

# The Management of Small and Medium Enterprises

Matthias Fink and  
Sascha Kraus

# The Management of Small and Medium Enterprises

“This book offers intelligent answers on a core problem: How to professionalize the management of SMEs without damaging the entrepreneurial spirit of the acting persons. It combines a clear focus with multifaceted research results from several countries and methodological approaches”.

**Josef Mugler**

Founding President

European Council for Small Business and Entrepreneurship (ECSB)

Professor

Vienna University of Economics & Business Administration, Austria

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Matthias Fink and Sascha Kraus

# **The Management of Small and Medium Enterprises**

**Edited by  
Matthias Fink  
and  
Sascha Kraus**

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# Foreword

## The Management of Small and Medium Enterprises

*Friederike Welter*

Small and medium sized enterprises (SMEs) have been and are the basis for economic development all over the world. They play an important role for employment, innovation and societal change. Researchers and teachers also have recognized that management processes in SMEs differ from large businesses, requiring specialized tools and management concepts. Small firms need specialized practices in human resource management; they apply specific strategies and use different methods of strategic management; and organizational learning within the firm is closely linked to the entrepreneur and his/her team.

The editors of this book have assembled interesting contributions from a wide list of international scholars on the management of small firms and new ventures. Their anthology highlights the variety of themes in managing and developing a small business, while also including international and country perspectives. As well as providing empirically grounded analysis of different facets of the management of new and small ventures, the contributors also provide conceptual insights into strategic management and planning in a small firm context, human resource management, entrepreneurial teams and challenges SMEs face in the twenty-first century, such as entrepreneurial learning and innovation and knowledge management. This book therefore is a valuable and up-to-date overview of the current debate in small business management, and it is of interest for researchers, teachers and practitioners alike.

*Friederike Welter*

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We are also thankful for the institutional support received from our home institutions at the time of this work, i.e., the Vienna University of Economics and Business Administration, Austria (Institute for Small Business Management and Entrepreneurship as well as Research Institute for Co-operation and Co-operatives), the University of Liechtenstein and Utrecht University, The Netherlands, the Evald and Hilda Nissi Foundation/University of Vaasa, Finland, and the Institute for Management Research Cologne (IMFK e.V.). To this list, we would like to add the International Council of Small Business (ICSB) for giving us the opportunity to discuss and further develop some of the manuscripts published in this volume at the ICSB World Conference in Turku, Finland.

For their support in shaping the book, we would also like to thank Slawomir Teodorowicz (Vienna University of Economics and Business Administration, Austria), the editorial staff at Routledge/Taylor and Francis Group as well as our marvelous group of renowned scholars from all over the world.

*Matthias Fink & Sascha Kraus*  
Vienna/Vaduz, February 2009



# Introduction

## The Need for (Entrepreneurial) Management of Small and Medium Enterprises

*Matthias Fink and Sascha Kraus*

SMEs continue to play an increasingly important role in major economies around the globe (Mugler 1998). In the European Union (EU) alone, there are approximately twenty-three million SMEs classified, based on having less than 250 employees and being independent from larger companies (European Commission 2003). By this definition, more than 99 percent of all enterprises in the EU are SMEs. These SMEs provide over one hundred million jobs in Europe, and in some sectors account for more than three-quarters of all jobs. SMEs also account for a significant share of interfirm cooperations across national borders (Fink and Teodorowicz 2008; Fink *et al.* 2009). At EU-27 level, an average European SME employs 6.8 persons (Gallup Organisation 2007). In the U.S., SMEs also employ more than half of all private-sector employees, are responsible for half of the GDP and generate between 60 and 80 percent of net new jobs per year (Kraus 2007). Against this backdrop, it is not surprising that SMEs have become a popular topic of academic research since Birch (1979) found that small firms create more new jobs than large firms.

Nevertheless, ‘a small business is not a little big business’, as Welsh and White already noted in 1980. This implies that *Small Business Management*, i.e., management in SMEs (including its subgroup *new ventures*, which are virtually always small enterprises), is not *downsized Big Business Management*. Management can be regarded as a set of tools to reduce the complexity of large business units to a level that makes it possible for the manager to act. From this perspective, one could argue that in small enterprises, such management instruments are unnecessary, given the perception that a lower level of complexity in smaller business units results in a more intuitive form of management. Thus, *Small Business Management* may rely on the established concepts and instruments of *Big Business Management*, but also needs to develop a flexible and easily used set of tools to support the entrepreneur in making the optimal decisions.

In light of the importance of SMEs in developed economies worldwide, it becomes essential to investigate the underlying mechanisms and practices of management within these enterprises. In the book at hand, we aim at bundling current research on this important topic to generate a

contemporary body of knowledge and provide a focused overview on topics for future research. The book consists of four main parts, which are divided into eighteen chapters. Each chapter focuses on a special segment of challenges for the management of SMEs, particularly to its subgroup *new ventures*. Together the chapters provide a broad overview of the most important day-to-day aspects of entrepreneurial activity, i.e., how to plan your business, how to develop your staff, how to put together your teams, how to learn and how to deal with innovations.

The first part of the book comprises four chapters on *Strategic Planning and Management*. In the first chapter, titled ‘Pre-Startup Planning Sophistication and New Venture Performance’ Reinhard Schulte reports the results of a survey of initial business plans made by entrepreneurs, whose enterprises have been monitored within a German startup panel since 2000. This chapter seeks to determine the planning behavior of entrepreneurs, their planning sophistication and the impact of planning features on performance. Subsequently, Ann Jorissen, Anne-Mie Reheul, Eddy Laveren and Rudy Martens strive to improve understanding of the design of short-term planning systems in SMEs. Under the title ‘Short-Term Planning Sophistication in SMEs: The Relationship with Strategy and Perceived Environmental Uncertainty’, they develop an explanation for the conflicting results with regard to the influence of Perceived Environmental Uncertainty (PEU) strategy on the design of planning systems, and argue that this design is not only dependent on PEU and strategy individually, but also on the interaction between PEU and strategy. This is followed by a study presented by Klaus Deimel, Sascha Kraus and B. Sebastian Reiche entitled ‘Strategic Management in the German “Mittelstand”: An Empirical Study’, which investigates the extent to which strategic management procedures are used in German SMEs. In addition, this chapter explores the motivation and barriers for their application on an empirical basis and the contribution of strategic management procedures to SME success. A different perspective on strategic planning is taken by Marko Kohtamäki, Teemu Kautonen and Elina Varamäki in their contribution ‘Discourses of Strategic Planning in Small and Medium-Sized Growth Firms’, in which they investigate small business managers’ perceptions of strategic planning by means of discourse analysis. On the basis of twenty-two thematic interviews focusing on the topics of strategy and strategic planning with Finnish SMEs who had experienced continuous growth, three discourses of strategy-making are distinguished and characterized: emergent process, formal process and shared process.

The second part of this book comprises six chapters on *Human Resource Management* (HRM). The first chapter is ‘The Impact of Age and Reading on the Desire for Training of Managers in Entrepreneurial Ventures’ by George Solomon and David Tomczyk, which examines whether the desire to train managers is moderated by two factors: the age of the entrepreneur and reading popular business periodicals. Subsequently in her chapter titled

'HRM in SMEs—Linking Embedded Human Resource Practices to Performance and Employee Well-Being', Essi Saru reviews a selection of HRM models for small firms and points out the effects of HRM on the overall performance of an organization, followed by an analysis of the HRM practices of one small but growing firm, making explicit those practices' connection to employees' well-being in that organization. Next, under the title 'Human Resource Management in Small Firms: Effective Informality', Kate Lewis and Alan Coetzer provide a stringent line of argumentation for the impracticability of HRM in SMEs that is based upon models of practice developed in large firms. They argue that ignoring this misfit has frequently motivated SME owner-managers to implement generic, and thus inadequate, HR practices, or no HR practices at all, both potentially resulting in diminished firm performance. In his contribution entitled 'Entrepreneurial Management of Labor Market Constraints and Human Resources', Colin Gray focuses on the crucial role of the residual knowledge and interactions of the people who take an active role in the SME and establishes insightful links to SME innovation. The following chapter 'Human Resource Management in Small Enterprises from Poland' by Janusz Strużyna, Tomasz Ingram and Sascha Kraus investigates HRM practices of SMEs in a *transformation economy* and compares them to empirical data collected in traditional market economies. This part of the book closes with a contribution by Julia Brandl and Matthias Fink titled 'Voluntary Corporate Health Promotion as Strategic Function of HRM: Comparing SMEs and Large Companies', which discusses if, and to what extent, there are differences in the nature of health promotion measures according to company size. More specifically, it investigates the relationship between company size and the preventive or curative nature of health promotion measures, as well as the relationship between company size and the structural or personal approach of measures that are carried out.

The third part comprises four chapters on *Entrepreneurial Teams*. In the first chapter 'Defining Entrepreneurial Teams and Modeling Entrepreneurial Team Effectiveness', Leon Schjoedt presents a reformulated literature-driven definition of the Entrepreneurial Teams (ET) as well as a model of determinants of ET effectiveness. This is followed by a contribution entitled 'Reasons and Situational Factors behind the Formation of Management Teams and Other Teams in Small Firms' by Sanna Tihula and Jari Huovinen, which analyzes the extent of participation in small firm management by the management team and other teams; this chapter also explores the rationale and situational factors influencing team formation in these firms. Subsequently, under the title 'Understanding Fast-Growth Firms Founded by Entrepreneurial Teams through Structure and Strategy', Thomas M. Cooney explores the utilization of organic/mechanistic structures coupled with emergent/deliberate strategies in success-oriented fast-growth firms founded by entrepreneurial teams. This part closes with a contribution entitled 'Effects of Founder Team Interaction on Customer and Competitor Orientation' by Thilo A. Mueller and Hans Georg Gemünden, who shed light on the effects

of customer and competitor knowledge on software venture performance in high technology ventures. Against the background that high technology ventures are usually founded by two or more persons, the study focuses on the role of founder interaction.

The fourth part comprises four chapters on *Experience, Learning and Innovation Management*. It starts with “Don’t Rest on Your Laurels”—An Inquiry into the Barriers to Radical Follow-up Innovation in New Technology-Based Ventures by Rainer Harms and Thomas Meierkord who—based on the results of in-depth interviews—discuss the barriers to radical new technology follow-up innovations in new ventures. Subsequently, under the title ‘Learning Progresses of Internationalizing SMEs—Assimilating New Knowledge’, Margaret Fletcher investigates SME assimilation of new knowledge as businesses grow through internationalization. This is followed by a chapter titled ‘Are Opportunities Recognized or Constructed?—An Information Perspective on Entrepreneurial Opportunity Identification’ by Ivan P. Vaghely and Pierre-André Julien who set out to ‘penetrate the black box’ of entrepreneurial opportunities in order to understand how these opportunities are identified with the help of the entrepreneur’s information processing. Finally, under the title ‘The Role of Adaptation and Learning of Entrepreneurs in Managing Outsourcing Relationships’, Miroslav Rebernik and Barbara Bradač present a three-phase model of outsourcing. They argue that in each phase the entrepreneur has to play different roles and provide different skills in order to establish an efficient relationship management that requires the acquisition and development of new capabilities and skills, of learning and adaptation.

Even though a significant number of books on small business management and/or entrepreneurship have been published recently, integrated knowledge on the management of SMEs and new ventures is still missing; this book helps to close this gap by providing a unique and essential overview of the current state of conceptual and empirical research in this topical area of management in SMEs and new ventures. Notably the demanding and interactive two-step review process ensures the quality of the contributions included in this volume, which were chosen from over sixty submitted manuscripts, twenty-four of which were presented and discussed at a specialized international academic meeting, the ICSB World Conference. The successful authors then participated in a double blind review procedure resulting in the selection of eighteen articles, written by thirty-three authors from universities in thirteen countries. The diverse perspectives included here represent both established authors and emerging scholars in the field. We are confident that this collection will foster discussion and stimulate research in SME and new venture management.

