al, 1998; Ensley et al., 2003; Baum & Locke, 2004

⁷ Baum & Locke, 2004; Gupta et al., 2004; Ireland et al., 2009

⁸ Hitt et al., 2001; Ireland et al., 2003; Ireland et al., 2009

From Opportunity Seeking to Vision Realization

Entrepreneurship is an activity that involves discovery, exploration and exploitation of opportunities that lead to the introduction of novel goods and services, ways of organizing, markets and processes⁹. Opportunity identification requires technical skills such as financial and market analysis, but also less tangible skills such as creativity, team building, problem solving, and leadership¹⁰. Outcomes of opportunity exploitation are thought to be competitive outcomes because the aim of entrepreneurship is to seize economic rents by exploiting an opportunity that has not been exploited by competitors¹¹. But, in order to search and then actually exploit an opportunity the entrepreneur has to acquire or activate a bundle of resources which are relevant and maybe even specialized to the opportunity¹². A business leader using opportunity exploration and exploitation as a strategy of realising his visions of strategic importance has been named by entrepreneurship scholars an entrepreneurial leader¹³.

In leadership literature, vision has been defined as *'simple and idealistic, a picture of a desirable future'* which *'should appeal to the values, hopes and ideals for organizational members and other stakeholders whose support is needed'*¹⁴. Entrepreneurial visioning regards the macro-perspective of a business and generally focuses on new products or venture creation, business development and growth¹⁵. Studies assume that each vision is a separate construct with specific characteristics that distinguish it from other visions across the organization and in comparison to other organizations. These differences have been attributed to the fact that entrepreneurs envision the futures of their venture as an extension of their wants and needs¹⁶. An entrepreneurial leader perceives entrepreneurial activity as the core organizational attribute, a vehicle to achieve his envisioned future of the firm¹⁷.

In effect, the leader postures himself in a way to set example and act as a role model of entrepreneurial leadership by engaging in opportunity focused activities¹⁸ and simultaneously collaborates with other individuals, such as top-level managers, to create an encouraging environment for engaging in entrepreneurial activities¹⁹. This is achieved via

⁹ Shane and Venkataraman, 2000

¹⁰ Long and McMullan, 1984; Hills, Lumpkin, and Singh, 1997; Hindle, 2004

¹¹ Mosakowski, 1998

¹² Foss, 2007

¹³ Ensley, Pearson, & Pearce, 2003; Gupta, MacMillan, and Surie, 2004; Ireland et. al., 2009; Renko et al., 2015

¹⁴ Yukl, 2002

¹⁵ Baum, Locke, & Kirkpatrick, 1998; Ensley et al., 2003

¹⁶ Fable & Larwood, 1995; Timmons, 1994

¹⁷ Gupta, MacMillan, and Surie, 2004; Renko et al., 2015

¹⁸ Kuratko, Ireland, and Hornsby 2001; McGrath and MacMillan 2000; Renko et al., 2015

¹⁹ Gupta, MacMillan, and Surie 2004; Renko et al., 2015

pro-entrepreneurship cognitions development and reconfiguration business cultural norms towards the enhancement of entrepreneurial behaviour²⁰.

The Resource Based View of Entrepreneurial Leadership

Empirical evidence shows business performance to be contingent on the strategies and competitive tactics of entrepreneurial firms²¹. At the same time, the resource based view has been used by both strategic management scholars and entrepreneurship scholars to investigate and explain heterogeneity in size and performance of different firms and different phases in the business cycle²². Whereas entrepreneurship scholars have concentrate their research interest on those specific resources that are connected with the ability to identify, explore and exploit opportunities²³. Conner (1991) called for the exploration of entrepreneurship within the resource-based theory by stating that: *'in a resource-based view, discerning appropriate inputs is ultimately a matter of entrepreneurial vision and intuition; the creative act underlying such vision is a subject that so far has not been a central focus of resource-based theory development'*²⁴. Since then, numerous studies within the entrepreneurship domain investigated the effect of different type of resources (financial, human, managerial, marketing, operational, technological etc.) on entrepreneurial endeavours²⁵. Extensively, evidence support that initiating and growing successful ventures is significantly dependant on the availability of resources²⁶. Indeed, the entrepreneurial process is centrally concerned with creating new resources or combining existing resources in new ways leading to wealth creation through the mechanism of the sustainable competitive advantages²⁷.

Consequently, the question of how entrepreneurial leadership is connected with firm performance and growth should be treated including in the analysis resource deployment for opportunities focused activities towards realizing the leaders vision. The vision may include the generation of sustainable returns, increased market share by building sustainable competitive advantages, internationalisation and much more which all are directly connected with the improvement of performance and growth.

Conclusively, the current study hypothesizes the entrepreneurial leader be the architect and co-ordinator of a process that takes place within a business and constitutes of effective

²⁰ Ireland et.al, 2009

²¹ McGrath & MacMillan, 2000; Gupta et al., 2004; Kuratko et al., 2007

²² Alvarez & Busenitz 2001; Alvarez & Barney, 2002; Ireland et. al, 2003; Zahra et. al, 2006; Teece, 2007

²³ Brush et.al, 2001

²⁴ Conner, 1991

²⁵ Michael et. al, 2002; Carter et al., 2003; Davidson and Honig, 2003; Leitch et al., 2013

²⁶ Carter et al., 2003; Leitch et al., 2013

²⁷ Ireland et al., 2001

resource deployment and management to ensure consistency between an envisioned future that concerns business's development and growth and the entrepreneurial actions to realize this vision. To achieve that the leader acts both as a role model of entrepreneurial leadership in an effort to lead by example and at the same time creates favourable circumstances and actively encourages his followers to adapt this strategic posture and assume ownership of the entrepreneurial future of the business.

RESEARCH METHOD & QUESTIONS

Research Questions

The overall aim of the research is to explore the concept of entrepreneurial leadership in Scottish Enterprise account managed firms as well as to identify *how* and *why* entrepreneurial leadership affects firm performance and growth. The main research questions aimed to be answered are the following:

1. What are the contextual and circumstantial conditions under which the leaders of Scottish Enterprise account managed companies envision business growth and how a strategic approach to entrepreneurship supports its realization?
2. What are the specific behaviours and attitudes leaders possessing/developing that enhance their entrepreneurial style of leadership?
3. What is the role of resource accumulation and co-ordination in new opportunities exploration and exploitation and how does it affect the realization of visions of performance and growth? What is the weight of the different forms of resources (economic, human, social, other capitals)?
4. What are the managerial/ policy and research implications of the findings of this study?

Research Method

Qualitative Study – Case Studies: Six case companies, out of an initial pool of twelve, were identified in collaboration with SE account managers on the basis that they have had invested financial and/or time resources in leadership development within the organization, displayed a strategically entrepreneurial attitude²⁸, were diverse in terms of life-cycle phase and had delineated particularly interesting courses in terms of organisational performance and growth during their lifecycle following Stake's (1994) suggestion to choose cases that can help you "*learn the most*". The intention to grow by taking a strategic approach to entrepreneurship²⁹ was another selection criterion which was a priori satisfied because all companies taken into consideration had surpassed the growth trajectory thresholds identified by SE that enabled the firms to be account managed by the agency.

In-depth, semi-structured interviews were conducted at two different phases over a period of two years (2014-2016). During the first phase three informants were interviewed for each

²⁸ Ireland et al., 2003

²⁹ Ireland et al., 2001

case; the leader, an employee in a management position and an external adviser (e.g. financial adviser, business consultant, account manager etc.). For the second phase, only the leader was re-interviewed. By including the perspectives of three individuals, holding different roles and able to make a judgement based on their own perception, the study sought to triangulate findings, increase internal validity, avoid personal perception biases³⁰ and mitigate issues related to the twin problems of introspection and retrospection³¹ such as self-censoring and recall bias³². Triangulation in the second round of the interviews was insured by asking follow up questions based on information defined and triangulated during the first phase in order to investigate continuity and change rather than explore new variants or the same variants anew.

The thematic interview protocol was constructed in a way that enabled informants to create a narrative of their own experience by reflecting on incidents they considered to be critical³³ in terms of visioning, strategic decision making for opportunity exploration and exploitation, and resource mobilization and management. It was designed to identify complex critical episodes rather than discrete incidents³⁴ and contextual relationships by asking questions about actions, perceptions, behaviours and circumstances related to the actors and the environment inside and outside the episodes identified³⁵. Finally, dynamic perceptions that would help to adopt a more process-based view of incidents were investigated by including the time dimension to help track influences of the present and future³⁶. This method enabled the respondents to build a narrative of entrepreneurial events and leadership outcomes and link them to different trajectories of their business development. This allowed the researcher to follow up the same events/themes with the different informants by using a dialogical approach.

Data analysis and was conducted in the following steps:

Step 1: Close reading and re-reading of transcripts of interviews case by case and coding of material into themes and categories for each case. Identification of critical/significant incidents and episodes of leadership related to visioning, opportunity exploration/exploitation and resource management to achieve the desired vision identified by the respondents. Focus were given to the way they have been managed and outcomes the respondents

³⁰ Eisenhart, 1989; Flick, 1992

³¹ Derbaix & Vanhamme, 2003; Harrison, 2015

³² Harrison, 2015

³³ Flanagan, 1954; Chell, 1998; Chell, 2015

³⁴ Cope & Watts, 2000

³⁵ Edvardsson & Strandvik, 2000

³⁶ Harrison, 2015

believe they have had³⁷The initial categorization was refined by informing the data with the different theoretical constructs discussed in the literature review, a process which resulted in the final themes presented.

Step 2: Creation of tables that describe the cases and the empirical themes. Presentation of short narratives for each case, theme and category in order to contextualize the analysis better.

Quantitative Study - Company Survey: The measured variables were specified and selected a priori based on the propositions developed during the case study research and the theoretical underpinnings of the measurement instruments used. The survey was first tested on a pilot study of a sample of 20 business leaders outside the SE company pool out of which 15 reported feedback on the length, the content and the language used and after comments were incorporated, the survey was launched in January 2015.

Out of the total 2,252 account managed companies the survey was sent out in two waves (two weeks apart) to 468 companies representing approximately the 21% of the total population. The fragment was chosen based on the following criteria:

1. The composition of the fragment sample was sought to represent the same distribution of the different account categories composing the total population (e.g. growth accounts, development accounts, opportunity accounts, global accounts, relationship accounts, scaling accounts, watching briefs, important to economy).
2. The companies chosen were not surveyed based on the SE's survey control for the last 6 months in order to avoid survey fatigue and ensure higher response rates.

92 companies responded initially constituting a respond rate of 19.65%. To boost respond rate another list of 100 companies was pulled out from the 468 sample by choosing randomly non- responding companies from under-represented account categories to contact by phone. 49 more companies responded to the call increasing the amount to 141 companies in total corresponding to 30.13%. Out of the 141 responses 133 questionnaires were suitable for analysis constituting the final response rate of 28.42%. To analyse the data received from the survey univariate and multivariate statistical analysis was conducted; more precisely, correlation, factor and regression analyses.

³⁷ Chell, 2004

QUALITATIVE RESEARCH FINDINGS

The cases

The six business cases are presented in Table 1. This table organizes information about the cases including the alias names of the businesses, the description of the company (industry, activities etc.) as well as the informants interviewed in each case. A short narrative describing each case is presented next.