This edited book will appeal to everyone interested in SME and new venture management (more broadly defined as *entrepreneurship*), either on a practical or academic level. The readers both get an overview of the field of research in management of SMEs and new ventures, and are at the same

time provided with in-depth knowledge on a broad selection of important issues. The clear focus of each contribution and the explicit delineation of recommendations for practice make this edited volume attractive for practitioners working in the field of SMEs and new venture management and consulting. This is also supported by the applied nature of many of the proposed chapters and the fact that some of the contributors are practitioners themselves. In addition, those who design the general conditions for SMEs and new ventures can gain a better understanding of this group of companies from the chapters comprised in this volume.

To the knowledge of the editors, this book is one of the first publications investigating and discussing the methods and techniques originally developed for big companies as to their applicability in the context of SMEs and/or new ventures.

The contributions fit together in a clear picture: It shows that we cannot directly transfer our well-established management knowledge from the big to the smaller business units. Empirical findings presented in this volume indicate the sensitivity of various management tools to firm age and the stage in the company life cycle. Thus, there is an urgent need for management tools that take into account the characteristics of SMEs and new ventures. This highlights the importance of the specific research field on small business, respectively young venture management. The texts at large draw up a research agenda with defined contributions on the collective and the individual level.

We hope that the book at hand can serve as a road map towards the much-needed development of a consistent body of knowledge on the management of SMEs and new ventures.

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Part I

# Strategic Planning and Management



# 1 Pre-Startup Planning Sophistication and New Venture Performance

*Reinhard Schulte*

## INTRODUCTION

Surprisingly little empirical work has examined the relationship between planning sophistication and performance in new ventures. The present study reports the results of a survey of initial business plans made by entrepreneurs, whose enterprises have been monitored within the startup panel of Northrhine-Westphalia since the year 2000. This chapter seeks to determine the planning behavior of entrepreneurs, the grade of their planning sophistication and the performance effects of planning features.

Reflections on new venture planning are spread quite widely in the academic entrepreneurship literature (e.g., Diochon *et al.* 2005; Hisrich *et al.* 2008; Kuratko and Hodgetts 2004; Timmons 2003; Dollinger 2003; Hormozi *et al.* 2002; Mugler 1998; Pleschak and Werner 1998; Ripsas 1997; Olson and Bokor 1995; Risseuw and Masurel 1994; Carter *et al.* 1994; Unni 1984), as well as in how-to books and papers for practitioners (e.g., McKeever 2005; Hebig 2004; Dowling 2002; Gruber *et al.* 2002; Barrow *et al.* 1998). The literature strongly supports the argument that planning is a key issue for startups and that a lack of planning leads to a poor performance of young enterprises. However, some authors even argue that planning delivers only few advantages to new small businesses (Carter *et al.* 1996). Moreover, theoretical linkages between planning sophistication and performance in new ventures were hardly delineated (Castrogiovanni 1996), and only a few empirical works have been done on this topic.

Brüderl and others (1992, 1998), as well as Jungbauer-Gans and Preisdörfer (1991), inspected the time invested by entrepreneurs for planning activities and the frequency of written business plans. Planning activities exposed no significant effect on survival and growth (in employees), but on growth in gross revenue. Klandt and others (1998) investigated the frequency and partitioning of written quantitative business plans of government-supported startups with interviews. They found no substantial effect on gross revenue per capita. Lussier (1996) examined a small sample of startups in the retail industry, finding accurate planning to be a relevant cause explaining survival. Rüggeberg (1997) analyzed surviving technology startups with a retrospective questionnaire. He reports startup planning to some extent (concerning a commercialization plan and a customer requirements analysis) to have significant impacts on turnover and

goal attainment. Pleschak and Werner (1998) examined by interview the circumstances of development of initial business plans within a sample of government-supported technology startups. They concluded that the application for financial support initiates planning processes and affects the quality of business plans. Lumpkin and others (1998) examined the planning behavior and the perception of success. They concluded that preparing financial projections is positively related to profitability. Schutjens and Wever (2000) tested a sample of Dutch business starters. They concluded that thoroughly prepared entrepreneurs in means of making a business plan more often realize growth in employees and turnover. Honig and Karlsson (2004, 2001) inquired about the planning behavior of nascent entrepreneurs in Sweden and their individual perception of their business success. They found no evidence for a positive correlation between planning and performance. But Matthews and Human (2000) indicated that perception of success is problematic when used as a measuring technique for business success, because it cannot be separated from expectations and is therefore biased. They delineated how business plan formalization affects the expectation of growth in new businesses: More formal business plans lower the expectation of growth. Kraus and Schwarz (2007) and Kraus (2006) showed that pre-startup planning leads to ongoing planning in small Austrian businesses, and that the existence of written business plans is beneficial for company success.

In an early work on strategic planning in enterprises based on new technology, Roberts (1983) identifies strategic planning deficiencies in a lack of emphasis on economic performance, an inadequate analysis of the economic and the technical environment, an inadequate perception of competitors and a too broad business approach with an inappropriate multiple product line. Functional planning deficiencies were found lacking in marketing planning, management team planning, R&D planning and financial planning. Spitzer and others (1989) show that using external financial sources highly correlates with making formal plans in new technology-based enterprises. Entrepreneurs who use external financing therefore exhibit a greater propensity to develop formal business plans than those entrepreneurs not using these sources.

This research area does not seem to be very well explored. Widening the perspective to strategic or operational planning in already existing small businesses, what is supposed to be a roughly comparable context, there are a lot more studies available. Some of them already highlighted the correlation between planning and performance: Jones (1982) detected planning businesses to be more successful in terms of return on assets than nonplanning businesses. Bracker and Pearson (1986) identified different levels of performance to be associated with different levels of planning. Robinson and others (1986) confirmed this for small independent food retailers. Bracker and others (1988) found that structured planning procedures outperform businesses with nonstructured planning procedures. Rue and Ibrahim (1998) found the overall planning sophistication to be a possible determining factor for growth rates in sales, but not for subjective organizational performance

or return on investment. Berry (1998) found out that strategic planning in British small high-tech companies fostered their long-term growth. In young Dutch businesses, success leads to increasing planning activities, promoting further success (Van Gelderen and Frese 1998). Perry (2001), describing very little formal planning in U.S. small businesses, deduced that non-failed businesses do more planning than similar failed businesses did prior to failure. Lussier and Pfeiffer (2001) stated that accurate planning is relevant for survival in small businesses in Croatia, in accordance with Delmar and Shane (2003, 2004), who later found that planning in young Swedish small and medium enterprises (SMEs) increased survival rates. Based on a longitudinal analysis, Gibson and Cassar (2005) confirm a relationship between planning activity and performance in small businesses, pointing out that planning is more likely after a time of growth, whereas planning in turn promotes subsequent performance. Yusuf and Saffu (2005) found that planning SMEs outperform nonplanners only in the manufacturing sector.

Ackelsberg and Arlow (1985) concluded that although planning improves performance, formalization of the plan does not affect it. Robinson and Pearce (1983) found performance of small U.S. banks not to benefit yet from highly formalized strategic planning processes and extensive written documentation, as well as Gable and Topol (1987), who found no planning–performance relationship for small retail businesses.

In a meta-analysis containing large and mature companies as well as small businesses, Boyd (1991) reports that earnings growth, sales growth and return on investment benefit modestly from planning activities. The meta-analysis by Schwenk and Shrader (1993) led to similar findings.

Rauch and Frese (1998), as well as Van Gelderen and others (2000a), found a positive relationship between the detailedness of planning and the realization of owner goals. This relationship is moderated by uncertainty and environmental hostility. Rauch and others (2000) complemented the relevance of cultural differences as moderating influences on this relationship. Van Gelderen and others (2000b), using a psychological approach to investigate action strategies of small business owners (see Rauch and Frese 2000; Van Gelderen and Frese 1998), distinguished between different strategic planning variants in small businesses. They found a reactive strategy to be negatively related to the achievement of goals of the business owners, while a strategy focusing on the most crucial issues (critical point strategy) is positively related.

To summarize what has been done so far:

- Relatively few examinations focus on startups (Kraus and Schwarz 2007; Kraus 2006). The vast majority of empirical work on the planning–performance link targets established enterprises.
- Empirical studies targeting startups off and on expose modest hints of the assumption that planning sophistication promotes performance. However, by now there has been no substantial empirical evidence that holds for unflinching levels of significance.

All in all, the level of knowledge seems to be quite marginal. This may be caused by some deficiencies associated with prior research on initial business planning. Apart from limited geographic or industry coverage and an accidental lack of empirical testing, these deficiencies are particularly the following two:

- **Survivorship bias:** The exclusion of failed enterprises from performance studies due to the fact that they no longer exist biases (resp. overestimates) performance, because only companies that were successful enough to survive until the end of the period are included. To avoid this bias, a longitudinal research design is required.
- **Interview bias:** Performance studies on startups necessarily depend on an individual recollection of past events when not designed longitudinally. When looking at the later performance of a newly founded enterprise, an interview approach is, therefore, apparently biased by selective perception, selective answering and selective recollection of the past planning behavior. Those retrospective approaches are thus inappropriate.

The objective of this study is to analyze the relationship of planning sophistication and performance of startups in Germany, referring to real business plans. This research design avoids the numerous problems of retrospective approaches.

## DATA AND METHODOLOGY

### Variable Set

This chapter uses data collected by the Start Up-Panel Northrhine-Westphalia (NRW) (Schulte 2002; Schulte 2001). The panel, which has been run by the author since 2000, underwent its sixth wave of observation in 2005. Until 2005, it has monitored more than ten thousand startups belonging to the crafts business sector. This sector can be viewed as typical for entrepreneurial activities in Germany in terms of sizes, business models, legal types and other (Schulte 2002). The panel covers startups as well as successions and active participations in existing businesses, and contains solely full-time entrepreneurship. The core elements of the Start Up-Panel NRW are standardized written interviews conducted periodically, which allow for a longtime monitoring of a high quantity of entrepreneurs and their new enterprises. The Start Up-Panel NRW excludes survivorship bias. Because all included startups have been monitored through government authorities (*Landes-Gewerbeförderungsstelle*), no hidden exit is possible. Furthermore, if required all exits could be verified by way of a special crafts register (*Handwerksrolle*), where all entries and exits have to be recorded.

These regular panel examinations were accompanied by an extra enterprise database with detailed business information and some examinations placed aside the panel waves. One of the latter is an evaluation of 585 randomly selected initial business plans of the monitored enterprises that were made for financial acquisition purposes before starting the business. These written business plans were examined by a document analysis. It has to be pointed out here that data concerning planning activities is not collected by interviews, but by analyzing the written documents in order to avoid the interview biases mentioned earlier. Apart from this methodological aspect, this is a matter of content: Following assumptions of Baker and others (1993), who regard formal written plans as more effective for promoting critical thinking and decision support, we refer to the real paper documents rather than to interview answers. Because of this research design, there is no nonresponse bias possible.

Depending on the founder, the business plans were made with or without external help, covering a broad spectrum of different planning styles, ranging from handwritten two-page papers with a spot of coffee on the one hand, to elaborate planning folders containing a hundred and more pages on the other.

The business plans were addressed to dedicated consultants who had to attest that a business plan had been conducted (for application purposes in funding government aids). However, they did not have to evaluate plans. Thus, the planning style could not have been predetermined by this process. So we can assume that every new venture with an already prepared business plan for a bank or VC did use it for approval, while others creating new plans were following minimum requirements for this purpose. All in all, this should reasonably reflect the planning reality of nascent entrepreneurs, because there's only constraint to write down the project already in mind, but no pressure leading to institutional conformity in the way planning has to be conducted (Honig and Karlsson 2004).

The investigation intended combines data from the enterprise database with specific variables taken from panel waves and the document analysis of the initial business plans. The following depiction outlines the selection of the independent, dependent and control variables used.

The enterprise database provides information about the age of the enterprise and the gender of the entrepreneur. If planning effects exist, they possibly fade with time. Assuming that startup teams provide a broader set of competencies, we also carry out control for the number of entrepreneurial persons involved (team), which is delivered by the database, too.

The predominant part of the data is provided by a document analysis of initial business plans that detects information about the topics person, employment, support, finance and marketing. It provides not only information about the capital raised when starting the business (startup size in money) and the startup size (persons in  $t=0$  including the entrepreneur), but also includes some variables that can be taken as indicators of the planning

depth of new ventures. Following suggestions of Castrogiovanni (1996), this chapter decomposes the degree of planning into variables distinguishing between different topics of the initial business plan. These topics were subject to the document analysis of initial business plans.

The panel waves were used for data about the size of the enterprises at the time of investigation and the annual performance derived therefrom (for construction of dependent variable see the following). Moreover, they deliver the variables 'Financing problems mentioned' and 'Financial consulting needs (pre-startup)'. Assuming that financing problems mentioned when starting the business indicate a necessity for external capital, and the need for external money prompts entrepreneurs to make a more refined written business plan, we include the variable 'Financing problems mentioned'. Moreover, we assume that entrepreneurs needing financial consulting are less sophisticated in financial planning affairs and include the corresponding variable, too. Because initial finance is supposed to be a key problem in starting a new venture, and business planning in particular often is caused by the need for external financing, the data collection notably accounts for financing issues.

To validate this content-induced arrangement of ten planning indicators (1. capital requirements plan, 2. investment plan, 3. financial plan, 4. turnover plan, 5. profit and loss plan, 6. duties of staff plan, 7. ability of staff plan, 8. perception of competitors, 9. estimation of market volume, 10. target group definition), the variables were tested for intercorrelations. To give them a similar structure, all indicators were recoded binary (1=true, 0=false). Within the three groups 'financial planning' (#1-5), 'staff planning' (#6-7) and 'marketing planning' (#8-10), all recorded indicators showed highly significant correlation. Therefore a reduction of the quantity of indicators with a factor analysis seemed to be useful, as this not only facilitates the interpretation and handling of the phenomena in a multivariate setting, but also tests for the adequacy of the thematic connections made earlier.

The factor analyses induced two important modifications of the variables set relevant for the measurement of planning depth: Firstly, the financial planning group has to be modified, because no single factor can adequately represent the phenomenon. Rather two important components could be identified. While the indicators 'capital requirements plan', 'investment plan' and 'financial plan' highly correlate with component 1, 'turnover plan' and 'profit and loss plan' clearly correspond with component 2. So the financial planning group had to be divided in two parts, which we will call 'Financial planning depth' (factor 1) and 'Profit and Loss planning depth' (factor 2). These two aspects could be explicated clearly and provided high explanation rates for variance (74 percent and 91 percent).

Secondly, the marketing planning group had to be modified, because 'target group definition' was too peculiar for a single factor solution and was therefore suppressed. The factor described as 'marketing planning depth' was limited thus to the indicators 'perception of competitors' and 'estimation of market volume' (80 percent of variance explained).

*Table 1.1* Latent Variables and Related Indicators

<i>Latent variable</i>	<i>Related indicators</i>
Financial planning depth	Capital requirements plan Investment plan Financial plan
Profit and Loss planning depth	Turnover plan Profit & loss plan
Staff planning depth	Duties of staff Ability of staff
Marketing planning depth	Perception of competitors Estimation of market volume

Concerning the ‘staff planning depth’, no modifications were necessary so the indicators ‘duties’ and ‘ability of staff’ could be utilized (76 percent of variance explained). This leads to four latent variables specifically describing the planning depth of startups.

The planning depth variables are characterized by the following distributions in Table 1.2 (standardized, with positive figures indicating deeper planning activities).

Analyzing subgroups of this sample reveals some interesting differences in their planning behavior: Women did significantly deeper marketing planning than men (marketing planning depth 0.31 versus -0.05 with men,  $F=10.1^{**}$ ,  $\alpha<0.01$ ). Compared to successions and active participations as alternative types of professional independence within existing businesses, startups show a less sophisticated staff planning depth (startups -0.11 versus 0.14 with successions/active participations,  $F=7.7^{**}$ ,  $\alpha<0.01$ ). Apparently, defining duties and competences in a new venture setting is more difficult than in an existing business with an established employment configuration.

*Table 1.2* Planning Depth Dimensions

	<i>n</i>	<i>Ø</i>	<i>Std. dev.</i>	<i>Std. err.</i>	<i>25 % Quart.</i>	<i>Med.</i>	<i>75 % Quart.</i>
Financial planning depth	585	0	1	0.04	-1.23	0.31	1.10
Profit and Loss planning depth	585	0	1	0.04	0.50	0.50	0.50
Staff planning depth	585	0	1	0.04	-0.75	-0.75	0.42
Marketing planning depth	585	0	1	0.04	-0.83	-0.83	1.51

On the other hand, startups more often did profit and loss planning, resulting in higher scores for the profit and loss planning depth (startups 0.10 versus -0.13 with successions/active participations,  $F=9.8^{**}$ ,  $\alpha<0.01$ ).

Focusing on startups, from this point on we solely examine startups joining the panel waves that provided the required variables (see earlier). In consequence, 242 cases were available. Referring to the aims of this chapter mentioned earlier, some findings describing the planning behavior of the responsible entrepreneurs, respectively the grade of their planning sophistication, should be presented first. Second, the performance effects of planning features have to be examined.

Defining performance in a startup context is not trivial. The literature mentioned earlier in this chapter suggests a wide range of measurements of success, including methods biased by individual perceptions. One can assume that the determinants of success inspected are not independent from the selection of a specific measurement. So it is necessary to choose an operationalization carefully and with respect to the requested findings. Based on theoretical results of prior work of the author that gives reasons why an increase in company size is a rational goal for entrepreneurs in the early expansion phase, startup performance can be defined as an expansion in size in a given period of time (for details see Schulte 2004), whereas size can be quantified as the number of people working for the enterprise, including the entrepreneur. To make things operable and commensurable between different enterprises, performance is defined by

$$P = \text{age} \sqrt{\frac{\text{employees}_T}{\text{employees}_{t=0}}} - 1$$

where  $t=0$  stands for the moment of starting the business, and  $T$  for the last time of observation. Age expresses the age of the enterprise in years. Hence,  $P$  describes a periodic rate of growth in employment, including the entrepreneur.

## Sample Description

Table 1.3 summarizes the features of the data gathered for this chapter.

As the table shows, the sample contains microventures employing 4.8 people including the entrepreneur(s). These very young enterprises, aged 3.7 years on the average, grow at an intermediate rate of 22.3 percent a year. The growth rates decline with age and usually attain a maximum in the first year of business. When starting, the entrepreneurs typically employ less than one person. The amount of money supplied for the startup equals € 65,000 on average. As described earlier, the table again shows that startups did a less sophisticated planning on staff, but a more elaborate planning on profit and loss.

To spotlight some of the background facts of their planning behavior, some characteristic details can be revealed: 52 percent of the business plans expose a capital requirements plan, 55 percent an investment plan and 43

Table 1.3 Descriptive Statistics

	# Cases	Source*	Mean	Std. dev.
Age of enterprise (years)	242	e	3.740	1.340
Male (yes=1)	242	e	0.897	0.305
Team (yes=1)	242	e	0.178	0.383
Financing problems mentioned (yes=1)	242	w	0.335	0.473
Financial consulting needs (pre start up) (yes=1)	154	w	0.175	0.381
annual performance P	227	w	0.223	0.300
size at time of investigation (persons in t=T)	236	w	4.830	3.370
start up-size (persons in t=0)	233	d	1.410	1.450
start up-size (money, in T€)	104	d	64.940	86.750
Financial planning depth	242	d	-0.033	1.006
Profit and Loss planning depth	242	d	0.107	0.920
Staff planning depth	242	d	-0.109	0.944
Marketing planning depth	242	d	0.004	0.999

\* e: enterprise data base—w: panel waves—d: document analysis

percent a financial plan. In comparison to the recommendations in the literature, in which these elements of a business plan are identified as quite important for every startup, these figures are mediocre. The profit and loss sector of initial business planning is a lot more elaborate. Eighty-seven percent of the business plans contain a gross revenue plan, 84 percent a profit and loss plan. Apparently, the exposure of profit opportunities and of potential success of the venture is viewed as a meaningful matter in business planning.

The planning behavior in the staff sector extremely contrasts with these figures. Only 17 percent of the business plans indicate intended duties of the employees, 34 percent indicate required abilities of the staff, though all of these young enterprises had to recruit personnel in the near future following the startup. Turning finally to the marketing sector, a similar low planning level could be identified. Thirty-seven percent of the business plans show a perception of competitors, 34 percent of them comprise an estimation of the relevant market volume. Only 15 percent of the business plans portray the target group of the business model.

## Hypothesis

The examination follows the assumption that startup planning supports the realization of a better performance in the early expansion stage of new businesses. This could be justified with potential benefits in efficiency, acquisition and learning.

Efficiency gains are possible, because an initial business plan ensures consistency of the concept itself and discloses some potential problems in advance. It provides coherence of all relevant startup activities, because it gives operational support within a jungle of single decisions to be made in the expansion phase.

Acquisition benefits result from the transfer of information to the stakeholders. It meets institutional expectations of investors. This leads to a decrease of information asymmetries. An initial business plan legitimates entrepreneurs and supports the attainment of trust.

Learning benefits are possible because formal planning incorporates learning effects. The planning individuals have to gather and process information about target groups, markets, the business itself and so on. So formal planning reduces uncertainty and leads to the acquisition of relevant knowledge.

### Analysis Procedure

The examination will be carried out in three parts. At first, the impact of the control variables on planning depth will be tested to enlighten the planning behavior of entrepreneurs more deeply. Second, a correlation analysis of startup performance and the four different planning depths will be executed. Finally, a multivariate regression model with performance as a dependent variable will be computed. The underlying hypothesis is 'planning sophistication promotes performance' and can be divided into the four dimensions of planning depth derived earlier. Assuming sophisticated planning to be a key issue for the success of startups, planning sophistication should induce sizable effects on performance, because elaborate plans improve orientation and ease navigation in early development stages of an enterprise. Furthermore, sophisticated plans are more persuasive and can relieve capital acquisition accordingly.

Table 1.4 outlines the structure of the variables used in the following regression modeling.

*Table 1.4* Organization of Variables

<i>Independent variables</i>	<i>Dependent variable</i>	<i>Control variables</i>
Financial planning depth	Performance	Age of enterprise (years)
Profit and Loss planning depth		Male (yes=1)
Staff planning depth		Team (yes=1)
Marketing planning depth		Start up-size (persons in t=0)
		Size at time of investigation (persons in t=T)
	Financing problems mentioned	
	Financial consulting needs (pre start up)	

## RESULTS

Before testing the influences of planning sophistication on new venture performance, the general planning behavior of entrepreneurs should be considered. Table 1.5 shows the results of four OLS regression models analyzing the role of four control variables concerning planning depth, which is segregated in the four dimensions presented earlier. In addition to this setting, the variables gender and team were implemented to test for differences in the planning behavior coming out of the personal sphere of the entrepreneurs as well.

Because of the small number of respondents within the variables 'startup size' (n=104) and 'need for financial consulting' (n=154), the model had to work with only fifty-nine cases. As can be seen, in terms of significance there are only two noteworthy differences in planning depth: Men seem to do deeper planning in financial affairs, while women seem to do a more sophisticated planning in the marketing area. On the given empirical basis, this could only be viewed as a possible tendency, however, since all four models demonstrate a level of significance that is too small for further interpretations.