Table 1 – Cases description

Case	Industry/ Activities	Informants
Case 1: The Web-Based Business Solutions Experts	IT consultancy-software engineering (Intelligent Back Office Systems, Website and Mobile apps development, Online Marketing, Ecommerce)	-Founder/ Main owner and Managing Director -Operations Director -External Growth Advisor: Enterprise Development Agency Account Manager
Case 2: The Water Industry Specialists	Water Industry Specialist (Repairs, Cleaning and Inspection of Water Tanks and Pipelines)	-Chief executive -Operations Manager -Non-executive director
Case 3: The Renewable Energy Consultants	Renewable energy consultancy (Planning & Development, Ecology & Hydrology, Wind Technical, Construction & Geotechnical, Asset Management, Due Diligence)	-Managing Director - Director of Due Diligence -External Advisor: Lawyer - Leading Individual: Energy & Natural Resources
Case 4: The Digital Analytics Pioneers	Online marketing agency (Data Driven Analytics, Analytics Health-check, Multi-channel Attribution Modelling, Full-service Analytics Management)	-Founder/Director -Head of Digital -External Growth Advisor: Enterprise Development Agency Account Manager
Case 5: The Waste Management Experts	Waste management (Waste Management, Skip Hire, Composting Energy from Waste)	-Managing Director -Commercial Director -2 External Growth Advisors: Enterprise Development Agency Account Manager
Case 6: The environmental consultants	Environmental engineering consultants (Environmental Impact Assessment & Permitting, Ecological Surveying & Enhancement, Water Management & Engineering, Contaminated Land & Sediment Assessment)	-Managing Director -PA to Managing Director -External Growth Advisor: Enterprise Development Agency Account Manager

Case 1: The Web-Based Business Solutions Experts

This company was founded in 2001 by a former child-prodigy in computers and software engineering who advanced his capabilities out of necessity as he was growing up in a very remote area of Great Britain and at the age of nine *'there was nothing to do and your friends were miles away'* (Case #1 founder). The entrepreneur continued advancing his knowledge, studying artificial intelligence at the University of Edinburgh, and developed his first experience of entrepreneurship in his university years by founding his first digital marketing company to secure living expenses. At the same time working as an analyst for a car company brought him closer to the realization that if he wanted to be acknowledged properly for his contribution he should create and run a company according to the standards and ethics he believed in. His first entrepreneurial activity did not end well as close business partners committed fraud against the entrepreneur leaving him with *'empty bank account...and a learnt lesson about legal and banks'* (Case #1 founder). Following that the entrepreneur reorganized himself and setup a new business in a basement having as his only resource his laptop. The company built their way up by securing contracts for clients who could not afford to pay significant amounts in advance, such as social enterprises, and through this process elevated their reputation step by step. Since then, the company has grown significantly, becoming an award winner for innovation and design. Today, the company offers bespoke web solutions to business leaders to start and further grow their businesses by producing software that guarantees significant results to productivity and at the same time incubates and spins-out digital business created as a result of spill-overs of in-house knowledge and expertise.

Case 2: The Water Industry Specialists

This company was founded in 1994 and its name today is associated with incomparable expertise in drinking water maintenance in the UK. Originally the company was very small and only after the first six years did it grow to the point where it could employ just seven people. Although the company was small, the most significant resource that triggered the later growth was developed during this period. A unique chemical, which was developed in house and patented by the company, guaranteed the best results in drinking water maintenance increasing the company's advantage significantly against their competitors. The unique product was reinforced using robotic equipment and that combination sparked a series of growth opportunities for the company. By 2003 the company had established their presence in the UK market and came to discover opportunities from outside the U.K. In 2011 the company completed their succession program which culminated in the replacement of the owner and founder of the company by his son. The new leader has held Chief Executive

and Senior Management positions in a range of organisations and previous to that had held high levels of responsibility during years of flying and managing utility and attack helicopters in the British Armed Forces. Since then, the company has been involved in organizational change activities and vision reconfiguration by the new leadership in order to ensure a continuous and sustainable growth by capitalizing on the combination of their unique product and industry expertise within as well as outside UK.

Case 3: The Renewable Energy Consultants

Established in 1996 by two passionate environmentalists after spotting a market opportunity in Scotland due to public investment in renewables, the company established itself in the market with ease due to the growing industry and the lack of knowledgeable and experienced competition. Although competition grew over the next years, the two leaders continued building their reputation and investing in the appropriate expertise in order to expand their services and ensure the delivery of intergraded services for their clients. Growing around 5% faster than the market the company became the most significant player in the industry and a very attractive investment opportunity. In 2000, when the market reached a maturity state and the competition became stronger, the leaders faced the decision to either drive the company further or fight to maintain the position they held by using company's existing resources. The lack of further investment and the vision of a market leading company led to the sale of the company to a large group of companies with the founding couple reserving the positions of managing directors. Today the business is led by one of the two founding entrepreneurs and although it is a part of a large firm, the renewable energy company continues to grow independently from its investors within and outside the UK market with presence in France, Ireland, Sweden, Turkey and Chile. Over the past two years the leadership has undertaken a major re-organization and change project as the company has grown to employ nearly 250 people and envisions a future where the company will be a global leader in renewable energy consultancy services.

Case 4: The Digital Analytics Pioneers

Founded in 2006 by two experts in the field of digital analytics and marketing who had been work colleagues in the banking sector and felt that companies of the particular industry '*never really delivered...*' and therefore they decided to '*set something which would actually deliver on promise*' (Case #4 Leader). The roles of the two business founders-leaders are divided, with one leading the company's product development while the other takes care of the business side of the enterprise. In 2009, an innovative tag management site spun-out of the company and was eventually acquired by the major US-competitor creating one of the world largest companies of the field. The company preserved a strategic percentage of that

venture and at the same time benefited from the significant influx of financial resources. In 2013, the business managed to acquire a six-figure loan from an important investment company for expansion of the search engineering optimisation side of the business, an investment which led to a major contract with a leading UK bank. Today, within the company there are functioning two independent, yet complementary businesses (a digital analytics marketing company, and an IT ad-web analytics training academy) in two different UK locations under the umbrella of the same organization. Each enterprise is led principally by each of the founders, while final decisions about the future of the umbrella organization are taken collectively. Finally, the umbrella company acts as an incubator of other technology businesses by either acting as attractors of potential investment for the new ventures or by taking the businesses for validation to the marketplace by using their own clientele. Today the company is valued as a leading competitor in the EU digital analytics market.

Case 5: The Waste Management Experts

The heritage of this brand dates back to the late 1800s. The business was developed in the early part of the 20th century by undertaking civil engineering projects. Up until the turn of the millennium the company was owned by the descendants of the family which originally founded the business. The family business grew to become one of the most important employers of the area after embarking upon a major expansion and diversification programme that took the company into areas such as house building, leisure management, and retail. In 2007, the company was sold to a major firm. The financial crisis of 2008 forced the new leadership to reconfigure the mission of the company and take difficult decisions in the face of both a shrinking market and tighter financial conditions. This critical phase resulted in the significant downsizing of the original venture and, through continuous reconfiguration of the business, its re-development into an independent waste management business. The company retained the powerful brand name but gave up entirely the rest of the original business activities. Today the company is considered to be a leading player of the waste management market, providing comprehensive services in waste management, skip hire, composting and transforming waste to create renewable energy. The re-organization of the business model was based on the fundamentals of the circular economy model with a particular focus on economic, ecological and social sustainability. During the transformation period the company undertook a major leadership development program which included action plans, succession planning, alternative styles of leadership, increasing confidence by developing new capabilities and retaining the focus on innovation, strategic thinking and ethical responsibility.

Case 6: The environmental consultants

In 1990, the UK had to adapt to new environmental laws which changed fundamentally the way businesses expected to operate in the UK, particularly construction and engineering companies, waste management facilities and local authorities. The combination of the rapid growth of demand for a market and the lack of expertise to correspond to this demand led academics and university departments to undertake significant amount of consulting work to reduce this gap. As a result, this company spun-out of a major technical university in 1995 as a non-profit organization led by an academic expert. When the market rules were established it was obvious that the non-profit model did not work anymore and the company re-organized to become a for-profit entity. At that point, with the help of investment coming both from the founder/leader of the company and a development agency due to the affiliation with the university, the business started its growth course. Since then the company developed to become a family business with the two sons of the founder-leader participating actively in the decision-making process. Although the financial crisis of 2008 brought difficulties because of the decline in the construction industry, which led to the difficult decision of downsizing, the leadership reacted fast by moving into renewables and the energy sector which has helped to protect the business through the recession. In 2011, the company completed their succession program which resulted in the replacement of the founder of the company from the managing director position by his son who was trained in-house starting in a junior position at the start-up phase. Today the company is focused on targeted business development by providing high level expertise in four major areas: environmental impact assessment and permitting; ecological surveying and enhancement; water management and engineering; contaminated land & sediment assessment within the UK as well as in several European locations.

Analytical Themes

Five analytical themes emerged from the analysis of the cases to give further insight into the process of entrepreneurial leadership. The first analytical theme regards *the interlinked relation between business growth strategies and vision*. The theme emerged during the analysis of the process of visioning while investigating vision formation, content and attributes, communication and change. The second theme focuses on *opportunity exploration/ exploitation decision making* which was unfolded from the informants' narratives on entry decision, correspondence to market demand, strategies to develop and build the

management team and generate internal and external stakeholder support to pursuit new opportunities. Other elements that was categorized under this analytical theme were the decision for spin-outs creation, small or bigger investment in resources that would help to explore and exploit opportunities better, decisions related to portfolio entrepreneurship, sale of shares and internationalization. The third theme discusses *mobilization, development and strategic management of resources* under which are categorized individual and company level resources, competitive advantages and resource mutation from the individual to the company.

Under the theme *entrepreneurial leadership attributes and behaviours*, influential attributes and behaviours were categorized as identified by the leaders to have contributed when using entrepreneurship as a strategy to achieve their vision of business development and growth. Finally, the *external environment* was identified as a separate analytical theme based on the leaders' descriptions of market dynamism and competition effects as well as on the role of the general economic climate in leading their business while holding a strategic posture towards entrepreneurship. The following table summarizes the themes and categories.

Table 2 – Analytical Themes and Categories

Analytical Themes	Categories
The interlinked relation between business growth strategies and vision	Vision formation
	Vision Content <ul style="list-style-type: none"> -Increase of market share -Internationalization -Profit Growth -Turnover Growth -Sales Increase -Intangible
	Change in vision
	Vision Communication
	Vision Attributes
Opportunity exploration/ exploitation decision making	Entry decisions
	Market demands
	Developing and building the management team
	Generation of internal and external stakeholder

	support (e.g., investors, government, employees)
	Investment
	Spin-outs creation
	Investment
	Portfolio entrepreneurship
	Sale of shares
Mobilization, development and strategic management of resources	Internationalization
	Firm Resources
	-Economic Capital
	-Human Capital
	-Social Capital
	-Symbolic Capital
	Individual level resources
	-Cultural Capital
	-Economic Capital
	-Social Capital
	-Symbolic Capital
	Competitive advantages
Entrepreneurial leadership attributes and behaviours	Resource Mutation
	Innovativeness
	Creativity
	Passion/Motivation
	Tenacity/ Flexibility
	Risk Taking
	Vision and Vision Communication
	Competitiveness

External Environment	Market Dynamism
	Economic Climate

The Interlinked Relation between Business Growth Strategies and Vision

Research of interlinked relations between venture growth and vision in entrepreneurial firms has found that vision attributes are significantly related to subsequent venture growth³⁸. Particularly, vision of growth is significantly associated with subsequent venture growth³⁹. Finally, the vision-venture growth relationship has been found to be connected, mostly indirectly, with vision communication⁴⁰. The six cases demonstrated these complex, integral links between leaders' decision on growth strategies and their vision of the business, but most importantly helped to inform why and how phenomena occur.

Leaders explained that they comprehend visioning as a perpetual process which reflects their expectations of the firm at different points of the business lifecycle. Below, are several quotations that demonstrate this evolving nature of visioning as well as its interlinked relation with decision making related to development and growth strategies.

The head of digital from business Case #4 started explaining the vision of the business with the phrase: *'I will like to explain it (the vision) as it will be from the end of the year, into next year'*. The account manager responsible for this particular company related the changing nature of the vision directly business lifecycle effects: *'The strategic vision is changing and it's constantly changing I think...they now turnover about one point eight million, when they started they were turning about nine hundred thousand'*. Another example, from Case #3, which is significantly more mature, reaffirms this notion. The leader of the company was in position to identify at least three critical incidents throughout the company's lifecycle of vision change. During the start-up phase of the company the leaders/founders were described to be driven by their belief in environmental issues, later and as the company was growing the founders of the company saw that the only way the company would grow faster than anybody else in the industry would be if they would sell it to a larger firm. Today, the business has changed ownership but is still led by one of the two initial leaders and the vision has been described to be stable the last two and a half years as the company decided to concentrate to *'long-term cash flow and stability'*.