Table 1.5 Impact of Control Variables on Planning Depth (OLS Regression Betas)

Planning Depth Indicators	Financial		Profit and Loss		Staff		Marketing	
	Beta	T	Beta	T	Beta	T	Beta	T
Constant		2.751 <sup>b</sup>		1.989 <sup>a</sup>		-0.765		1.360
Start up-size (persons)	-0.061	-0.449	0.073	0.526	0.216	1.643	0.136	1.016
Start up-size (money)	0.092	0.680	-0.206	-1.496	-0.132	-1.016	-0.099	-0.745
Financing problems mentioned	0.066	0.474	0.017	0.123	0.214	10.590	0.209	1.523
Financial consulting needs (pre start up)	0.123	0.880	0.116	0.813	-0.078	-0.579	0.046	0.333
Male (yes=1)	0.234 <sup>a</sup>	1.742	-0.139	-1.014	-0.056	-0.431	-0.242 <sup>a</sup>	-1.828
Team (yes=1)	-0.113	-0.830	-0.046	-0.329	0.196	1.490	0.038	0.281
Observations	59		59		59		59	
R-squared	0.113		0.074		0.175		0.142	
Adj R-squared	0.011		-0.033		0.080		0.043	
$\alpha$	0.374		0.657		0.109		0.220	

<sup>a</sup> significant at 10 %

<sup>b</sup> significant at 1 %

*Table 1.6* Correlation of Start Up Performance and Planning Depths (Pearson's R)

<i>n</i> = 227	<i>Correlation (α in parentheses)</i>
Financial planning depth	0.026 (> 0.1)
Profit and Loss planning depth	0.146* (0.14)
Staff planning depth	-0.064 (> 0.1)
Marketing planning depth	-0.042 (> 0.1)

\* significant at 5 %

Table 1.6 gives an outline of an overall correlation analysis conducted with the four independent variables and the performance measure.

The correlation analysis reveals only one remarkable relation between planning depth and performance. Planning in terms of profit and loss seems to have a slight impact on venture performance, while all other independent variables are inconspicuous. However, this analysis is correlational only, while the theoretical relation to be examined shows a one-way connection between reason and effect. Having a continuous performance variable the examination could therefore be done with a regression model again. Moreover, the hypothesis has to be tested in a multivariate context rather than in a bivariate one. The research question and the arrangement of variables given here lead to the utilization of OLS estimators. Testing for the applicability of this method, especially for multicollinearity (for details on all requirements see Wooldridge 2003) exposed no violations of its preconditions. Plots of the relevant variables against performance implied only placid nonlinearities. Since corresponding transformations of performance (log) supplied only poor results, respective changes had to be rejected. The sample has been tested for industry sector effects, but showed no significant disparities concerning different lines of business, so we omitted the variable.

Table 1.7 demonstrates the results of an OLS regression considering the four stated independent variables and four control variables. Differing from the concept shown in Table 1.5, one of the prior used control variables (startup size, in terms of the capital gained) was skipped because of its small number of valid cases. The age of enterprise is included as an additional control variable, because in the early development stage of an enterprise age is a substantial cause for differences in size.

The results depicted in Table 1.7 clearly show a potential explanation rate of model. The most extensive pressure on performance could be identified in startup size, which influences the dependent variable in a heavily negative manner. The age of the enterprise has an equally directed, but smaller and less significant, impact on performance, which confirms findings of prior studies. Another relevant parameter of performance in this context is the profit and loss planning depth. It promotes performance in a positive way. This result is in harmony with the theoretic assumptions stated. In contrast

Table 1.7 Impact of Planning Depth Indicators on New Venture Performance (OLS regression Betas)

Independent Variables	Dependent: Performance		
	Beta	T	$\alpha$
Constant		-2.050	0.042
Age of enterprise	-0.164 <sup>b</sup>	2.059	0.041
Start up-size (persons)	-0.329 <sup>c</sup>	-4.194	0.000
Financing problems mentioned	0.090	1.109	0.269
Financial consulting needs (pre start up)	-0.121	-1.503	0.135
Financial planning depth	-0.022	-0.269	0.788
Profit and Loss planning depth	0.183 <sup>b</sup>	2.238	0.027
Staff planning depth	-0.026	-0.314	0.754
Marketing planning depth	-0.145 <sup>a</sup>	-1.735	0.085
Observations		144	
R-squared		0.201	
Adj R-squared		0.153	
$\alpha$ (regression model)		0.000	

<sup>a</sup> significant at 10 %

<sup>b</sup> significant at 5 %

<sup>c</sup> significant at 1 %

to these assumptions, financial planning depth, staff planning depth and marketing planning depth do not promote, but restrict, performance slightly. The financial and staff planning depth measures have quite a small effect. Without doubts, the hypotheses concerning these three planning variables have to be omitted. Concerning the marketing area, the negative relation even is vaguely significant. Controlling for financing problems mentioned and financial consulting needs (pre-startup) gives no significant differences.

All in all, the impact of planning sophistication on new venture performance is limited. A base model directed only on the control variables reached an adjusted R-squared of 0.135 ( $\alpha = 0.000$ ) already. So the planning depths deliver no remarkable gain in R-squared ( $\Delta=+0.018$ ).

## CONCLUSION

This chapter investigates planning practices as a determinant of new venture performance. Utilizing the Start Up-Panel NRW files, it uses a survey that reduces the distorting effects of survivorship and interview bias. However, it faces some limitations that could lead to future research approaches. First, not every planning activity is subject to written plans

(see Baker *et al.* 2001 for an examination of the propensity of a transition from improvisation to planning). So part of the startup preparations were not disclosed with a business plan. Second, it is limited to the crafts sector with highly successful enterprises in terms of survival.

It could be found that initial business planning sophistication has a very small impact on performance and is limited at most to the profit and loss planning depth. Furthermore, profit and loss planning is the most elaborate area of initial business planning and is executed far more intensely than financial planning. Staff and marketing planning, on the other hand, are handled as much less important planning topics.

As one can see, theory and some parts of the literature described in the beginning of this chapter let us assume that planning per se makes sense. Some studies confirmed that planners perform better than nonplanners or that accurate planning outperforms less sophisticated planning activities. Others studies rejected this assumption. This study is not meant to doubt this interrelation. However, we have to consider that business planning is useful at least to determine if a business idea is feasible and promising. Business planning helps nascent entrepreneurs to evaluate the opportunity, and if the evaluation process leads to poor results, they can stop founding the new venture. So concerning performance, we now can conclude that planning is a hygiene factor rather than a determining issue in a way that planning elaboration resp. raised planning depth could increase performance. In other words: Initial planning is an important requirement of success, but cannot lift it until certain minimum constraints are met.

Further research will have to answer the question what those minimal requirements are.

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## 2 Short-Term Planning Sophistication in SMEs

### The Relationship with Strategy and Perceived Environmental Uncertainty

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#### INTRODUCTION

Planning is a tool designed to assist managers in decision making and control. It is regarded as one of the basic managerial tasks that contribute to the success of a firm (Drucker 1973; Schwenk and Shrader 1993). Planning is not only important for large firms, it is essential for small firms as well. Both practitioners and academics are interested in determining the appropriate design of planning systems in order to enable a firm to achieve sustainable growth and/or successful performance. The appropriate design of planning systems has been studied in the academic literature through different theoretical lenses. Among those lenses, contingency theory is the most widely adopted theoretical framework. This theoretical paradigm assumes that management accounting systems (MAS), including planning systems, are adopted to assist managers in achieving some desired organizational outcome and that the appropriate design is influenced by the context in which the firm operates.

Research grounded in the contingency paradigm has produced mixed results. These mixed results particularly relate to the alignment of the design of planning systems with two important contextual variables, namely, perceived environmental uncertainty (PEU) and strategy (Risseuw and Masurel 1994; McGee and Sawyerr 2003; Collins *et al.* 1997; Matthews and Scott 1995). Various review articles have pointed at an increasing body of conflicting results (Otley 1980; Dent 1990; Langfield-Smith 1997; Chenhall 2003). The main criticism is that in most areas of management accounting research, studies have not developed sufficient 'critical mass' to confirm findings (Chenhall 2003). Further, Matthews and Scott (1995) and Shrader and others (1989) claim that the antecedent conditions of planning remain poorly understood and need further investigation, particularly in small and medium enterprises (SMEs). Also Rue and Ibrahim (1998) and Gibson and Cassar (2002) launched a plea for more studies on planning practices using samples and research populations in different country settings.

Our study aims at improving the understanding of the design of short-term planning systems in SMEs. From an academic perspective, we want to provide an explanation for the conflicting results with regard to how the design of planning systems is influenced by PEU and strategy. In this chapter, we argue that this design is not only dependent on PEU and strategy separately, but also on the interaction between PEU and strategy. This argument is based on the theoretical work of Miller (1988) and the empirical work of Matthews and Scott (1995), which is discussed in the literature review and hypothesis development section. Our empirical analyses reveal that introducing the interaction effect between PEU and strategy in a regression model explaining short-term planning sophistication significantly enhances the model's explanatory power and, moreover, provides an explanation for the prior conflicting empirical findings.

The degree of short-term planning sophistication (dependent variable) is captured by the scope of the planning process (the number of plans that are used) and the degree of formality applied to short-term planning (absent, intuitive, informal and formal). Firms with sophisticated short-term planning have several short-term plans that are formally prepared. Prior literature revealed a number of other contingent variables besides PEU and strategy that are important explanatory variables with regard to the design of planning systems. These variables (CEO experience, CEO education, firm size, firm age, family character, firm independence, industry) are included as control variables.

The chapter proceeds as follows. In the next section we present a literature review and develop research hypotheses. Thereafter, we describe the research data and the methodology used. Finally, we present the research results and discuss the implications for academics and practitioners.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### **The Relationship Between the Environment and Planning Systems Design**

One of the most studied characteristics of the external environment refers to its degree of uncertainty. According to Milliken (1987), uncertainty can be defined in terms of an individual's perceived inability to understand the direction in which an environment might be changing, the potential impact of those changes on that individual's organization and whether or not particular responses to the environment might be successful.

Since environmental uncertainty has an impact on information processing (Bergh 1998), it is assumed that environmental uncertainty influences the design of planning systems. High levels of PEU go together with a need for more information processing (Galbraith 1973; Chenhall 2003) and a need to reduce ambiguity (Hartmann 2000), which might encourage

firms to use formal planning systems. On the other hand, high levels of PEU make information processing and planning more difficult (Mintzberg 1972; Chenhall and Morris 1995; Bergh 1998). PEU causes formal planning systems to provide incomplete information and results in a need for regular reformulations.

These contradictory arguments on the basis of the information processing theory are reflected in the empirical literature. A number of studies provide evidence that in SMEs high PEU levels are positively associated with sophisticated operational planning (Schrader et al. 1989; Risseuw and Masurel 1994). Further, environmental hostility has been associated with a strong emphasis on meeting budgets (Otley 1978). Other studies, however, show that high levels of PEU are associated with less sophisticated operational planning (Matthews and Scott 1995) and with a decrease in the use of 'impersonal' sources of information (McGee and Sawyerr 2003). With regard to budgets, Brownell (1985) found that environmental uncertainty is associated with a reduced emphasis on budgets. So far, the empirical literature has not yet produced an unambiguous relationship between PEU and the design of planning systems.

When SMEs face high levels of uncertainty, planning becomes more difficult. As a result we believe that SMEs will decrease their level of planning sophistication due to their lack of financial resources, time and personnel (Patterson 1986). SMEs in the face of increasing PEU will therefore focus on action instead of thinking, with action largely based on intuition (Bhide 1994). Therefore, we hypothesize that:

*H1: Perceived environmental uncertainty is negatively related to short-term planning sophistication.*

## **The Relationship Between Strategy and Planning Systems Design**

In the academic research on the influence of strategy on planning systems, we find two opposing views. One group of academics (among others Rogers *et al.* 1999) states that firms pursuing growth and innovation have greater information needs and adopt more formal planning systems than firms that stick more to their routines and follow defensive or reactive strategies. Other academics like Chenhall and Morris (1995), Dent (1990) and Miller (1988) claim the opposite. According to these authors, firms pursuing growth and innovation adopt flexible, informal planning systems to encourage innovation. Firms relying on routines like defenders have formal planning systems to enhance efficiency.

Empirical studies performed in large firms found evidence of both views. Simons (1987) provided evidence that defenders find cost control and budgets more appropriate than prospectors. Collins and others (1997), on the other hand, found that prospector-like firms use budgeting

to a much greater extent than the less innovative archetypes of Miles and others (2003) (analyzers, defenders and reactors in decreasing order of innovativeness). Empirical studies using SME data reveal that strategies of dynamism and innovation go together with higher levels of data gathering, higher planning intensity and more written plans (Piëst 1994; Matthews and Scott 1995).

The decision-making process of prospectors, adopting explicit and proactive strategies, is more complex than the decision-making process of defenders, adopting routine strategies. Given the vulnerability of small firms to poor decision making (Covin and Slevin 1989), and in line with the prior empirical studies using SME data, we expect that prospector SMEs need more sophisticated planning systems to support decision making than defender SMEs. As the analyzer strategy contains characteristics of both the defender and the prospector strategy (Miles *et al.* 2003), we expect that the level of planning sophistication of analyzers will lie between that of prospectors (high) and defenders (low). The following hypotheses result from this analysis:

*H2a: Prospectors demonstrate a higher short-term planning sophistication than defenders.*

*H2b: Prospectors demonstrate a higher short-term planning sophistication than analyzers.*

*H2c: Analyzers demonstrate a higher short-term planning sophistication than defenders.*

### **The Relationship Between the Interaction Variable 'PEU x Strategy' and Planning Systems Design**

Empirical research mainly investigates strategy and PEU as main effect variables in relation to planning systems design. Miller (1988), however, pointed to the interaction between PEU and strategy in a theoretical article in which he stated that different strategies with very different structural requisites may thrive in very similar environments. In other words, the interaction between strategy and environment determines the appropriate structure that is able to fulfill a firm's information needs.

In line with Miller (1988), Matthews and Scott (1995) argue in an empirical study that PEU and strategy are interactively related to the sophistication of operational planning. They empirically tested this interaction effect by means of four moderated regression analyses, each reflecting another type of PEU. Even though the interaction term was not significant, the sign of its coefficient in each of the four analyses was consistent. Though not statistically significant, their analyses reflected the sensitivity of prospectors to the volatile nature of opportunities in highly uncertain environments. Together with Matthews and Scott (1995) we believe that this omission may have led

to the conflicting results in prior research. Prospectors that take the time to plan sophisticatedly under conditions of high PEU may lose that opportunity (Bhide 1994). Therefore, we hypothesize that prospectors decrease planning sophistication in highly uncertain environments. By definition, defenders interact less proactively with their environment and focus more on their internal processes and on routines. Consequently, response time to opportunities in the environment is less important for defenders. Therefore, we hypothesize that prospectors are more likely to reduce short-term planning sophistication than defenders at increasing PEU levels. As the analyzer strategy contains characteristics of both the defender and the prospector strategy (Miles *et al.* 2003), we expect that the impact of increasing PEU levels among analyzers holds the middle between the impact among prospectors and defenders. We hypothesize that:

*H3a: Prospectors are more likely to reduce short-term planning sophistication than defenders at increasing PEU levels.*

*H3b: Prospectors are more likely to reduce short-term planning sophistication than analyzers at increasing PEU levels.*

*H3c: Analyzers are more likely to reduce short-term planning sophistication than defenders at increasing PEU levels.*

## **The Relationship Between Other Contingent Variables and Planning Systems Design**

In prior research several variables have been related to management processes in general and to the design of planning systems more specifically. We discuss these variables in the following and we control for the influence of these contingent variables in the analyses.

### *CEO Experience and Education*

The *upper-echelons theory* suggests that the demographic traits of top managers (tenure, age, functional and educational background) are systematically related to their underlying cognitive orientations and knowledge base and, as such, are systematically related to their decision making (Hambrick and Mason 1984). As CEOs in SMEs are often in a position to be the sole decision-makers and have a lot of discretion, the impact of their demographic traits on the organization is even more important compared to CEOs in large firms (Miller *et al.* 1982).

In this chapter we control for two demographic traits: the CEO's experience (measured through industry tenure) and the CEO's education. Both the upper-echelons literature (Miller 1991) and the small business literature (Gibbons and O'Connor 2005) reveal that the perceived need for formalized planning and information processing decreases as CEO experience increases.

This finding is attributed to the executive establishment of routines, policies and practices (Hambrick *et al.* 1993), to the establishment of more reliable internal networks and to the development of predictable repertoires for dealing with information (Miller 1991). The upper-echelons literature and the small business literature (Gibson and Cassar 2002) also provide evidence that CEO education encourages documented business planning.

### *Firm Size*

According to Khandwalla (1976/1977), size is the most consistent explanation of organizational structure and structural features like planning systems. Formal planning systems are more critical in large firms as more information is required to ensure integration and control (Miller and Cardinal 1994). Moreover, large firms have greater internal resources and therefore are more able to invest in formal planning systems (Fredrickson and Mitchell 1984). These assertions are empirically confirmed by Lyles and others (1993), Masurel and Smit (2000), Risseeuw and Masurel (1994) and Gibson and Cassar (2002).

### *Firm Age*

Several studies revealed that the intensity of planning decreases as firm age increases (Risseeuw and Masurel 1994; Berman *et al.* 1997). Firms that exist longer have a better understanding of their environment and are more involved in networks. Consequently, they have more informal channels for information gathering and processing (Moores and Yuen 2001) and less need for formal planning systems (Gibson and Cassar 2002).

### *Family Versus Non-Family Firm*

Family firms are often dominated by a strong CEO who wants to maintain control. This autocratic rule (Kets de Vries 1993) causes family firms to prefer social methods of control. Also agency theory (Jensen and Meckling 1976) suggests that family firms need less sophisticated planning systems because of overlapping owner/manager relationships, which reduces information needs for integration and control.

### *Subsidiary Versus Independent Firm*

In SMEs that are subsidiaries it is more likely that planning systems are imposed by the headquarters. Budgets are a tool for the headquarters to guide the subsidiary's operational activities and to control performance. Therefore, subsidiary SMEs are believed to have higher levels of planning sophistication than independent SMEs.

## **Industry**

Finally, empirical research has shown that the industry context influences planning practices (Jones 1985; Foster and Gupta 1994; Williams and Seaman 2001; Schrader et al. 1989).

## **RESEARCH METHOD**

### **Sample Selection and Data Collection**

A large-scale survey was sent to the CEOs of 8,367 companies in the Flemish region, which is the northern part of Belgium. Based on the size, industry and location (province) of all private and public firms with limited liability that have published financial statements over the years 1993–1999, a three-dimensional matrix was designed. According to the percentages of the matrix, 10 percent of this population was chosen at random (21,640 firms). Within this group, those firms with at least five full-time employees received a questionnaire (8,367 firms). Startups and microfirms are thus excluded from the study. A total of 839 usable responses were received immediately. A follow-up survey to a random selection of 10 percent of the nonrespondents (750 firms) resulted in an additional eighty-three usable questionnaires. In total, 922 responses were obtained, representing a response rate of 11.02 percent. We checked for dissimilarity between the immediate respondents and the respondents to the follow-up survey. Based on statistical tests we may conclude that nonresponse bias is absent.

Of the 922 respondents, 82 percent identified themselves as CEOs. We are aware of the potential variance among managers' perceptions of organizational characteristics within the same firm (Snow and Hambrick 1980). However, on the basis of Crampton and Wagner (1994), who revealed that concepts that are external referents to the focal individual (like the variables used in our study) are not seriously affected by common method bias, we conclude that the problem of common method bias is negligible in our study.

### **Profile of Respondents**

For the purpose of this study we restrict the initial population of the responding firms (922) to those SMEs that employ from 5 and 250 full-time equivalent (FTE) employees and that are active in the manufacturing and the trade industry. This restriction reduces the population of respondents of 922 firms to a dataset of 766 firms. Our final dataset contains 630 firms since we had to omit a further 136 firms from the respondents. Of these 136 firms, 59 firms could not be identified as family or non-family firms and 77 firms had not provided complete responses to the survey.

Table 2.1 presents the characteristics of these 630 firms. The largest proportion of firms is active in the manufacturing industry (57 percent).

Table 2.1 Profile of Respondents

<i>Industry</i>	<i>Manufacturing</i>	<i>Trade</i>			<i>Total</i>		
No.	359	271			630		
%	57	43			100		
<i>Firm size</i>	<i>Micro 5–10 FTEs*</i>	<i>Small 11–50 FTEs</i>	<i>Medium 51–250 FTEs</i>			<i>Total</i>	
No.	191	362	77			630	
%	30.3	57.5	12.2			100	
<i>Strategy type</i>	<i>Prospector</i>	<i>Analyzer</i>	<i>Defender</i>	<i>Reactor</i>			<i>Total</i>
No.	183	115	217	115			630
%	29.0	18.3	34.4	18.3			100

\* FTEs: full-time equivalent employees

Almost 90 percent of the firms count less than fifty FTE employees. About 34 percent of the firms follow a defender strategy and about 29 percent follow a prospector strategy.

## Variable Measurement

### *Planning Sophistication*

The degree of planning sophistication is captured by combining information on the planning system's scope and the planning system's formality. We asked the respondents to indicate which of the five short-term plans or budgets they prepared (sales, production, costs, investments and liquidity). In the next step, the respondents had to indicate for each short-term plan the degree of formality being applied to it. Four levels of planning formality (derived from Matthews and Scott 1995) were distinguished: 'formal plans' or plans being fully written out (coded 3); 'informal plans' or plans being partly written out (coded 2); 'intuitive plans' or plans only existing in the minds of the managers (coded 1); and 'no planning at all' (coded 0). The average sophistication over the five short-term plans is our measure for short-term planning sophistication.

Table 2.2 presents the descriptive statistics with regard to the sophistication of the five individual short-term plans and the average sophistication over the five short-term plans.

The mean value of our measure of short-term planning sophistication is comparable with the figures found in other small business studies (Wijewardena et al. 2004; Gibson and Cassar 2002; Perry 2001; Masurel and Smit 2000; Rue and Ibrahim 1998). The interterm reliability (Cronbach alpha) coefficient amounts to 0.90.

*Table 2.2* Short-Term Planning Sophistication: Descriptives

	<i>Mean</i>	<i>Std.</i>	<i>Range</i> <i>(theoretical = actual)</i>
Short-term sales plan sophistication	1.38	1.29	0–3
Short-term production plan sophistication	0.97	1.23	0–3
Short-term cost plan sophistication	1.60	1.24	0–3
Short-term investment plan sophistication	1.63	1.18	0–3
Short-term liquidity plan sophistication	1.31	1.18	0–3
Short-term planning sophistication (DV)	1.38	1.05	0–3

### *Environmental Uncertainty*

To capture environmental uncertainty a three-item scale developed by Khandwalla (1976/1977) is used (benevolent/hostile; opportunity-oriented/stressful; controllable/uncontrollable). In order to determine the first item, the respondents had to indicate on a five-point scale the extent to which their environment is safe and presents little threat for the firm's survival versus whether the environment is very risky and prone to false steps leading to the firm's failure. In response to the second item, they had to indicate the extent to which their environment is either rich in opportunities versus very stressful, exacting and hostile. In relation to the third item, they had to indicate the extent to which their environment can be controlled and manipulated to their own advantage versus whether the environment is a dominating environment in which the firm's initiatives count for very little against other tremendous forces. The respondents' ratings are averaged to arrive at a single environmental uncertainty index (mean of 1.69, standard deviation of 0.70, range from zero to four and interterm reliability of 0.59). A higher index refers to a more uncertain environment.