³⁸ Jacobs & Jaques, 1990; Locke et al., 1991; Collins & Lazier, 1992; Baum et al., 1998

³⁹ Dees, 1998; Baum et al., 1998; Ensley et al., 2003; Baum & Locke, 2004

⁴⁰ Locke et al., 1991; Baum et al., 1998

The most radical example of vision reconfiguration comes from Case #5. The crisis of 2008 led the company to undertake a radical change in the content of the vision as the company moved to a radical change of their business activities in order to first save the business and then design a new route to growth and sustainability. In his effort to describe the business vision, the commercial and board director of the business Case #5 described *'things'* to *'have changed...we owned a quarry business which we have recently disposed to another company...we also have taken the decision to effectively merge our construction business with another company...now we will be simply within the environmental business... The nature of this industry is to continually invest in order to stay ahead of the game. If we weren't to make these decisions, we would lose the contracts that we currently have in three or four years' time because there would be somebody else offering that.'*

The analysis also showed that vision is affected by expectations constantly subject to alteration either because of changes in the business lifecycle or driven by the external environment (new opportunities, financial crisis etc.). As a result, business operation and development was synonymous to continuous redefinition, reconstruction and modification of business models and strategies to achieve improvement in performance and growth. As expectations changed, the vision was re-defined and leaders engaged into a continuous communication race which involved interaction with internal and external stakeholders in order to ensure a coherent and comprehensive framework for consistent individual decisions. Looking into the companies' organizing processes throughout their lifecycle revealed that during the start-up phase, when structures were not in place, the leader bore at most the responsibility of ensuring this consistency. Whether, in later stages the companies developed organizational procedures explicitly in order to co-ordinate the functions discharged by individuals and fit them as a whole to the requirements laid out by the leaders. This observation was expected as structures produce greater organizational performance, and so organizations tend to adopt those structures⁴¹.

More precisely, the PA to the executive director described the vision communication process in Case #6 to be distributed using a top-down process and in particular: *"The vision was drawn up by the managing director and there was an initial executive team meeting where the people at the higher level of the company would go through the vision. It was also put to the board as well. Their vision and the strategy were agreed before it was disseminated to the rest of the team. It was disseminated through stakeholder meetings."* Another example that draws attention to the effect of context on this process comes from company Case #2. As the current leader of the company has recently succeeded his father in this position, the

⁴¹ Donaldson, 1996

company is being involved in organizational change activities and vision reconfiguration. The military background of the new leader prompted him to create an 'ops' room where *'you've got everybody sitting. There's very visual stuff up. They've got targets and performance all around.... Great reporting and an elegant way of going, 'Where are we against our target? We've set a target, we know what we're trying to achieve here'*, (Case #4, non-executive director and board member). A high-level manager of this company also explained that the senior management team engages in communication meetings with the leader on a weekly basis to discuss strategy toward vision implementation. Then, the top management team evangelizes the outcomes to *'all the staff right down to, well every single employee is there'*.

For company Case #1, the vision communication process starts practically as a vision formation process and then evolves via both top-down and bottom up directions. The operations director of this company described the process as follows, *'(The leader) adds his vision of where he wants it to go but once you actually look at where we are in the company and what the company might need in order to keep servicing customers, we had a change to that as part of the group, and set new targets and goals for what we were doing'*. With the leader adding that *'I suppose in the early aspects...I was quite dictatorial...what I learnt over a period of time was that...actually by getting other people's involvement, especially if you've got the right people around you, you actually get better inputs.'*

An interesting observation which related the business size and lifecycle stage with the process of vision communication came from examining the evolution of the process within the cases. It is evident that in the start-up phase, vision communication is a mouth to mouth process. As the leader from Case #3 highlighted, *'the way a company works is very different when you are a small company from when you become medium sized...when you are a very small group of people...it is project led...I was a project manager effectively, now I have a zero charge for utilization in the company, I am entirely strategically involved now'*.

Finally, vision related to growth and organizational development was observed to be associated with subsequent venture growth. More precisely, all the cases agreed that even if the content of the vision would change over time, the process of visioning was driven by an ambition to develop and grow. Looking into the nature of the visions rather than into the particulars of their content, all cases expressed expectations of sustainable growth in terms of turnover and profitability as well as expansion of the business in other locations within and outside the UK. Key discourse coming from different informants and different companies related to development and growth included: *'grow it profitably and sustainably'*, *'... (concentrate) in what the core areas of growth have been'*, *'grow to sizable level'*, *'grow*

internationally', '...like every other company, the vision is about growth', 'increasing turnover by a fairly drastic amount, as in doubling it over two years'.

This analysis synthesizes a processual view of visioning by examining vision content, characteristics and communication. Of course, just from this analysis, it cannot be derived that having and communicating a well-formulated vision is enough to guarantee the desired results in terms of organizational development and growth, but it is evident that there are direct and indirect effects.

Opportunity Exploration / Exploitation Decision Making

One finding apparent among all cases was related to the fact that leaders expressed their difficulty in increasing their market share without continuous exploration/exploitation of new opportunities. In terms of critical decisions and strategic planning for growth, the all six companies intentionally selected to gear towards the more *'entrepreneurial'* road of exploring new opportunities (as in new products or new ways of organizing) within domestic markets (UK) and/or reaching international markets.

In all cases the informants identified several critical incidents which displayed a *'strategically entrepreneurial'* direction⁴². Firms with this kind of entrepreneurial strategic postures are perceived risk-taking, innovative, and proactive⁴³. The six companies sample accorded with Miller's (1983, p.780) view on what is called an entrepreneurial business:

'In general, theorists would not call a firm entrepreneurial if it changed its technology or product-line ("innovative" according to our terminology) simply by directly imitating competitors while refusing to take any risks. Some proactiveness would be essential as well. By the same token, risk-taking firms that are highly leveraged financially are not necessarily entrepreneurial. They must also engage in product-market or technological innovation'

The business models of Cases #1 and #4 were built on the premise of continuous opportunity exploration and exploitation via investment in R&D, new technology introduction, incubation of start-ups, portfolio entrepreneurship via spin-outs creation, and growth through international collaborations. Cases #2, #3 and #5 outlined numerous in-house digital and non-digital product developments which were a result of opportunity exploration and later helped the companies to explore and exploit further market opportunities. Cases #3 and #6, they were founded exactly because of opportunity exploitation in a forming market. Moreover, cases #2, #3 and #4 have been also involved in a continuous plan of exploration

⁴² Ireland et al., 2003

⁴³ Miller 1983; Covin & Slevin, 1990

of opportunities related with internationalization. Finally, cases #3 and #5 have exploited opportunities resulting from merging and acquisitions strategies to change their business activities to a more sustainable and profitable direction. To conclude with, all cases valued the importance of investing in human resource development programs in order to encourage personnel to get involve in exploration and exploitation of new opportunities as part of their strategy to enable personnel to act more “*entrepreneurially*” in terms of opportunity exploration and exploitation.

Analysing the six cases the following grouping of critical incidents related to opportunity exploration / exploitation decision making was apparent: 1. Incidents about R&D investment in in-house digital products building that could attract new customers and increased the company’s competitive advantage 2. Incidents describing investment in human resource development programs such as talent management, leadership development, new technology training 3. Incidents related to decision- making on mergers and acquisitions, 4. Incidents regarding portfolio entrepreneurship via spin-out development and 5. Incidents about building on opportunities arising from internationalization activities.

Mobilization, Development and Strategic Management of Resources

Examining resource mobilization, development and strategic management towards vision realization it has been identified that each business case has managed to build a unique bundle of resources throughout their lifecycle. This observation was expected because it confirms a phenomenon well investigated under the lens of the resource based view of the firm⁴⁴, the dynamic capabilities framework⁴⁵ and theories of capital⁴⁶. Since mobilization, development and strategic management of resources towards vision realization have been identified to be integral parts of the entrepreneurial leadership process⁴⁷ the analysis was concentrated on how each business has managed to build their unique bundle of resources throughout their lifecycle and how these resources affected entrepreneurial leadership.

Leadership in all cases recognized that the business unique bundle of resources was directly connected with the company’s competitive advantage. The content of the vision would built on this competitive advantage which then would be exploited strategically to bring further growth. A characteristic example comes from Case #2. The company holds a unique combination of products and expertise coming from an in-house developed patent. The company’s leader combined the patented product with state of the art robotic equipment,

⁴⁴ Penrose, 1959; Barney, 1991; Mosakowski, 2002; Ireland et al., 2003

⁴⁵ Teece et al., 1997; Teece, 2007; Koryak et al., 2015

⁴⁶ Bourdieu, 1986; Dirk De Clercq & Maxim Voronov, 2009; Leitch et al., 2012

⁴⁷ McGrath & MacMillan, 2000; Ireland et al., 2003, Gupta et al., 2004; Leitch et al., 2012

which allowed them to produce the best results in the drinking water maintenance industry, increasing their advantage significantly against their competitors. Case companies #1 and #4 developed unique digital products which singled them out ahead of their competitors. Leadership of business Case #4 decided to sell the product and capitalize on their advantage and invest in other areas, while case company #1 kept the technology in-house and use it against competition. Similarly, the other companies were able to identify and pinpoint their advantage against their competitors.

To unravel the effects of resource deployment to entrepreneurial leadership, questions on how individual level and company level resources were acquired, developed and managed were posed to leaders. The analysis showed that in a start-up phase, individual level resources such as the founders'/leaders' economic capital, networks (social capital), knowledge and experience (symbolic capital) as well as the experience, knowledge and networks of the first employees joining the company played a particularly important role in enabling the leaders to act and lead entrepreneurially. All founders/leaders as well as key employees, usually working in the company since its start-up phase, were identified to be experts in the field with either extended studies or working experience or both. Each leader was found to bring individual level capitals such as their own personal network, economic resources, knowledge and experience to the business. The founder of Case #1 '*...setup in a basement just with a laptop*' and managed to borrow a significant amount of money in a time which was considered not appropriate based on the company's performance. The leader attributed this incident purely to his relationship with the bank manager. Similarly, founders of Case #3 '*were working out of a spare bedroom in the West End of Glasgow and they offered me a job*' explained the company's technical director. The founder of Case #6 capitalized on his professorial capacity as well as his connection with the University as the company practically span-out of it. Similar incidents were identified across all companies. Utilizing personal resources and mutating them into firm resources the leaders were eventually using them for opportunity exploration/exploitation strategies facilitating the entrepreneurial leadership process.

Finally, in regard to the weight of the different resources the leaders identified incidents when symbolic capital, such as reputation, or economic capital played an important role in the process; however, human and social capital were identified unanimously by all informants to play the most important role towards successful implementation of their vision of growth. Representative discourse coming from informants from all cases included: '*It's always people. It's absolutely and utterly the people*', '*When you are small it is all about personal relationships between individuals...it all about our people and how they interact within the company and externally...*', '*As a service company, it's people...if the people*

aren't here, we don't make any money', 'There's pretty much nothing that our company can't do with people we have!', '... (the) key is collective intellect of the management team', 'You can't do anything without people and I think we have got a very experienced team here', 'Collaboration that's really the method of generating your growth platform...Collaboration with your customer...Collaboration with trade associations...Collaboration with potential partners whether its technology providers, investors, or whatever...Political collaboration to try and understand politicians, or trying to build networks... Community collaboration because ultimately anything that we do is going to be in the heart of the community...' These quotes illustrate well that entrepreneurial leadership builds on company's resources and capabilities and rests significantly on both human and social capital⁴⁸.

Entrepreneurial leadership attributes and behaviours

Three key dimensions of attitudes and behaviours related to entrepreneurial leadership were derived from the six case studies: 1. The individuals who assumed leadership roles within these organizations were engaging in opportunity-focused activities and acting as role models to their personnel implementing a leading by example strategy 2. they were trying to influence actively their followers to engage in entrepreneurial behaviours by giving space for initiatives, embracing new ideas, reward entrepreneurial behaviour and encourage personnel to undertake appropriate training in new technology, leadership development etc. 3. and they were ultimately responsible for forming the appropriate strategies within the organization to facilitate entrepreneurial activity and growth orientation by refining a vision for the development of the company and working out strategic plans with the management teams to achieve this vision.

For instance, when asked about his leadership role, the founder/director of company case #4 commented using as an example an incident when the company was exploring internationalization opportunities in Japan: *'And then my sort of leadership part comes in when I say, we're not going to go to Japan, but I'm going to speak to somebody in Japan because I think there's an opportunity over there. And by showing the rest of the business that anything can be done, that we can go anywhere we want and in any direction as long as it's right for the business...And it's about showing people what they can achieve'*. Similarly, referring to the founder/managing director the operations manager of case #1 pointed out: *'I don't know if it's ...(name)... or entrepreneurs in general. I mean, I worked with two other entrepreneurs before and I would say the benefit of working with that type of person is there's lots of opportunities if you're the type of person that's there to take it.'* Signifying the role of the entrepreneurial leader as opportunity enabler for his followers. When it comes to

⁴⁸ Hitt et al., 2002; Leitch, et al., 2012

rewarding initiative and entrepreneurial behaviour the leader of case #1 explains: *'The idea of putting on a transition map is that they take ownership over it, so they have the responsibility for delivering the things which give them their own rewards. Money is tiny in terms of that everybody should be paid a good amount for their job where the recognition of the thing that you do, the ability of being able to control what you're working on, the ability to have your views listened to is far more important than paying someone. Now you can't pay people peanuts because that's stupid they're just demotivated straightaway but you need to pay a certain level and then it's about the other things. That's really the ethos behind all that sort of stuff.'*

The leader of the case company #3 pointed out that: *'...if we don't provide them a framework within the company so they understand where they sit within the company and what the opportunities are we will lose key staff all the time'* explaining the responsibility of the leader to create an enabling environment for his employees. Finally, within the same spirit the leader from the case #5 reflects on his leadership posture saying that *'I am not leading the people who are reporting to me if they don't feel that they understand their purpose or direction... You have [got] to empower people, let them get on with it'* making clear his responsibility as an influencer and enabler.

When asked to reflect on entrepreneurial leadership behaviours and attitudes the interviewees discerned incidents related to forming a vision and communicating it to the rest of the organization, being innovative and creative individuals as well as promoting innovativeness and creativity within the business by enabling initiative and opportunity exploration. Being passionate and demonstrating openly this passion about their business to motivate towards the realization of their visions was another common behaviour among the leaders in the six cases. Furthermore, leaders were identified to understand and favour risk taking as a *'necessary evil'* they need to carefully manage in order to achieve greater developmental goals. Finally, behaviours and attitudes that demonstrate tenacity, persistence and flexibility showed to have a positive influence towards bringing in fruition their strategic plans to achieve better performance and growth. The identified behaviours and attitudes have been recognized in prior studies to form what is described an entrepreneurial style of leading a business⁴⁹.

External Environment

Business external environment plays a significant role when investigating any sort of business entrepreneurial attitude as numerous studies have found that entrepreneurial

⁴⁹ Renko et al., 2015

success depends on the environment in which a company operates in terms of the existence of opportunities, the availability of resources, legal, political and economic constraints etc.⁵⁰

Commenting on how new product introduction in technology start-ups works the leader of case #4 pointed out: *'So I guess the point is if you think you can win it and you're first to market then fine, go for it. If you realise that you're not going to be first to market you're just going to throw a lot of money away for a very small margin or percentage of the marketplace. You're probably better off looking at alternatives at that point.'* Underlying the importance of competition position in the market when deciding on investing in new product introduction. Similarly, the fact that for cases #3 & 6 the lack of competition was the primer success factor in combination with opportunities for new market creation coming from changes in legislation showcases very well how external circumstances can favour entrepreneurial activities. When asked about his strategic plans the leader of case company #5 opened his response by saying that *'...a lot of our strategic direction is controlled by external factors, so European directives, national policies towards the treatment of waste, national policies towards recycling'*.

The 2008 recession was another significant moment for the case companies trading that period proving the importance of the external environment when it comes to leading a company. The leader of the case company #6 very early in the interview identified this period as particularly significant when it came down to visioning a future for the business. *'After the recession, it then all became very internal very quickly. The work wasn't there. We had too many people for the amount of work we had to do. So, all of sudden, for the first time in our history, we had to start thinking about things like redundancies. We had to start thinking about restructuring the business. We had to start thinking about dropping off services. We had to really work out what our service lines were going to be. We had to work out how to manage our cash flow and the debt that the business had built up, in terms of costs that we'd committed to.'* For case #5 the recession came at the exact time when the company was sold out to its new owners making structural changes even more difficult and at the same time even more necessary as the new owners wished to see return on their investment as soon as possible *'...the owners collectively only put a million pounds into the business, and the rest of it was forms of debt to acquire the business, so it could be considered to be a leveraged purchase...and that was at a buoyant moment in the economic cycle, and you had a recession coming in after that. And so, one of the significant factors in business development would have been saying more difficult market conditions, and tighter financial conditions...'*

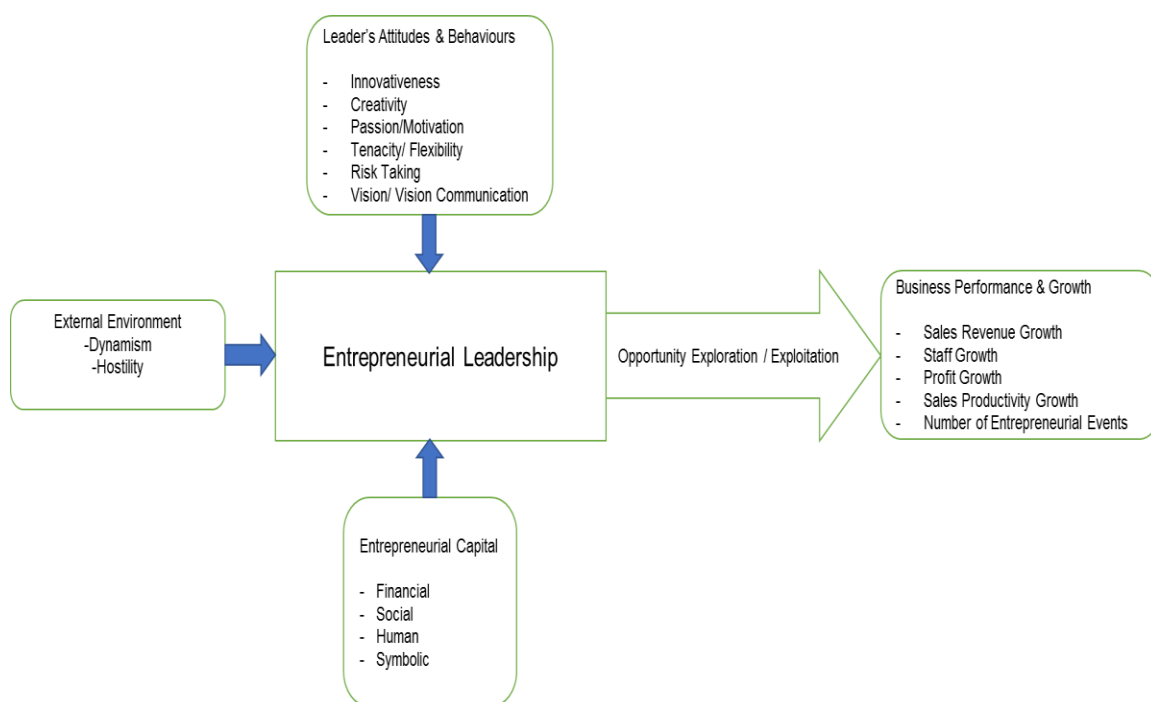
⁵⁰ Aldrich, 1979; Miller & Friesen, 1982; Dess & Beard, 1984; Covin, Slevin, 1989

Miller & Friesen (1982) argued that the more dynamic and hostile the environment, the greater the need for innovation and the more likely it is that firms will be innovative. But research has shown that hostile environmental conditions imply competition for scarce resources and opportunities⁵¹. To conclude, it is unrealistic to consider any effects of entrepreneurial leadership on business performance and growth without taking into account the impacts of the external environment

Synthesis of qualitative and quantitative findings - Presentation of the theoretical framework and the empirical testing process

The cases unravelled the components of a model that describes how does entrepreneurial leadership within organizations looks like, what variables affect and explain the different levels of entrepreneurial leadership amongst organizations and how being an entrepreneurial leader can improve business performance and growth through opportunity exploration and exploitation. Specific behaviours and attitudes of the leader, the access and quality of the entrepreneurial capital as well as the levels of dynamism and hostility of the external environment have been identified as potential explanatory variables of entrepreneurial leadership. The following graph summarizes the central interactions immersed from the literature review and the case studies analysis.

Graph 1 – Entrepreneurial Leadership as a strategic posture for better performance and growth



⁵¹ Khandwalla, 1977; Miller, 1983; Covin & Slevin, 1989

To test empirically the above model a factor analysis was conducted to the 6 attitudes/ behaviours to identify which of them describe entrepreneurial leadership as a construct in our sample. The same process was applied to the entrepreneurial capital components to understand which of the four explain better the access and quality of capital in our sample.

Next, hierarchical regression analysis was conducted to establish if and how much does entrepreneurial capital and the external environment affect entrepreneurial leadership. Finally, a set of regressions were run to establish the relationship between entrepreneurial leadership business performance. The following table organizes the constructs and variables.

Table 3 – Summary of Constructs & Variables

Construct	Variables
Entrepreneurial Leadership (Testing the leader as a role model aka leading by example and influencer by encouraging entrepreneurial behaviour and enabler by creating the appropriate environment)	Innovativeness
	Creativity
	Passion/Motivation
	Tenacity/ Flexibility
	Risk Taking
	Vision and Vision Communication
Resource Deployment (Quality and Relevancy)	Financial Capital
	Human Capital
	Social Capital
	Symbolic Capital
External Environment	Environmental Dynamism
	Environmental Hostility
Business Performance	Sales Revenue Growth
	Staff Growth
	Profit Growth
	Sales Productivity Growth
	Number of Entrepreneurial Events

Controls	Company's Age
	Company's Size
	Industry
	Leader's experience in industry
	Leader's tenure in the company

QUANTITATIVE RESEARCH FINDINGS

Sample Demographics

The size distribution of the participating businesses is based on their number of employees in FT equivalent. The sample is constituted of 91.7% of Small and Medium Enterprises (as defined by the EU recommendation 2003/361). The age distribution is based on the number of years since the company was founded. There is a greater proportion of businesses aged between 7 and 15 years (32.3%) and correspondingly slightly fewer between 16 and 25 years or more (24.8%). Cumulatively the 12% are in what could be considered as a start-up/early growth stage of between 0 and 6 years since founded and an impressive 12.8% of our sample constitutes of well-established long running businesses being in business for 50 years and more.

Industry wise the companies were distributed using SE's industry categorization for reasons of convenience. The most representative sector with 18% representation is manufacturing with technology and engineering coming second with 15.5% representation and food and drink with 14.3%. These three sectors cumulatively correspond to the 48.1% of the sample. A percentage of 12.8% corresponds to companies who could not place themselves in the limits of the given categories (few examples from the sample are funeral plans providers, bicycle and accessories retail and repair unit, pet food and animal feed suppliers etc.)

To account for leaders' experience, questions were asked about their years of experience in the industry and their tenure within the business. The majority in the sample have more than 15 years of experience within the sector the business operates (67.6%). Nevertheless, the majority in the same sample has tenure within the business in question less than 15 years (58.6%). The following pie charts summarize the demographics discussed above.