### *Strategy*

Respondents were asked to identify the strategy adopted by the firm for its most important product. They had to select one of the four descriptions, derived from Daily and Dollinger (1992), each representing a Miles and Snow strategy type. These descriptions are as follows. For the prospector strategy: We innovate and take the necessary risks of providing new products and services. With regard to the analyzer strategy: We do not want to be the first in our industry to offer an unproven product or service, but we try to be close behind with a similar competitive product or service. In relation to a defender strategy: We stick to what we know how to do and do it as well as or better than anyone else. Finally, for a reactor strategy: We do

not follow a specific program to make us more competitive, but if we face strong opportunities or threats we make changes. The adopted strategy is included in the analysis by means of three strategy dummies.

### ***CEO Experience***

To capture CEO experience we use the CEO's tenure in the industry. This variable is calculated by adding together the number of years that the CEO has worked in the current firm and the number of years that he or she worked in other firms in the same industry.

### ***CEO Education***

Respondents had to select one of the following education levels measured on an ordinal scale: lower/secondary education (coded 1), higher education (three-year program) (coded 2), higher education (four-year program) (coded 3) and university education (coded 4).

### ***Firm Size***

Firm size is captured by the number of FTE employees.

### ***Firm Age***

Firm age is calculated as the number of years that the firm has been in operation since the date of start up.

### ***Family Versus Non-Family Firm***

In line with the definition of Westhead (1997), family firms (coded 1) are firms that perceive themselves as family firms, and in which a family possesses the majority of the shares. Non-family firms (coded 0) are firms that do not perceive themselves as family firms, and in which a family does not own the majority of the shares.

### ***Subsidiary Versus Independent Firm***

To capture firm (in)dependence we asked whether the firm is a subsidiary of a parent company (coded 0) or not (coded 1).

### ***Industry***

Industry is captured using NACE codes (equivalent of SIC codes). Manufacturing (coded 1) is represented by the NACE codes ranging from one to five. Trade (coded 0) is represented by the NACE codes six and seven.

## Method of Analysis

The sophistication of short-term planning systems is investigated with the use of the two regression models. In the first model PEU and strategy are included separately, as main effect variables only.

$$\text{Short-term planning sophistication} = \beta_0 + \beta_1 \text{PEU} + \beta_2 \text{Strategy} + \beta_3 \text{CEO education} + \beta_4 \text{Ln (CEO experience)} + \beta_5 \text{Ln (Firm size)} + \beta_6 \text{Ln (Firm age)} + \beta_7 (\text{Non})\text{family firm (0/1)} + \beta_8 (\text{In})\text{dependence} + \beta_9 \text{Industry}$$

In the second model we also consider the interaction effect of PEU and strategy (see  $\beta_3$ ).

$$\text{Short-term planning sophistication} = \beta_0 + \beta_1 \text{PEU} + \beta_2 \text{Strategy} + \beta_3 (\text{Strategy} \times \text{PEU}) + \beta_4 \text{CEO education} + \beta_5 \text{Ln (CEO experience)} + \beta_6 \text{Ln (Firm size)} + \beta_7 \text{Ln (Firm age)} + \beta_8 (\text{Non})\text{family firm (0/1)} + \beta_9 (\text{In})\text{dependence} + \beta_{10} \text{Industry}$$

Both models include all the control variables derived from the prior literature. ‘Strategy’ is a vector of strategy dummies (prospector, analyzer, defender and reactor) with the reactor as strategy of reference. If the inclusion of the interaction variables significantly increases the model’s power to explain the variance in the dependent variable, then we may state that PEU and strategy are interactively related to the degree of planning sophistication.

To solve the multicollinearity problem associated with the interaction term and the strategy dummies, we use a centered PEU variable ( $\text{PEU}_c$ ) derived by subtracting the mean PEU (1.69) from each case. The method is successful since the values of the variance inflation factors (not shown) no longer exceed the cutoff value of ten (Bowerman and O’Connell 1990). The centered PEU variable should be interpreted as follows: Lower than average PEU levels are represented by a negative  $\text{PEU}_c$ , average PEU levels by a  $\text{PEU}_c$  equal to zero, and higher than average PEU levels by a positive  $\text{PEU}_c$ . Thus, in the regression model the main effects of the strategy dummies should be interpreted as the effects of the strategy dummies at average PEU levels ( $\text{PEU}_c = 0$ ). To facilitate comparisons between both models, we also use a centered PEU variable in model 1.

Table 2.3 presents the descriptive statistics of the research variables. Table 2.4 shows the correlations between these research variables.

## RESULTS

Table 2.5 shows the results of both regression models explaining the degree of short-term planning sophistication.

Table 2.3 Research Variables: Descriptives

	<i>Mean</i>	<i>Std.</i>	<i>Min</i>	<i>Max</i>
1. Short-term planning sophistication	1.38	1.05	0	3
2. PEU <sub>c</sub> *	0.00	0.70	-1.69	2.31
3. Prospector (0/1)	0.29	0.45	0	1
4. Analyzer (0/1)	0.18	0.39	0	1
5. Defender (0/1)	0.34	0.48	0	1
6. CEO education	2.32	1.17	1	4
7. Ln (CEO experience)	2.86	0.67	-0.29	4.16
8. Family firm (1) / non-family firm (0)	0.86	0.35	0	1
9. Ln (firm age)	3.04	0.60	0.40	4.74
10. Ln (firm size)	2.90	0.88	1.61	5.46
11. Manufacturing (1) / trade (0)	0.57	0.50	0	1
12. Independent firm (1) / subsidiary (0)	0.87	0.34	0	1

\*PEU<sub>c</sub> = PEU—1.6918 (rounded 1.69)

Table 2.4 Research Variables: Spearman's Rho Correlations

	1	2	3	4	5	6	7	8	9	10	11	12
1.	1.00											
2.	-0.06	1.00										
3.	0.32 <sup>b</sup>	-0.15 <sup>b</sup>	1.00									
4.	0.01	0.02	-0.30 <sup>b</sup>	1.00								
5.	-0.24 <sup>b</sup>	0.10 <sup>a</sup>	-0.47 <sup>b</sup>	-0.34 <sup>b</sup>	1.00							
6.	0.27 <sup>b</sup>	0.05	0.12 <sup>b</sup>	0.09 <sup>a</sup>	-0.17	1.00						
7.	-0.12 <sup>b</sup>	-0.04	-0.05	-0.04	0.08	-0.34 <sup>b</sup>	1.00					
8.	-0.25 <sup>b</sup>	-0.02	-0.07	0.05	0.00	-0.15 <sup>b</sup>	0.15 <sup>b</sup>	1.00				
9.	0.05	0.08	0.01	-0.05	0.02	0.12 <sup>b</sup>	0.16 <sup>b</sup>	0.02	1.00			
10.	0.34 <sup>b</sup>	0.03	0.17 <sup>b</sup>	-0.00	-0.11 <sup>b</sup>	.030 <sup>b</sup>	-0.00	-0.20 <sup>b</sup>	0.19 <sup>b</sup>	1.00		
11.	-0.08 <sup>a</sup>	-0.02	-0.05	0.06	-0.05	0.04	-0.01	0.04	-0.02	0.16 <sup>b</sup>	1.00	
12.	-0.27 <sup>b</sup>	-0.06	-0.17 <sup>b</sup>	0.05	0.09 <sup>a</sup>	-0.16 <sup>b</sup>	0.08 <sup>a</sup>	0.42 <sup>b</sup>	-0.02	-0.25 <sup>b</sup>	-0.02	1.00

Note: For the meaning of the numbers 1 to 12: see table 1.10

<sup>a</sup> p<0.05

<sup>b</sup> p<0.01

Table 2.5 Hierarchical OLS Regressions Explaining Short-Term Planning Sophistication

<i>Predictors</i>	<i>Model 1</i>		<i>Model 2</i>	
	<i>Beta</i>	<i>Std. Error</i>	<i>Beta</i>	<i>Std. Error</i>
Constant	1.092	0.307	1.023	0.301
PEU <sub>c</sub> (c: centred) <sup>a</sup>	-0.064	0.053	0.052	0.138
Prospector (0/1)	0.487 <sup>b</sup>	0.112	0.416 <sup>b</sup>	0.110
Analyser (0/1)	0.175	0.121	0.172	0.119
Defender (0/1)	-0.133	0.106	-0.140	0.104
Reactor (0/1)	reference		reference	
Prospector x PEU <sub>c</sub>			-0.583 <sup>b</sup>	0.172
Analyser x PEU <sub>c</sub>			0.176	0.191
Defender x PEU <sub>c</sub>			0.004	0.158
Reactor x PEU <sub>c</sub>			reference	
CEO education	0.107 <sup>b</sup>	0.036	0.107 <sup>b</sup>	0.035
CEO experience (ln)	-0.034	0.060	-0.025	0.059
(Non-)family firm	-0.355 <sup>b</sup>	0.116	-0.351 <sup>b</sup>	0.114
Firm Size (ln)	0.262 <sup>b</sup>	0.047	0.267 <sup>b</sup>	0.047
Firm Age (ln)	-0.007	0.063	-0.010	0.062
Industry	-0.247 <sup>b</sup>	0.075	-0.250 <sup>b</sup>	0.074
(In)dependence	-0.366 <sup>b</sup>	0.120	-0.355 <sup>b</sup>	0.003
F (Full Model)	20.145 <sup>b</sup>		18.473 <sup>b</sup>	
R <sup>2</sup>	0.264		0.296	
Adj. R <sup>2</sup>	0.251		0.280	
df	11		14	
F test of change in Adj. R <sup>2</sup>		8.257 <sup>b</sup>		

<sup>a</sup>PEU<sub>c</sub> = PEU - 1.6918<sup>b</sup>p < 0.01

The F-test shows that model 2 has a significantly higher adjusted R<sup>2</sup> than model 1. Consequently, model 2 explains a higher proportion of the variance in the level of short-term planning sophistication than model 1. The regression results of model 2 provide evidence that PEU and strategy are interactively related to short-term planning sophistication.

Looking at the individual strategy dummies in both models, we notice that at average PEU levels (PEU<sub>c</sub> = 0) short-term planning sophistication is significantly higher for prospectors than for analyzers, defenders and reactors. The coefficients of the interaction variables, however, provide evidence that increasing PEU levels significantly discourage short-term

planning sophistication among prospectors. The data reveal further that the interaction variable does not play a significant role in explaining the level of planning sophistication in the case of analyzers and defenders.

Taking into account the strategy dummies and the interaction variables together, the following result is revealed. At increasing PEU levels the level of short-term planning sophistication among prospectors decreases from the highest to the lowest position in comparison with analyzers, defenders and reactors. In other words, at low to average PEU levels prospectors demonstrate higher levels of short-term planning sophistication than analyzers (PEU < 2.01), defenders (PEU < 2.638) and reactors (PEU < 2.405). At high PEU levels, however, prospectors have less sophisticated planning systems than analyzers (PEU > 2.01), defenders (PEU > 2.638) and reactors (PEU > 2.405). Although statistically not significant, it seems that at all PEU levels analyzers plan more sophisticatedly than defenders. So, our findings support the hypotheses H3a and H3b, but not H3c.