Chart 1 – Company Size

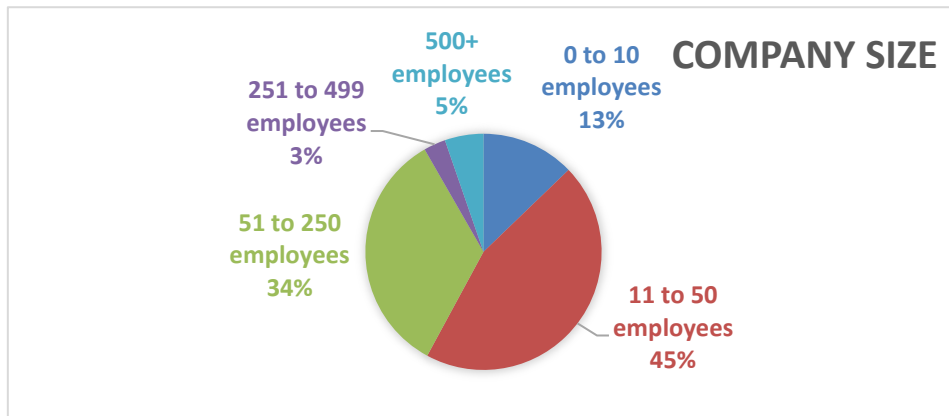


Chart 2 – Company Age

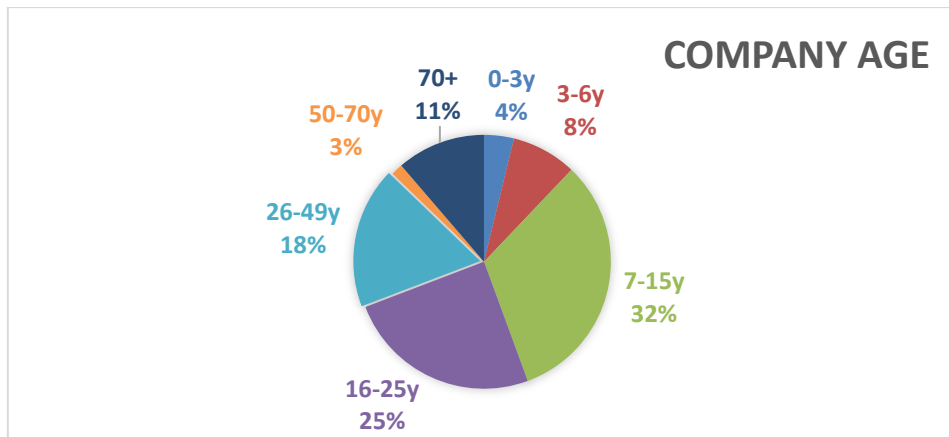


Chart 3 - Industry

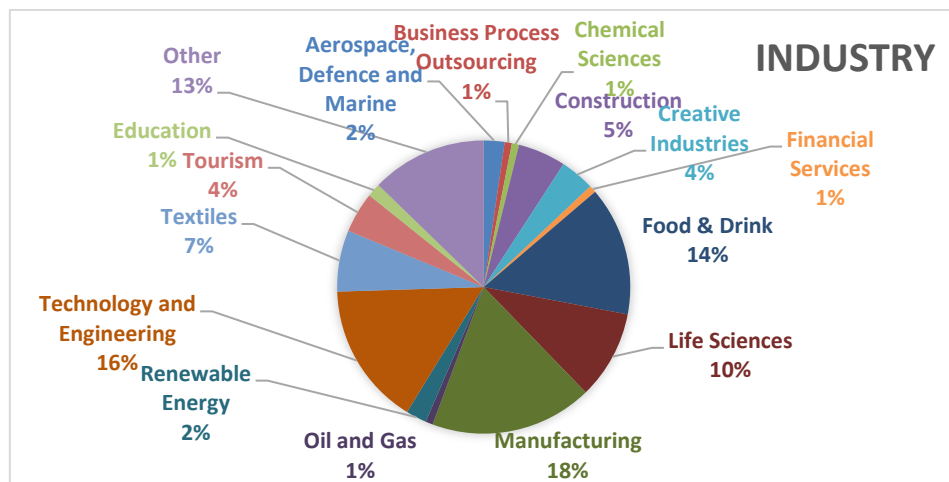
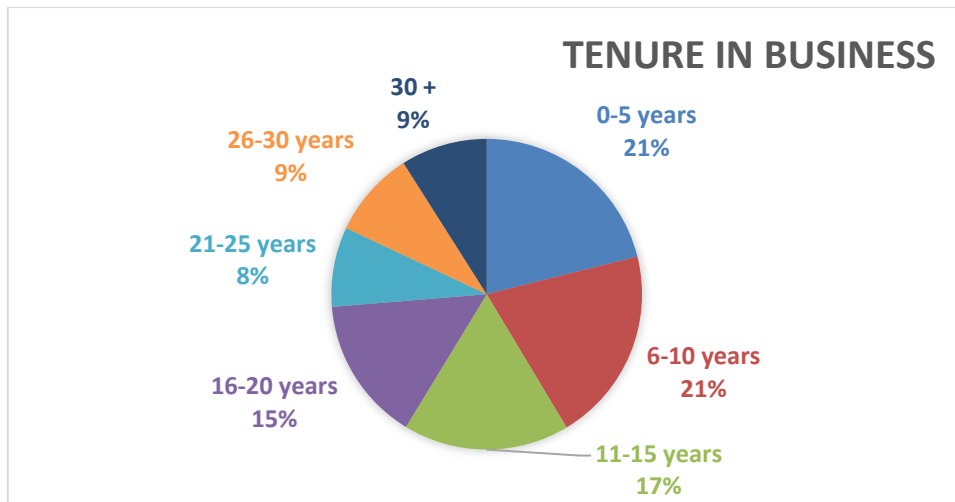


Chart 4 – Tenure in Business



Descriptive Statistics

Next, the descriptive statistics, including information about the sample size, the min, max and mean for each of the constructs used in the analysis are presented.

Entrepreneurial Leadership

Table 4 presents the leaders perceptions relating to their entrepreneurial leadership attitudes/ behaviours. Likert-type scale, ranging from 1 (never/strongly disagree) to 7 (all the time/strongly agree) was developed to evaluate 5 dimensions of entrepreneurial leadership: innovativeness, creativity, passion, tenacity/patience, risk taking, vision/ vision communication.

Table 4 - Descriptive Statistics for Entrepreneurial Leadership Scale

	N	Min	Max	Mean
Q1: I often come up with radical improvement ideas for the products/services we could sell	133	2	7	4.79
Q2: I often come up with ideas of entirely new products/services that we could sell	133	1	7	4.50
Q3: I strongly encourage our employees to act in a more innovative way (ex. by giving them room to work on alternative projects, come forward with new ideas for products/services, by involving them in change and encouraging openness to new, promoting alternative training programs etc.)	133	2	7	5.89
Q4: I strongly encourage our employees to challenge the current ways we do business	133	2	7	5.88

Q5: I have created a culture within the business which is characterized by a strong emphasis on R&D, technological leadership and innovation	133	1	7	5.38
Q6: I consider myself to be creative	133	2	7	5.61
Q7: I create processes that enable employees to bypass unnecessary rules, regulations and/or bureaucratic obstacles in order to encourage creative approaches to problem solving	133	1	7	5.20
Q8: I create a culture in which employees are rewarded for being creative and trying new and different things, even if they do not work out in the end	133	2	7	5.35
Q9: I am passionate about my work	133	4	7	6.63
Q10: I demonstrate my passion to inspire and motivate employees to be passionate about their work	133	4	7	6.16
Q11: I demonstrate my passion to inspire and motivate employees to support my aspirations for the business	133	4	7	5.97
Q12: I demonstrate my passion to motivate external stakeholders (investors, advisers, major clients etc.) to support my aspirations for the business	133	4	7	5.87
Q13: I motivate my employees to explore new opportunities for the business	133	3	7	5.93
Q14: I demonstrate persistence in every task that I undertake	133	3	7	6.06
Q15: I consider myself to be flexible	133	3	7	6.01
Q16: I demonstrate patience in every task that I undertake	133	1	7	4.53
Q17: I consider myself to be a risk taker	133	2	7	5.35
Q18: I strongly encourage employees to exploit opportunities for the business with uncertain outcomes	133	1	7	4.98
Q19: I strongly encourage employees to undertake high risk projects which are expected to produce high risk returns	133	1	7	4.14
Q20: I have a vision for the future of the business	133	3	7	6.38
Q21: The vision is regularly re-defined by the changing business and external environment	133	2	7	5.86
Q22: It is clear to me what steps we need to take for achieving this vision	133	3	7	5.96
Q23: The vision is clear to our staff	133	2	7	5.50
Q24: It is clear to our staff what steps we need to take for achieving this vision	133	1	6	4.35
Q25: The vision is clear to the business external collaborators/ stakeholders (investors, advisers, major clients etc.)	133	2	7	5.25
Q26: The vision of the company is (written, spoken, both)	133	1	3	2.63

It is impressive that in all questions the leaders scored above scale's mean. The lowest mean (4.14) which is still higher than the 3.5 mean of the 1 to 7 scale was recorded for the question *"I strongly encourage employees to undertake high risk projects which are expected to produce high risk returns"* from the bundle of questions about risk taking attitudes and behaviours. The leaders appear to rank themselves high in being passionate ($\mu=6.63$), flexible ($\mu=6.01$), persistent ($\mu=6.06$), creative ($\mu=5.61$) and rather risk takers ($\mu=5.35$) but appear quite *"neutral"* in the first two questions which intent to rate their innovativeness ($\mu=4.79$, $\mu=4.50$ respectively). Nevertheless, questions 3, 4, and 5 with means 5.89, 5.88 and 5.38 respectively reveal that even though they do not consider themselves to be greatly innovative, they try to create a business culture and mentality that supports innovativeness, novelty and allows employees to challenge the status quo. They have a clear vision for their company's future ($\mu=6.38$) and although it is re-defined by the changing business and external environment ($\mu=5.86$) they feel confident about what steps should be made in order to achieve the vision ($\mu=5.96$). Finally, it looks like being passionate and using this passion to inspire and motivate works better than any other behaviour or attitude in engaging the external and internal environment in supporting leader's business aspirations (Q10 $\mu= 6.16$, Q11 $\mu=5.97$, Q12 $\mu=5.87$, Q14 $\mu=5.93$).

Resource Deployment

Table 5 presents the leaders perceptions relating resource deployment. Likert-type scale, ranging from 1 (insufficient access) to 7 (fully satisfactory access) was developed to evaluate the leaders' satisfaction of their access to financial, human, social and symbolic capital as well as their satisfaction concerning the quality/relevancy of the capital accessed in relation to the business needs for achieving its vision. An 8th choice of N/A was added after the request of respondents during the pilot stage for the questions concerning the financial and human capital to cover cases where there was no need to access financial capital and cases when companies are in start-up phase and haven't been engaged in recruitment just yet. The N/A responses were removed in the calculation of mean therefore for the questions Q27-Q30 the mean is calculated for the N of cases rated their opinion using the 1 to 7 scale.

Table 5 - Descriptive Statistics for Resource Deployment

	N	Min	Max	Mean
Q27: How would you rate the access of the business to financial capital?	118	1	7	4.82
Q28: How would you rate the quality/relevancy of the financial capital you have accessed in relation to the business's needs for achieving its vision?	113	1	7	5.09

Q29: How would you rate the access of the business to human capital (qualified staff)?	130	1	7	4.31
Q30: How would you rate the quality/relevancy of the human capital (qualified staff) you have accessed in relation to the business's needs for achieving its vision?	131	1	7	4.90
Q31: How would you rate the access of the business to social capital (personal and professional social networks)?	133	1	7	4.83
Q32: How would you rate the quality/relevancy of the social capital (personal and professional social networks) you have accessed in relation to the business's needs for achieving its vision?	133	1	7	4.79
Q33: How would your rate the access of the business to symbolic capital (such as personal or company reputation, brand or name prestige, accreditation such as EFQM, investors in people etc, standardization such as ISO etc., company social responsibility impact etc.)?	133	1	7	4.99
Q34: How would you rate the quality/relevancy of the symbolic capital (such as personal or company reputation, brand or name prestige, accreditation such as EFQM, investors in people etc, standardization such as ISO etc., company social responsibility impact etc.) you have accessed in relation to the business's needs for achieving its vision?	133	1	7	4.87

The mean scores for all questions are again higher than the scale's mean (3.5) but it is clear that they are closer to the median answer (score 4). This indicates a certain neutrality in their perception about both accessing each kind of capital and its relevancy/quality in relation to achieving their vision while leaning towards a moderate satisfaction. Only in the case of their perception of the quality/relevancy of the financial capital accessed in relation to their business's needs for achieving its vision there is stronger satisfaction which is a quite interesting because if there are sufficient resources for the development of their business, then the leader will likely be satisfied with his/her access to this important resource⁵². Adding the dimension of quality/relevancy gives another layer of measurement of this satisfaction and enriches the effort to measure subjectively the access and quality/relevancy of resources important for the facilitation of entrepreneurial strategies and thus entrepreneurial leadership.

External Environment

⁵² Wiklund & Shepherd (2004)

Table 6 presents the descriptive statistics for the items evaluating the business external environment. The first 5 items correspond to the environment dynamism scale⁵³ and the next 3 items to the environment hostility⁵⁴. All items are scaled from 1 (strongly disagree) to 7 (strongly agree).

Table - Descriptive Statistics External Environment

	N	Min	Max	Mean
Q86: We need to change our marketing practices extremely frequently in order to keep up with competitors	133	1	7	4.66
Q87: The rate at which products/ services are getting obsolete in the industry we operate is very high	133	1	7	3.62
Q88: Actions of competitors are unpredictable	133	1	7	3.98
Q89: Demand and consumer's taste are almost unpredictable	133	1	7	3.56
Q90: The modes of production/ service change very often and in a significant way	133	1	7	3.48
Q91: The external environment within which the business operates is very risky, a false step can cause business downfall	133	1	7	3.85
Q92: The external environment within which the business operates is very stressful, exacting, hostile; very hard to keep afloat	133	1	7	3.79
Q93: The external environment within which the business operates is a dominating environment in which our initiatives count very little against the tremendous competitive, political or technological forces	133	1	7	3.79

The results show that the companies do not consider themselves being either in a very dynamic or hostile environment. The means are all under 4 which is the neutral choice apart from question 86 related to frequent change of marketing practices to keep up with competition which scores 4.66 which shows a very moderate agreement.

In relation to the dynamic environment there are empirical observations⁵⁵ that support a strong positive relationship between entrepreneurship and performance among firms in dynamic growth environments and negative among firms in static and impoverished environments. Therefore, it is expected that entrepreneurial leadership within a dynamic environment will have positive performance implications. However, firms that are more content with existing operations would be less likely to gain benefits from a dynamic

⁵³ Miller, Friesen, 1982

⁵⁴ Covin, Slevin, 1989

⁵⁵ Zahra, 1993

environment, because market demand might shift away from the firm's products negatively impacting performance⁵⁶. Nevertheless, our results indicate on average a rather stable but not for sure static or impoverished environment.

In relation to environment hostility, operating within a very hostile environment with high pressure from the competition, leaders could be refrained from promoting vastly entrepreneurial strategies. It is argued that extensive risk taking combining with a strong emphasis on novelty could be even hazardous when competitive conditions are becoming more pressuring⁵⁷. Furthermore, under high competition circumstances resources are not wasted for experimentation⁵⁸ and such conservative resource strategy is an obstacle for opportunity exploration/exploitation strategies⁵⁹. On the other hand, research has found also that environmental hostility may stimulate the pursuit of entrepreneurship as a strategy to differentiate its products to overcome the unfavourable market conditions⁶⁰.

Business Performance

This study uses five different proxies to indicate for business performance and growth. The next table summarizes the responds.

Table 7 - Business Performance

	N	Minimum	Maximum	Mean
Sales Revenue Growth	133	-65,54	299,51	17,96
Staff Growth	133	-36,75	369,04	13,86
Profit Growth	121	-200,00	419,62	26,26
Sales Productivity Growth	133	-88,00	292,00	7,41
Number of Entr. Events	133	0	175	8,37

Companies reported from 0 to 175 entrepreneurial incidents measured as novelties (new product, service or organizational process introduction) within a period of 3 years of

⁵⁶ Wiklund & Shepherd, 2005

⁵⁷ Miller and Friesen, 1983

⁵⁸ Bourgeois, 1981

⁵⁹ Lumpkin & Dess, 2001

⁶⁰ Zahra, 1991

operation. On average, our sample companies have introduced around 8 new products/services/new operational processes while six companies (4.5% of population) reported zero entrepreneurial events within the last three financial years since they have taken the survey.

Sales revenue growth, growth in number of employees, profit growth and sales revenue per employee growth within the last three years has been used to measure business performance improvement. It is obvious that on average all indicators reveal growth for our sample companies. It is worth noting that compound annual growth rates (geometric progression ratios) were used to provide constant rates of the three-year time period to treat seasonality effects that can render arithmetic means irrelevant.

Factor Analyses Results

To determine the scale structure for the entrepreneurial leadership and resource deployment constructs an exploratory factor analysis was conducted to finalize the items which describe better the construct from the originally based on theory pool of questions⁶¹. This is a wide used statistical method which can help to determine factors (components) that describe a specific construct based on the variability among observed, correlated variables. The method also serves in reducing the number of items and discover latent variables.

The result of the analysis for the construct **entrepreneurial leadership** produced a four factor result as presented in the table below. The final components describing better entrepreneurial leadership in our sample are: 1. Vision & Vision Communication 2. Innovativeness & Creativity 3. Passion & 4. Risk taking.

Table 8 - Pattern Matrix Entrepreneurial Leadership

	Factors			
	1 Vision	2 Innov_Creat	3 Passion	4 Risk
Q1: I often come up with radical improvement ideas for the products/services we could sell		.884		
Q2: I often come up with ideas of entirely new products/services that we could sell		.927		
Q6: I consider myself to be creative		.619		

⁶¹ Renko et al, 2015 & DeVellis, 2003

Q9: I am passionate about my work		.656
Q10: I demonstrate my passion to inspire and motivate employees to be passionate about their work		.968
Q11: I demonstrate my passion to inspire and motivate employees to support my aspirations for the business		.672
Q18: I strongly encourage employees to exploit opportunities for the business with uncertain outcomes		.763
Q19: I strongly encourage employees to undertake high risk projects which are expected to produce high risk returns		.810
Q23: The vision is clear to our staff	.917	
Q24: It is clear to our staff what steps we need to take for achieving this vision	.923	
Q25: The vision is clear to the business external collaborators/ stakeholders (investors, advisers, major clients etc.)	.702	
Q22: It is clear to me what steps we need to take for achieving this vision	.536	
Q17: I consider myself to be a risk taker		.545

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

The result of the analysis for the construct **resource deployment** produced a three factor result as presented in the table below. The components describing better capital deployment for our sample are: 1. Financial Capital 2. Social Capital and 3. Human Capital accessibility and quality.

Table 9 - Pattern Matrix Resource Deployment

Factors

	1 Financial	2 Social	3 Human
Q27: How would you rate the access of the business to financial capital?	.940		
Q28: How would you rate the quality/relevancy of the financial capital you have accessed in relation to the business's needs for achieving its vision?	.925		
Q29: How would you rate the access of the business to human capital (qualified staff)?			.763
Q30: How would you rate the quality/relevancy of the human capital (qualified staff) you have accessed in relation to the business's needs for achieving its vision?			.745
Q31: How would you rate the access of the business to social capital (personal and professional social networks)?		.866	
Q32: How would you rate the quality/relevancy of the social capital (personal and professional social networks) you have accessed in relation to the business's needs for achieving its vision?		.932	

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

Bivariate Correlation Analysis

Table 10 demonstrates the correlation matrix of variables described above. As expected, there is statistically significant strong correlation among the factors describing entrepreneurial leadership. More precisely all factors correlate in pairs indicating a positive linear relationship amongst them. Similarly, the three factors describing entrepreneurial capital deployment present the same behaviour which signifies that capital deployment success depends on the simultaneous deployment success of all the different kinds of capital.

When looking closely into the relationships between the entrepreneurial leadership factors and the entrepreneurial capital deployment factors, it is of interest to note that social capital deployment correlates positively and significantly with vision, innovation & creativity and passion. Similarly, human capital correlates with all four factors. This linear positive correlation confirms that resources, and not necessary financial, enhance entrepreneurial leadership attitudes and behaviours related to visioning and vision communication, innovativeness and creativity, passion for the business and for achieving the vision and risk taking towards that direction. Finally, this relationship demonstrates the power of social and human capital when it comes to facilitating entrepreneurial strategies within an organization.

Next, looking at the two variables explaining the external environment, hostility and dynamism it is obvious that the two variables are correlated, which signifies that a dynamic economic environment is at the same time somewhat hostile because of the high pressure from competition. However, the interesting thing here to see is that dynamism is positively related with risk taking whereas hostility negatively. This means that a dynamic and growing environment encourages risk taking activities but at the same time extensive risk taking combining with a strong emphasis on novelty could be even hazardous when competitive conditions are becoming more pressuring⁶². Finally, hostility has a negative correlation with passion. This observation can be interpreted as the negative influence a hostile and heavily competitive environment can have on a leader's "spirit" for driving the business to success.

Variables 10 and 11 are the combination of the factors describing the constructs of entrepreneurial leadership and entrepreneurial capital deployment using their mean scores to create a single variable describing each construct. EntreLed, which describes entrepreneurial leadership, is positively correlated with Entre_Capital (as expected) and more precisely with social and human capital. It is also correlated negatively with hostility. Therefore, we detect the same effects as when looking into the individual factors comprising the two constructs.

In relation to business economic performance and growth indicators, sales growth is positively correlated with innovativeness and creativity indicating that being an innovative and creative leader can increase sales growth either through new products/services introduction or via creating comparative advantages by using innovation or innovative organizational processes (ex. innovative marketing or selling processes). Personnel growth correlates with innovation & creativity, passion, access to financial capital, dynamism and sales growth. The number of entrepreneurial events occurred within the last three years in our companies correlates positively with creativity/innovativeness and passion from the entrepreneurial leadership components as well as with human capital deployment and negatively with hostility. This indicates that apart from having an entrepreneurial leader within an organization, human capital i.e. qualified and effective staff plays an important role in realizing entrepreneurial events while hostile external environments discourage them. It is worthy to mention that profits growth does not appear to have significant statistical correlation with any of the rest variables.

The leader's experience measured by his experience of the industry and his tenure in the business does not appear to have significant statistical correlation with any of the variables as well whereas business size correlates with visioning and risk taking and business age

⁶² Miller and Friesen, 1983

with access to financial capital. This is an indication that bigger and therefore more established companies to have more stable and rounded vision of their future as well as set processes of communicating in effectively to their staff. Furthermore, bigger companies may have more resources and better security in assigning them towards riskier activities. Finally, the correlation between financial capital deployment and business age maybe encapsules the fact that access to financial capital can be easier for well-established and successful companies with potentially a better credit history than new, smaller enterprises.

Table 10 – Bivariate Correlation Analysis

Variables	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16	17	18	19	20
1.Vision	1																		
2.Innov_Creat	.323**	1																	
3.Passion	.537**	.498**	1																
4.Risk_Taking	.377**	.378**	.421**	1															
5.Financial_Capital	.091	.000	.087	.157	1														
6.Social_Capital	.259**	.234**	.195*	.153	.185*	1													
7.Human_Capital	.191*	.210*	.192*	.219*	.299**	.361**	1												
8.Dynamism	-.054	.063	.044	.228**	.052	-.088	.061	1											
9.Hostility	-.155	-.083	-.202*	-.172*	-.064	-.084	.019	.372**	1										
10.ENTRELED	.747**	.733**	.820**	.712**	.110	.281**	.269**	.090	-.203*	1									
11.ENTRE_CAPITAL	.277**	.174*	.222*	.256**	.693**	.664**	.771**	.041	-.020	.308**	1								
13.Profits Growth	-.126	-.006	.018	-.085	-.021	.050	.036	-.081	.068	-.064	.028	1							
14.Sales Growth	-.037	.176*	-.068	.108	-.051	.091	.121	-.041	.001	.057	.072	.148	1						
15.Staff Growth	-.010	.297**	.195*	.149	.172*	-.045	.127	.091	-.033	.209*	.116	.034	.383**	1					
16.Sales Product. Growth	.046	.022	-.124	-.017	-.131	.150	-.017	-.177*	.008	-.024	.004	.090	.505**	-.350**	1				
17.No of entr. Event	-.154	-.192*	-.217*	-.105	-.054	-.134	-.228**	.068	.133	-.223**	-.184*	-.062	-.050	-.112	.056	1			

18. Industry Experience	.003	.015	.039	.005	-.039	.021	.015	-.037	-.062	.021	-.012	.009	.021	-.088	.071	-.069	1		
19. Tenure	-.038	-.087	-.045	-.075	.012	-.037	-.021	.055	.081	-.081	-.005	.097	-.048	-.071	.108	-.085	.652**		
20. Company Size	.216*	.009	.068	.211*	.222*	.059	.077	.030	-.034	.166	.175*	-.053	-.155	-.064	-.007	-.191*	-.016	-.002	1
21. Company Age	.074	-.170	-.128	-.116	.171*	.015	-.029	-.096	-.017	-.112	.090	-.031	-.133	-.143	.055	-.123	.082	.275**	.364**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Regression Analyses

The following two paragraphs will present the result from a hierarchical regression analysis used in defining a model that best explains entrepreneurial leadership within a business and a series of regression analysis to examine the effects of entrepreneurial leadership to business performance and growth.

Entrepreneurial Leadership - Universal and contingency models

Hierarchical linear regression analysis was conducted to test whether the universal or contingency, models best fit the data received from the account managed companies. The approach is appropriate when analysing highly correlated independent variables. A step wise process took place where in each step a next higher order of interaction is added (two-way interactions) and the incremental R^2 and F tests of statistical significance are evaluated⁶³.

The first model shows the effects of the control variables of business size, business age, industry, experience of industry in years and tenure within the organization in years. 7% of the variation in entrepreneurial leadership is marginally statistically explained ($P < .10$). The next step of the analysis addresses the universal influence of capital deployment looking separately at each kind of capital as well as the environmental dynamism and hostility on entrepreneurial leadership. These three variables account for an additional 15.1% of the variation in entrepreneurial leadership ($P < .05$). Social capital, human capital and dynamism have a statistically significant positive relationship with entrepreneurial leadership; i.e., higher entrepreneurial leadership is associated with greater access and quality of social and human capital ($P < .10$) and a dynamic external environment ($P < .10$). On the other hand, a hostile environment affects negatively entrepreneurial leadership variation ($P < .05$). When the model is run using all entrepreneurial capital factors combined into one variable Entr.Capital the results are similar.