The research results indicate that among defenders and analyzers the level of PEU does not significantly contribute to the explanation of the variance in the degree of short-term planning sophistication. However, among prospectors the level of short-term planning sophistication is significantly related to the level of PEU. This finding can be explained by focusing on the difference in information requirements between these strategies combined with the availability of information, which is influenced by the environmental uncertainty. Prospectors, by definition, need to take relatively quickly advantage of new opportunities to stay ahead of competitors. Therefore, prospectors need to collect much more external information from the environment than firms adopting the other strategy types. As a consequence, at low or average PEU levels prospectors invest in formal planning systems to collect the external information that is necessary to plan the near future as the information is available. At high PEU levels the external information is less reliable or does not exist. So, at high PEU levels formal planning is inevitably based on an input of less reliable or even unavailable external information, and as such formal planning becomes inappropriate for prospectors. Prospectors that take the time to plan formally in these circumstances may lose the identified opportunities. Among defenders and analyzers the level of short-term planning sophistication is not significantly related to the PEU level. The defender strategy is characterized by routines and the primary focus of this strategy is on cost efficiency of internal processes. Defenders do not really need to take advantage (quickly) of new opportunities in the environment. Therefore, they have a lower need for external information. Given that the information requirements of defenders are different from those of prospectors, the unreliability or unavailability of external information does not affect planning processes of defenders to the same extent as those of prospectors. At high PEU levels defenders do not lose all the vital information that is necessary to plan the near future and as such, at high PEU levels defenders are able to continue with the

existing planning systems. Similarly, unlike prospectors, analyzers do not want to be the first in the market to launch a new product, but try to be close behind. Consequently, analyzers do not have to respond to the environment as quickly as prospectors and can continue with their planning systems in the face of increasing uncertainty.

Both models show consistent results with regard to the control variables, measuring several CEO and firm characteristics. Concerning CEO characteristics our results indicate that CEOs with higher education levels adopt more sophisticated planning, which is in line with the prior literature. With regard to the CEO's experience in the industry, however, the results reveal that a longer tenure in the industry is not significantly associated with the level of short-term planning sophistication. Concerning firm characteristics, firm size is found to be positively related to short-term planning sophistication and being a family firm is found to be negatively related to short-term planning sophistication. These findings are consistent with the prior literature. Next, we find that the degree of short-term planning sophistication is dependent on the industry as well. The results show that manufacturing firms adopt lower levels of short-term planning sophistication than trade firms. Further, our findings indicate that subsidiary SMEs have more sophisticated short-term planning systems than independent SMEs.

## CONCLUSION

The aim of this empirical study was to gain more insight into the conflicting findings of prior contingency literature investigating how PEU and strategy relate to planning systems design. Prior literature included these contingent variables mainly as main research variables. Based on the theoretical study of Miller (1988), we investigated whether the interaction between PEU and strategy is related to short-term planning sophistication. Our main conclusion is that PEU and strategy must be considered in interaction to understand their relationship with short-term planning sophistication. We find that increasing PEU levels go together with decreasing short-term planning sophistication within the group of prospectors. Among analyzers and defenders, however, increasing PEU levels go together with increasing short-term planning sophistication, but not in a statistically significant way. So, the results show that prospectors plan significantly more sophisticatedly than analyzers and defenders at low PEU levels, whereas at high PEU levels analyzers and defenders plan more sophisticatedly than prospectors.

The existence of this interaction effect inhibits a straightforward relationship between planning systems design and PEU (considered separately), or a straightforward relationship between planning systems design and strategy (considered separately). Our findings show that the lack of these straightforward results in the prior literature, with regard to how PEU and strategy relate to planning systems design, can be attributed to the fact

that strategy and PEU have always been considered as separate main effect variables and that their interaction has never been included in the empirical analyses (except for Matthews and Scott 1995).

Finally, our chapter attempts to bridge the gap between practice and research. We provide practitioners with research results that might help them in the development of planning techniques used in decision-making and control processes. This study, situated in the structural contingency framework, adopted a 'selection' approach. This approach assumes that fit is the result of an evolutionary process of adaptation that ensures that only organizations with a 'good' fit survive (Drazin and Van de Ven 1985). Given that the respondent firms existed for at least thirteen years, the revealed relationships between the contingent variables and short-term planning sophistication can be considered as 'good' fits of long-term survivors. So, we can conclude that at low and average PEU levels prospectors need more sophisticated planning systems to survive and to be successful than defenders, analyzers and reactors. At high PEU levels, however, prospectors can thrive with less sophisticated planning systems.

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# 3 Strategic Management in the German ‘Mittelstand’

## An Empirical Study

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### INTRODUCTION

It is widely accepted that strategic management should not only play an important role in large or established companies but also in small and medium-sized enterprises (SMEs). These SMEs represent more than 90 percent of all enterprises in Europe and supply almost 70 percent of all jobs in Germany (OECD 2002b). Due to the crucial role of SMEs and their powerful market position in Germany, the German word *Mittelstand* has been absorbed into the Anglo-American management literature. These *Mittelstand* companies serve as a very important source of innovation and technological change, and thus increase economic welfare and competitiveness (OECD 2002a). Still, both media coverage and scientific research predominantly focus on large enterprises.

Given the increased external dynamics in combination with shorter product life cycles and growing uncertainties, SMEs often fail due to inadequate planning and management or extant deficiencies in analyzing and evaluating their own relative competitive advantages. In addition, SMEs often lack professional approaches for strategy development and implementation (Aragón-Sánchez and Sánchez-Marín 2005; Deimel 2004). Therefore, the search for factors that systematically affect the success of SMEs is highly relevant for labor and economic policy (Birley 1986; Carter *et al.* 1994). At the same time, SME managers, new venture founders and academic researchers also have an interest in identifying such factors (Cooper *et al.* 1994). In this regard, scholars have suggested that strategic management may play a key role in influencing SME success (Kuratko 2003).

In addition to the wealth of studies on strategic management in large enterprises, empirical research has increasingly begun to examine its implementation in SMEs over the past two decades (e.g., Robinson and Pearce 1984; Delmar and Shane 2003; Gibson and Cassar 2005). Despite these recent advances, our own review of the literature reveals that there is still a paucity of research on strategy in SMEs. More specifically, recently

published empirical studies on strategy in SMEs in the German-speaking environment—with its approximately one hundred million native speakers and therefore the most important linguistic, cultural and economic region within the EU—emphasize the role of this research area for the German economy (Müller *et al.* 2005; Welter 2003; Kraus *et al.* 2007). At the same time, a first review of empirical studies in this area led us to conclude that there are no recent reliable data on the use and effects of strategic planning in German SMEs.

This chapter, therefore, intends to address this research gap. Our interest lies in examining in more detail whether the scientific concepts of strategic management—which have originally been developed for and applied in large enterprises (Kraus and Schwarz 2007)—are also beneficial to SMEs, or whether they require substantial adaptation before they can be effectively applied. Specifically, the aim of this chapter is to investigate the extent to which strategic management procedures are used in SMEs as well as the motivation and barriers for their application on an empirical basis, focusing on the particular context of SMEs in German-speaking countries. In a second step, we will investigate whether the application of strategic management procedures is related to SME success.

## DEFINITION OF THE TERM ‘STRATEGY’

While there is no clear definition of the term ‘strategy’, scholars agree that it can be derived from the Greek word *strateos*, which can be translated as ‘military leading’ or ‘planning for battle’, and is thus rooted in military language (Bea and Haas 2001). Strategic doctrine and thinking goes back to the year 500 BC in China when the war theoretician, consultant and philosopher Sun Tzu developed thirteen principles that described strategies of successful campaigns for different warlords (Stahel 1996). Military strategy has been further elaborated in modern Europe, for example, through Napoleon or the Prussian General von Clausewitz, who, for the first time, attempted to expand the concept of strategy beyond pure war tactics (Von Oetinger *et al.* 2001). In the field of economics, the term ‘strategy’ gained particular relevance in *game theory* of the 1940s and by the end of the 1950s strategy had been integrated into courses at Harvard Business School.

The strategy development process is closely related to management. From a corporate perspective, strategy can be defined as an approach to reach corporate goals to be successful in the long run (e.g., Kreikebaum 1993; Nötzold 1994). The discipline of strategic management was formed in the 1980s based on advancements in the field of strategic planning. Strategy formulation and implementation is the process of making important organizational decisions (Mintzberg 1967). It is usually the entrepreneur’s vision that determines the broad outline of a strategy (Mintzberg 1993).

Strategy itself is a plan, an intended course of action and a set of guidelines to deal with specific situations (Mintzberg 1987).

The reason why enterprises succeed or fail is one of the key questions in strategy (Porter 1979). Traditional concepts of strategic management particularly deal with the question of why companies differ in their corporate success despite operating under similar market and social conditions (Koenig 2004). In this vein, strategy formulation and implementation focus on how to cope with and succeed in a competitive environment (Porter 1980). Strategic management entails two main components, namely, strategy *content* and strategy *process*, the latter of which is also referred to as *strategic planning* (Cole 1994). Additionally, strategic management is considered to be long-term oriented (at least three years), directed towards potential future profits, substantial, holistic and predominantly driven by top management (Haake 1987; Voigt 1992).

Strategic planning is the attempt to prepare for future contingencies and thus to account for environmental dynamics and complexity. This entails the need to build alternative future scenarios and configurations. Although the future cannot be predicted, it is possible to prepare for the future and/or alternative ‘futures’ and align the enterprise accordingly. Unlike strategic management, planning is not concerned with the development of strategic goals and visions but rather deals with extrapolating present tendencies into the future. Hence, strategic planning provides guidelines and programs for the achievement of specific goals and visions. It specifies the basic conditions as well as the scope for future business activities and is thus a key instrument for overall strategic management (Kropfberger 1986).

More recent approaches to strategic management reach beyond strategic planning and also encompass the realization of plans and their control (Welge and Al-Laham 2001). However, a clear differentiation between strategic management and strategic planning is difficult since particular elements such as strategic control have an overlap with both concepts. In this chapter, therefore, we adopt the traditional understanding of strategic management in the sense of strategic planning and will use both terms synonymously, thereby disregarding newer approaches such as a company’s vision or mission in favor of the planning perspective.

## LITERATURE REVIEW AND RESEARCH QUESTIONS

### Strategy in SMEs

In SMEs, strategic planning is often perceived as negative. Indeed, formal planning is often considered to be limited to large enterprises and thus not transferable to the conditions of the fast-moving and flexibly structured SMEs. Additionally, from the perspective of the entrepreneur, there are

three main objections that are made against using strategic processes in SMEs (Esser *et al.* 1985; Füglistaller *et al.* 2003):

- Strategic instruments limit the flexibility and the ability to improvise.
- It is preferable to use the limited time resources for operational, sales or R&D activities rather than for strategy development processes.
- Strategic management is too bureaucratic.

The 'true' reasons for this aversion are often deficient know-how, an over-estimation of one's own capabilities, rejection of external help, tradition-based behavior or fear of radical change. Despite the negative perception of strategic instruments in SMEs, scholars emphasize that particularly in times of increasing environmental dynamics and uncertainty, it is necessary to keep informed about corporate goals and their attainment on a regular basis (Esser *et al.* 1985; Füglistaller *et al.* 2003). Strategy development thus needs to be understood as a future investment. In this vein, strategic planning serves as a crucial means to predict possible future scenarios. While most of the well-known strategy concepts have been developed for large companies that generally display a higher level of awareness for existing problems and hence allocate more resources to this topic, some of these concepts and instruments also appear useful for SMEs. A specific strategy concept for SMEs, however, may need to account for their unique conditions and problems (Wirth 1995).