The contingency model presented in the last is statistically significant but the amount of explained variance is increased by only 1.6 % ($P > .01$), and none of the two-way interactions are statistically significant. The contingency model tries to capture the two-way interaction between internal characteristics and the external environment i.e. entrepreneurial capital and dynamism and entrepreneurial capital and hostility. Nevertheless, although there is a small increase of explained variance when compared to the universal model and the interactions have not statistical significant effect on entrepreneurial leadership.

⁶³ Cohen and Cohen, 1983

Table 11 – Entrepreneurial Leadership: universal & contingency models (N=133)

	Control Variables		Universal Model & Control Variables				Contingency Model	
	<i>B</i>	S.E	<i>B</i>	S.E	β	S.E	β	S.E
Industry	-.008	.016	-.006	.015	-.005	.015	-.006	.015
Industry Experience	.037	.041	.019	.039	.028	.039	.032	.039
Tenure in Business	-.037	.044	-.020	.042	-.026	.042	-.030	.042
Business Size	.172**	.070	.139*	.066	.125*	.066	.125*	.066
Business Age	-.084*	.046	-.072	.044	-.083*	.043	-.078*	.043
Financial Capital			-.017	.070				
Social Capital			.171*	.075				
Human Capital			.155*	.079				
Dynamism			.140*	.071	.123*	.070	.128*	.071
Hostility			-.177**	.063	-.174**	.063	-.186**	.063

Notes: Regression weights shown are unstandardized coefficients

*P < .10.

**P < .05.

***P < .01

Entr. Capital			.314**	.093	.308**	.093
Entr. Capital x Dynamism					-.169	.108
Entr. Capital x Hostility					.081	.087
Entr. Capital x Dynamism x Hostility						
<i>R</i>	.265*	.470**	.453***		.471***	
<i>R</i> ²	.070*	.221**	.205***		.222***	
Adjusted <i>R</i> ²	.034*	.157**	.154***		.158***	
ΔR^2	.070*	.151**	.135***		.016***	

	Sales Growth (N=133)		Staff Growth (N=133)		Profit Growth (N=120)		Sales Productivity Growth (N=133)		Number of Entrepreneurial Events (N=133)	
	<i>B</i>	S.E	<i>B</i>	S.E	<i>B</i>	S.E	β	S.E	β	S.E
Vision	-.046	.105	-.197*	.103	-.212*	.120	.154	.106	-.002	.005
Innovation&	.261**	.104		.101	.032	.111	.103	.104	-.006	.005

Effects of Entrepreneurial Leadership on Business Performance

To test the hypothesized relationships between EI and organizational performance, six sets of regression analyses were run. The six measures of organizational performance served as the dependent variables and the components of EntreLed as the independent variable. The results are summarized in Table 12.

Creativity			.270**							
Passion	-.225*	.114	.142	.113	.171	.126	-.256**	.116	-.007	.006
Risk Taking	.131	.108	.068	.104	-.096	.115	-.007	.109	.001	.005
<i>R</i>	.273**		.342**		.192		.202		.241*	
<i>R</i> ²	.075**		.117**		.037		.041		.058*	
Adjusted <i>R</i> ²	.046**		.089**		.003		.011		.028*	

Table 12 – Regression Results for Entrepreneurial Leadership and Business Performance

Notes: Regression weights shown are unstandardized coefficients

**P* < .10.

***P* < .05.

****P* < .01

As expected from the correlation analysis the components of entrepreneurial leadership explain sales (*P*<.05) and staff growth (*P*< .05) as well as the number of entrepreneurial events but marginally (*P*<.10) because although the components do not appear to have statistical significance they add net explanatory power to the model. Innov/creativity and passion explain 7.8% of variation in sales growth and vision and innov/creativity explain 11.7% of variation in staff growth.

Several reasons could be considered as plausible for the failure to find a relationship between Entrepreneurial Leadership and profits growth: 1. Highly entrepreneurial firms may have to sacrifice profits when investing in opportunity exploration and exploitation activities, R&D and market development. 2. Cash flow problems are a common problem in rapid growth companies because of high input demands to satisfy increased demand for the final product 3. Profits may also suffer from possible failures when companies used a great amount of their resources in opportunity exploration/exploitation and finally 4. The time lag between an entrepreneurial event ex. new product introduction and its effects on profits is difficult to predict as it can depend on the nature of the investment used and its return expectations.

Discussion/ Implications

Combining and synthesising the findings from both studies (qualitative and quantitative) further development of the concept of entrepreneurial leadership is encouraged. The findings lend support on the need to continue testing the measures in order to reach a universal model that would reflect the degree of entrepreneurial leadership as in leadership style but also as of a strategic process within an organisation and its direct and indirect effects on business performance and growth.

Leadership attitudes and behaviours connected with innovativeness and creativity, being passionate and sharing that passion to motivate followers, being a risk taker and encouraging risk taking for opportunities exploration and exploitation activities as well as being the evangelist of the company's vision ensuring its clear communication and connection with respective strategies have identified as representative for the SE account managed sample companies.

The findings concerning resource management identify that mobilization, development and strategic management of resources is important to the leader's vision of growth and is described as a perpetual process which depends on the maturity of the firm as well as the wider context. The case studies revealed that at a start-up phase, individual-level resources such as the founders'/leaders' (and/or the first employees') economic capital, networks, knowledge and experience were found to play an important role for the success of the business. As the businesses developed and grew, those individual level resources seem to be absorbed by the structure and mutated to become the company's resources. Therefore, leadership should be able to identify what kind of resources are important for the realization of their vision in order to plan strategically its mobilization.

Of specific interest is the fact that the sample identified social & human capital deployment per se responsible for improving the level of entrepreneurial leadership. This finding shifts a central understanding that it is the financial capital slack that leverages businesses to engage in entrepreneurial activities. This observation may as well be sample specific especially as far as it concerns social capital. The SE invests in developing networks of entrepreneurs (leadership program alumni, global scots etc.) that account managers encourage the businesses to take advantage of and therefore there is a chance that this result reflects the benefits of this applied SE strategy. Specific managerial/ business consulting and further research implications are discussed next.

Implications for business leaders/ consultants

Several implications for business leaders and professionals providing consultancy services to business leaders can be drawn from these findings. Modern business leaders can benefit by adopting the roles, behaviours and attitudes of the entrepreneurial leader. Risk taking, creative and innovative entrepreneurs are increasingly recognized for their abilities to create and develop successful products, organizations and markets in dynamic and hostile due to strong competition economic environments. By acting as a role model and providing a focused vision and the necessary space to his staff, an entrepreneurial leader has the

potential to empower his followers to become part of the entrepreneurial future of the business.

From a practical point of view, entrepreneurial leadership can be monitored and measured on a semi-annual basis in order to establish the orientation of the leaders and managers and to discover areas of improvement and development. When used to evaluate the highest rank of leadership it would be proper to triangulate the results by rephrasing the questionnaire and administering it to different levels of management as well as to external collaborators (ex. SE account manager) to capture a cross-level opinion of the leadership practice in the business (by asking them how does the statements describe the business's leader).

The questionnaire could be also used as a leadership skills evaluation tool for different levels of management where either the manager (self-assessment) and/or the personnel he manages (management assessment) could evaluate the degree of entrepreneurial leadership practiced. It is expected that different results will be generated by different management levels and functional areas within the same business. Accordingly, leadership may set goals to improve entrepreneurial leadership in key levels and areas and use this information as diagnostics to identify the underlying reasons.

The specific components of entrepreneurial leadership identified by the questionnaire could be mapped by using the critical incidents technique (identification of specific incidents/strategies that constitute entrepreneurial leadership) and then linked to specific business development and growth outcomes in order to establish the effectiveness of entrepreneurial leadership and not only its level of practice. This process can be integrated to the quarterly or semi-annual performance monitoring processes of a business.

Regarding the effects of capital deployment, entrepreneurial leadership was found to depend heavily on access to qualified staff. This finding is not new in entrepreneurship research as different studies have identified human capital as a crucial resource for success in entrepreneurial firms⁶⁴. Therefore, the continuous enhancement of skills, knowledge and abilities is considered vital for a business which wishes to use entrepreneurship as their development and growth strategy. More precisely, development of skills that would enhance innovativeness and creativity as well as communication skills that would help leaders and managers to communicate their vision and their passion for the business goals better and more effectively could enhance the development of entrepreneurial leadership within organizations.

⁶⁴ Florin et al., 2003; Pfeffer, 1994

Finally, social capital enhancement (development of peer-to-peer interaction, trust-building with internal staff and external collaborators, trust-building with customers, local communities, authorities, targeted industry collaborations etc.) has been found important for resource deployment as well as for improving entrepreneurial leadership within a business. Leaders should understand the benefits of investing their time and effort to create, cultivate and support social networks. Several studies have found that social capital development can affect business performance by enhancing entrepreneurial attitude⁶⁵, reducing entrepreneurial risks⁶⁶, creating business environments low in conflict⁶⁷ and optimized business leaders' efforts to acquire other resources⁶⁸. Business consultants and account managers can be key figures in complementing the leader's efforts. Thus, enterprise development agencies should invest further in institutional synergy that will help enterprising companies to acquire and develop further this kind of capital.

Research Implications

Implications for research on entrepreneurial leadership: It has been argued that studies have generally ignored the co-evolution of organizational leadership, resources and processes⁶⁹. Insights from the case studies related to the links between vision content and business growth strategies and the evidence that their success is dependent on the bundle of resources companies develop over time, contribute to that direction. Finally, the several incidents related to vision communication and leadership re-organization in the different phases of the business lifecycle may help to conduct further investigation of the evolving view of entrepreneurial leadership as a process of influence⁷⁰. Related incidents contain information about leadership behaviours associated with encouragement of others to emulate their behaviour, experiment and learn for themselves. In all cases, it is the leader's passion and vision to motivate others in such direction.

The most recent research on entrepreneurial leadership⁷¹ set the grounds in understanding and measuring entrepreneurial leadership. The current study enhanced the understanding of the notion by empirically investigating the qualitative characteristics of the phenomenon and subsequently testing them quantitatively. The qualitative investigation revealed processual characteristics with business cycle effects, external environment effects, the effects of

⁶⁵ Martinez-Gomez et al, 2010

⁶⁶ Moran, 2005

⁶⁷ Baum et al, 2000

⁶⁸ Oh et al, 2006

⁶⁹ Koryak et al., 2015

⁷⁰ Ireland et al, 2003; Renko et al, 2015

⁷¹ Renko et al, 2015

resource deployment on entrepreneurial leadership and finally the direct effects of entrepreneurial leadership to business performance and growth.

Implications for extending the Resource Based View (RBV) of entrepreneurship: It was observed that mobilization, development and strategic management of resources in order to realize the leader's vision of growth is a perpetual process which depends on the maturity of the firm as well as the wider context. At start-up phase, individual-level resources such as the founders'/leaders' (and/or the first employees') economic capital, networks, knowledge and experience were found to play an important role for the success of the business. As the businesses developed and grew, those individual level resources seem to be absorbed by the structure and mutated to become the company's resources. Social capital and human capital found as the most influential for our sample which shifts the traditional interest in financial resources. Deepening analysis of incidents related to resource mutation in different business phases as well as in what constitutes effective social capital and human capital can contribute to the extension of the RBV in entrepreneurship research. Finally, the items developed for the 4 different kinds of capital although inspired by Wiklund and Shepherd (2005) are original and show a good operationalization therefore can be utilized for entrepreneurial capital construct measurement.

Limitations

Although our case studies are triangulated by the use of 3 different informants, the quantitative study lacks triangulation as it relies on a single-informant. Furthermore, entrepreneurial leadership was revealed to have processual characteristics and therefore a longitudinal collection of data would help to understand how entrepreneurial leadership evolves over time and how this evolution affects business performance and growth.

Furthermore, the explained variance of the total variation in performance reaches between 7.5% and 11.7% which should be improved. The two reasons maybe affecting this results are 1. The model derived from our case studies revealed that entrepreneurial leadership leads to business performance through opportunity exploration/exploitation and therefore a measurement instrument capturing this process should be developed and tested and 2. Although compound growth measures were utilized to overcome seasonal effects, time periods between data collection for predictors and outcome variables would more likely increase the model's explanatory ability⁷².

⁷² Wiklund & Shepherd, 2005; Wiklund (1999); Zahra (1991)

The explanatory power and robustness of the models would also benefit from a bigger sample size and more diverse including non-profit and public organizations as it would allowed more rigorous tests of the factor structure and the regressions and better robustness of the results. A simultaneous test on a sample of companies that are not account managed by SE could help to identify account management effects as well. Finally, the results concern only surviving companies leaving out of the frame companies that may have failed (closed) despite demonstrating entrepreneurial leadership (survivor bias).

REFERENCE LIST

Aldrich, H. E., Cliff, J. E. (2003) The pervasive effects of family on entrepreneurship: toward a family embeddedness perspective. *Journal of Business Venturing* 18(5): 573–596.

Alvarez, S. A., Barney, J. B. (2002) Resource-based theory and the entrepreneurial firm. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.). *Strategic entrepreneurship: Creating a new mindset*: Oxford: Blackwell Publishers, p.p. 89–105

Barney, J. B. (1991) Firm resources and sustained competitive advantage. *Journal of Management* 17: 99–120.

Baum, J.R., Locke, E.A., Kirkpatrick, S.A (1998) A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology* 83: 43–54

Baum JA, Calabrese T, Silverman BS. Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic management journal*. 2000 Mar 1:267-94

Baum, J.R., Locke, E.A. (2004) The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology* 89(4): 587-598

Bourdieu, P. (1986) The forms of capital. In J. Richardson (ed.) *The handbook of theory and research for the sociology of education*. New York: Greenwood Press.

Bourgeois, L. (1981). On the Measurement of Organizational Slack. *The Academy of Management Review*, 6(1), 29-39

Brush, C.G., Greene, P.G., Hart, M.M., (2001). From initial idea to unique advantage: the entrepreneurial challenge of constructing a resource base. *Academy of Management Executive* 15 (1), 64–78

Carter, N., Brush, C., Greene, P., Gatewood, E. and Hart, M., (2003). Women entrepreneurs who break through to equity financing: the influence of human, social and financial capital. *Venture Capital: an international journal of entrepreneurial finance*, 5(1), pp.1-28

Chell, E. (1998) Critical incident technique. In G. Symon & C. Cassell (Eds.) *Qualitative methods and analysis in organizational research*: 51-72. London: Sage

Chell, e. (2015) Research the entrepreneurial process using the critical incident technique, *Handbook of Qualitative Research Techniques and Analysis in Entrepreneurship*. Neergaard, H. & Leitch, C. (eds.). Edward Elgar, pp. 199-223

Cogliser, C. C., Brigman, K. H. (2004) The intersection of leadership and entrepreneurship: Mutual lessons to be learned. *The Leadership Quarterly* 15: 771-799

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioural sciences* (2nd Ed.). Hillsdale, NJ: Erlbaum

Collins, J.C., Lazier, W.C. (1992) *Beyond Entrepreneurship*. Englewood Cliffs, NJ: Prentice Hall.

Conner K.R. (1991). "A Historical Comparison of Resource-Based View and Five Schools of Thought within Industrial Organization Economics: Do We Have a New Theory of the Firm?". *Journal of Management*. 17 (1): 121–154

Cope, J., Watts, G. (2000) Learning by doing: An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behaviour and Research* 6(3): 104-124

Covin, J.G. and Slevin, D.P. (1989). Strategic Management of Small Firms in Hostile and Benign Environments. *Strategic Management Journal* 10 (1), 75-87

Covin, J. G., & Slevin, D. P. (1990) New venture strategic posture, structure, and performance: An industry life cycle analysis. *Journal of Business Venturing* 5(2): 123-135.

Covin, J. G., Slevin, D. P. (2002) The entrepreneurial imperatives of strategic leadership, In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (eds.). *Strategic entrepreneurship: Creating a new mindset*. Oxford: Blackwell Publishers, p.p. 309–327

Davidsson, P., Delmar, F. & Wiklund, J. (2006). *Entrepreneurship and the Growth of Firms*. Edward Elgar Publishing

Davidsson, P., & Honig, B., (2003) The role of social and human capital among nascent entrepreneurs, *Journal of Business Venturing* 18 (3), p.p 301-331

De Clercq, D., Voronov, M. (2009) Toward a practice perspective of entrepreneurship: entrepreneurial legitimacy as habitus. *International Small Business Journal*, 27(4): 395-419

Dees, J. G. (1998) Enterprising nonprofits: What do you do when traditional sources of funding fall short?. *Harvard Business Review*, 55-67

Dess G.G, Beard D.W (1984), Dimensions of Organizational Task Environments, *Administrative Science Quarterly*, 29, pp. 52-73

DeVellis, R. F. (2003). *Scale development: theory and applications* (2nd ed. Vol. 26). Thousand Oaks, CA: Sage Publications

Donaldson, L., (1996) *For Positivist Organization Theory: Proving the Hard Core*. Sage, London.

Edvardsson, Strandvik, (2000) Is a critical incident critical for a customer relationship?, *Managing Service Quality: An International Journal*, 10: 2, pp.82 - 91

Eisenhardt, K.M. (1989) Building theories from case study research, *Academy of Management Review* 14 (4): 532-555.

Ensley, M. D., Pearson, A., Pearce, C. L. (2003) Top management team process, shared leadership, and new venture performance: A theoretical model and research agenda. *Human Resource Management Review* 13(2): 329–346

Falbe, C.M., Larwood, L., (1995) The context of entrepreneurial vision. In: 1995 Babson - Kauffman Entrepreneurship Research Conference. *Frontiers of Entrepreneurship Research*. Available at: <http://fusionmx.babson.edu/entrep/fer/papers95/falbe.htm> (Assessed at 31/03/2015)

Fernald, L. W Jr. Solomon, G. T., Tarabishy, A., (2005) A new paradigm: Entrepreneurial Leadership. *Southern Business Review* 30(2): 1-10

Flanagan, J.C. (1954) The critical incident technique. *Psychological Bulletin* 51(4): 327–358.

Flick, U. (1992) Triangulation Revisited: Strategy of or Alternative to Validation of Qualitative Data. *Journal for the Theory of Social Behaviour* 22: 175-97

Foss, N. (2007) Scientific Progress in Strategic Management: The Case of the Resource-Based View. *International Journal of Learning and Intellectual Capital* 4 (1/2): 29-46

Gilbert, B. A., McDougall, P.P. & Audretsch, D.B. 2006. New venture growth: A review and extension. *Journal of Management*, 32: 926-950

Gupta, V., MacMillan, I. C., Surrie, G. (2004) Entrepreneurial leadership: developing and measuring a cross-cultural construct. *Journal of Business Venturing* 19: 241-2

Harrison, R. (2015), A critical incident technique approach to entrepreneurship research using phenomenological explicative data collection, *Handbook of Qualitative Research Techniques and Analysis in Entrepreneurship*. Neergaard, H. & Leitch, C. (eds.). Edward Elgar, p. 251-268 9

Hills, G. E., Singh, R., Lumpkin, G. T., (1997) Opportunity recognition: perceptions and behaviors of entrepreneurs. *Frontiers of entrepreneurship research* 17: 168-182

Hindle, K. (2004) Choosing qualitative methods for entrepreneurial cognition research: A canonical development approach. *Entrepreneurship Theory and Practice* 28: 575-607

- Hitt, M. A., Bierman, L., Shimizu, K., Kochhar, R. (2001) Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal* 44: 13–28
- Ireland, R. D., Hitt, M. A., Camp, S. M., & Sexton, D. L. (2001). Integrating entrepreneurship and strategic management action to create firm wealth. *Academy of Management Executive*, 15(1): 49–63
- Ireland, R.D., Hitt, M.A., Sirmon, D.G., (2003) A Model of Strategic Entrepreneurship: The Construct and its Dimensions. *Journal of Management* 29: 963-989
- Ireland, R.D., J.G. Covin, D.F. Kuratko (2009) Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship Theory & Practice* 33(1): 19-46
- Jacobs, T. O., Jaques, E. (1990) Military executive leadership. In K. E. Clark, M. B. Clark (Eds.) *Measures of leadership*. Leadership Library of America, New Jersey, p.p. 281-295.
- Koryak, O., Mole, K.F., Lockett, A., Hayton, J.S., Ucbasaran, D., Hodgkinson G.P., (2015) Entrepreneurial leadership, capabilities and firm growth. *International Small Business Journal* 33: 89-105.
- Kuratko, D.F., Ireland, R.D., Covin, J.G., Hornsby, J.S. (2005) A model of middle-level managers' entrepreneurial behaviour. *Entrepreneurship Theory & Practice* 29(6)
- Kuratko, D. F., 2007. Entrepreneurial leadership in the 21st century. *Journal of Leadership & Organizational Studies*. 13(4), pp. 1-11
- Leitch, C. M., McMullan, C and Harrison, R.T. (2013) The development of entrepreneurial leadership: The role of human, social and institutional capital." *British Journal of Management* 24.3: 347-366
- Long, W., McMullan W., (1984) Mapping the New Venture Opportunity Identification Process. In: *Frontiers of Entrepreneurship Research*, Ed. J. Hornaday, F.Tarpley, Jr., J. Timmons, et al. Wellesley, MA.84
- Locke, E.A., Kirkpatrick, S., Wheeler, J.K., Schneider, J., Niles, K., Goldstein, H., Welsh, Chah, D. O. (1991) *The Essence of Leadership*. New York: Lexington Books
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16, 429-451

- McGrath, R. M., MacMillan, I. C. (2000) *The entrepreneurial mindset*. Boston: Harvard Business School Press
- Michael, S., Storey, D., & Thomas, H. 2002. Discovery and coordination in strategic management and entrepreneurship. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.), *Strategic entrepreneurship: Creating a new mindset*: 45–65. Oxford: Blackwell Publishers
- Miller, (1983) *The Correlates of Entrepreneurship in Three Types of Firms*. *Management Science* 29 (7): 770–791
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3, 1-25
- Moran, P. (2005), *Structural vs. relational embeddedness: social capital and managerial performance*. *Strat. Mgmt. J.*, 26: 1129–1151
- Mosakowski, E. (1998) *Entrepreneurial resources, organizational choices, and competitive outcomes*. *Organization Science* 9(6): 625–643
- Mosakowski, E. (2002) *Overcoming resource disadvantages in entrepreneurial Firms: When less is more*. In M.A. Hitt, R.D. Ireland, S.M. Camp, & D.L. Sexton (eds.), *Strategic entrepreneurship: Creating a new integrated mindset*. Oxford: Blackwell Publishing, p.p. 106–126
- Oh, I.-S. (2006). *The Pygmalion effect in organizations revisited: The conceptualization of the Pygmalion leadership behaviour and its impact process in organizations*. *Korean Journal of Industrial and Organizational Psychology*, 19(3), 301-324
- Penrose, E. E. T. (1959) *The Theory of the Growth of the Firm*. John Wiley and Sons, New York
- Pfeffer, J. 1994. *Competitive advantage through people*. Boston: Harvard Business School Press
- Pret T, Shaw E, Dodd S, et al. (2015) *Painting the full picture: The conversion of economic, cultural, social and symbolic capital*. *International Small Business Journal*. DOI: 10.1177/0266242615595450
- Renko, M., El Tarabishy, A., Carsrud, A.L. and Brännback, M., 2015. *Understanding and measuring entrepreneurial leadership style*. *Journal of Small Business Management*, 53(1), pp.54-74

- Shane, S., Venkataraman, S. (2000) The promise of entrepreneurship as a field of research. *The Academy of Management Review* 25 (1): 217-226
- Teece, D., G. Pisano, A. Shuen (1997) Dynamic capabilities and strategic management. *Strategic Management Journal* 18: 509-533.
- Teece, David J. (2007) Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal* 28(13): 1319-1350
- Timmons, J.A. (1994) *New Venture Creation: Entrepreneurship for the 21st Century*. Irwin Press, Burr Ridge, IL (4th edition)
- Wiklund, J., (1999) The sustainability of the entrepreneurial orientation – performance relationship. *Entrepreneurship Theory & Practice* 24 (1), 37 – 48
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing*. 20(1), 71-89
- Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, 6, 259-285
- Zahra, S. A. (1993). Business strategy, technological policy, and firm performance. *Strategic Management Journal*, 14, 451-478