The unique characteristics of SMEs lead to both problems and opportunities for strategy development in SMEs (Füglistaller *et al.* 2003). For example, compared to large companies, SMEs tend to offer a more limited range of products for a more limited number of markets. Also, SMEs use market penetration and product development strategies rather than market development or diversification strategies. Moreover, given their focus on limited product/market segments that often constitute market niches, SMEs usually cannot afford central service departments that are able to conduct complex market analyses (Johnson and Scholes 1997). Furthermore, they usually possess access to less human and financial capital as well as other resources. As a result, particularly up to a certain 'critical size', the use of formal planning mechanisms is often lacking (Karagozoglu and Lindell 1998). On the other hand, SMEs can also exploit distinctive opportunities. For example, their small size and flexibility allows SMEs to specialize in narrow niches that are unfeasible for large companies to pursue due to the relatively small sales volumes and their high fixed costs. Additionally, their limited resources and the resulting focus on a small product range permit SMEs to develop strong competitive advantages and specific problem-solving competencies in these areas, for instance concerning qualitative market leadership. Also, higher flexibility in decision making and direct customer contacts are particularly helpful for the commercialization of innovations (Kropfberger 1986).

Existing empirical evidence from the German-speaking countries paints a somewhat ambiguous picture with regard to strategic planning in SMEs. Studying 214 German industrial enterprises, Esser and others (1985) showed that strategic planning instruments are most frequently applied in the legal form of a limited (GmbH) and incorporated (AG) company. Moreover, their results reveal a positive correlation between a company's workforce size and the use of strategic planning activities. Another study demonstrated that out of 1,461 German industrial SMEs, 73 percent indicated they plan strategically (Scholz 1991). In contrast, the results from Austria and Switzerland are more discomfoting. Kropfberger (1986) found in a survey of 161 medium-sized enterprises in Austria that nearly half of the enterprises under study only plan on a short-term basis whereas almost a third do not have any sales planning at all. Similarly, results by Fröhlich and Pichler (1988) suggest that only 12 percent of the 107 enterprises they investigated applied strategic planning, with almost a quarter not applying any planning and about one-third only using short-term planning. A similar picture emerges in Switzerland, where Haake (1987) surveyed 127 SMEs from different industries. Again, only 13.7 percent of the SMEs used strategic planning while 27.9 percent applied no written planning and 31.4 percent only used short-term planning. More than one decade later, Leitner (2001) presented a somewhat improved situation: Out of one hundred Austrian SMEs from different industries 62 percent had established a written corporate policy. Nevertheless, strategy development still seemed to mainly take place intuitively (31 percent) or based on experience (88 percent). A recent study by Kraus and others (2007) reports that only 26 percent of the 323 young Austrian SMEs interviewed make use of strategic instruments (such as SWOT analysis, product life cycle and portfolios).

As the majority of studies in the German-speaking environment were conducted in the 1980s, recent data remains scarce. Therefore, in this study we were interested in conducting a more recent investigation of strategic planning behavior of SMEs in German-speaking countries. Accordingly:

*Research Question 1: To what extent do SMEs in German-speaking countries apply instruments of strategic planning?*

## **The Entrepreneur's Role in Strategic Planning**

The management of SME ventures has always been an integral part of *entrepreneurship* (Kraus 2007). The term 'entrepreneurship' itself is derived from the French word *entreprendre*, which can be translated as 'to undertake' or 'to take something into one's own hands' (Schaper and Volery 2004). In other words, entrepreneurial work is about transforming new ideas into actual ventures that exploit market opportunities by better serving customer needs. While the entrepreneur does not necessarily act as

the inventor of a new product, service or business, s/he is the one introducing this innovation into the market. An entrepreneur is thus somebody who takes something (e.g., an opportunity or a business venture) into his/her own hands, at his/her own risk.

In most SMEs, it is usually only the top management, i.e., mostly the entrepreneur him- or herself, that is responsible for developing and deploying strategic plans. Hence, the entrepreneur's role is always critical to the overall strategic process. In addition to the entrepreneur whose involvement in strategic planning is legitimized based on his/her role as the owner of the enterprise, the enterprise may employ managers to develop and implement strategy, for instance in their role as CEO. Given the relatively small size of the enterprise, the entrepreneur is often deeply involved in the day-to-day business operations and thus deals with all levels of decision making, mostly even simultaneously. Accordingly, personal goals, characteristics and strategic awareness of the entrepreneur have an important influence on the development of the enterprise, and the degree of sophistication of strategic planning is often a function of the entrepreneur's previous experience. In addition, the process of strategic decision making in SMEs is often not only based on experience but also on intuition or simply guessing (Welter 2003). Consequently, strategic decisions mostly reflect the subjective orientations and attitudes of the entrepreneur. The role of the entrepreneur and his/her attitude towards strategic issues are thus often critical for the implementation of planning measures.

Although business schools regularly highlight the link between strategic planning and corporate performance, only approximately 20 percent of all college graduates obtain their degrees in management. Academic research shows that education has a significant influence on strategic activities. Indeed, the probability to think and act strategically increases with higher levels of education (e.g., Beutel 1988). In particular, the probability of having written a business plan is substantially higher for business graduates than for their nonbusiness counterparts (Gibson and Cassar 2002). Given that many entrepreneurs have not graduated from college or have obtained their degrees in nonbusiness areas, many simply lack the required expertise in strategic planning. Importantly, planning is an activity without direct returns that is hard to justify (psychologically), both if customers flock to the company and if they are hard to attract and marketing and sales activities appear more important (see Posner 1985). Against this background, the motivation for an entrepreneur to develop strategic planning capabilities is likely to be low. Given the crucial role of the entrepreneur in the planning process, we were interested in examining in more detail what motivates or inhibits entrepreneurs to apply strategic planning in the context of SMEs in German-speaking countries. Therefore:

*Research Question 2: What are the main motivators and barriers for applying strategic planning in SMEs in German-speaking countries?*

## Strategic Planning and Corporate Success

Extant empirical research from the past twenty years provides ambiguous results with regard to the successful implication of strategic planning in SMEs. Out of the twenty-four studies dealing with the relationship between strategic planning and success in SMEs that were identified in a detailed literature review by Kraus and others (2008), seventy-nine detected a positive relationship between the two variables, whereas the rest failed to demonstrate a relationship or found only mixed results. These inconsistent findings may be due to the use of different methodologies, different approaches to operationalize strategic planning or the success variables, methodological mistakes or simply due to incomparable research populations that were used by these studies.

It should be mentioned, however, that even those authors who were unable to identify a relationship emphasize the importance of strategic planning in SMEs. Overall, the application of strategic planning is thus widely viewed as positive. We infer from this that an influence on corporate success seems to depend on the right way of applying strategic planning but that not all studies have been able to operationalize this appropriately. Masurel and Smit (2000) conclude that strategic planning can only influence corporate success if it enables an entrepreneur to develop an awareness of the company's strengths and weaknesses and systematically anticipate alternative future scenarios. Building on the aforementioned mixed results of extant empirical research, we were interested in investigating in more detail the link between strategic planning and corporate success among SMEs in German-speaking countries. Consequently:

*Research Question 3: What is the relationship between strategic planning and corporate success for SMEs in German-speaking countries?*

## METHODOLOGY

To address the research questions, a survey-based empirical study was carried out in a representative sample of one thousand SMEs from various industry sectors in Germany, Austria and Switzerland between June and December 2004 (see also Deimel and Kraus 2008). Building on the *key informant approach* (Silk and Kalwani 1982), the pool of potential respondents was restricted to the owners or top managers of the respective companies.

A database on SMEs from German-speaking countries provided by the economic information service *Creditreform* served as the basis for our survey. In total, 101 statistically useful questionnaires were returned, resulting in a response rate of approximately 10 percent. Data analysis entailed the use of both descriptive methods to provide exploratory insights into the nature of strategic management in German SMEs and the use of statistical analyses.

Table 3.1 Industry Sectors of the Interviewed Companies

<i>Branch</i>	<i>Percent</i>
Trade	27.1
Industry	14.0
Craft	15.9
Services	31.8
Others	11.2
Total	100.0

### Description of the Sample

Table 3.1 provides a breakdown of the industry affiliation of the companies included in the study.

The majority of companies (72.2 percent) are run by their owners whereas 17.8 percent are under the ownership of external enterprises, and in each case 5 percent belong to a larger enterprise or a conglomerate of companies.

With respect to annual revenues, 75 percent of the surveyed companies stated a volume of less than €5m, 6.9 percent of less than €10m and 18.1 percent of more than €10m. Regarding the number of employees, companies with less than forty-nine employees (about 75 percent) are dominant whereas only 25 percent have more than fifty employees. Three quarters of the enterprises in this study can therefore be called 'small enterprises' according to the official EU definition, and thus belong to the so-called German 'Mittelstand'.

## RESULTS

### Strategic Planning Behavior

The literature suggests that many SME managers appear to concentrate on short-term planning and troubleshooting of specific problems, and therefore lose sight of the enterprise's strategic dimensions due to operational time pressures. This also applies to the companies surveyed in this study. Although about 75 percent of the companies under study have classified strategic planning as 'important' or 'very important', about half of them do not conduct formal, written planning. A further differentiation concerning the existence of strategic planning between smaller enterprises (< €5m in revenues) and larger enterprises (> €5m in revenues) indicates that 63.2 percent of the smaller but only 12 percent of the larger enterprises do not apply strategic planning (see Figure 3.1).

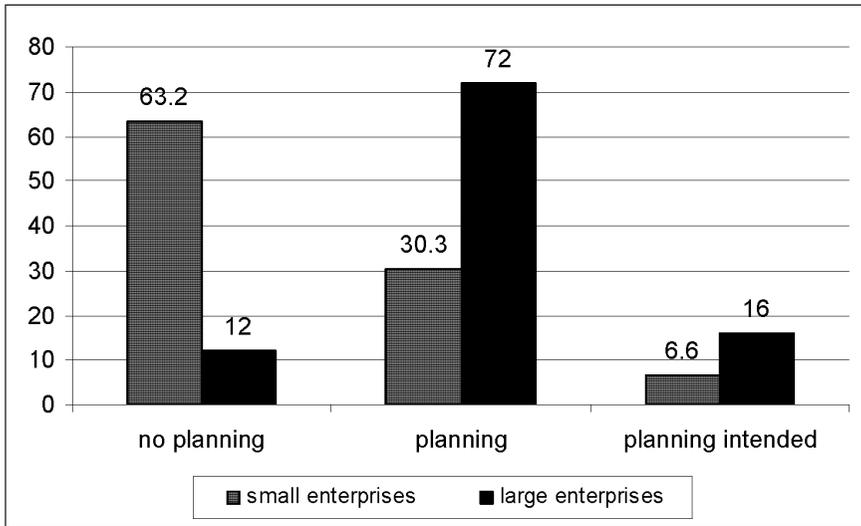


Figure 3.1 Use of strategic planning according to company size.

The long-term orientation of strategic planning is generally considered to be relevant both for the attribution of the term ‘strategic’ as well as for its relationship to corporate success (Kraus 2008). For example, a study of 150 small enterprises in Scotland found a positive relationship between long-term formal planning and corporate success (Smith 1998) while another study of fifty-eight small enterprises in Australia showed that the identified group of ‘high performers’ had a significantly higher time horizon in their plans than the group of ‘low performers’ (Orpen 1985). In the present study, 18.6 percent of the companies appear to plan with a time horizon of less than twelve months, whereas the majority of the SMEs (57.6 percent) plan between two and four years, and another 23.7 percent even longer than four years (see Figure 3.2).

Top management holds the main responsibility for the development of strategic planning in the surveyed SMEs. Only a few SMEs have a separate controlling (16.1 percent) or staff unit (1.6 percent) that explicitly deals with strategic planning. In addition to top management, middle management (29 percent) or—especially in the smaller enterprises—tax advisors and financial auditors (24 percent) are included in the process of strategy development and planning.

In SMEs, quantitatively oriented *strategic instruments* are most widely spread. 67.2 percent of the companies under study apply balance sheet analyses, 56.5 percent cost or productivity analyses, 46 percent SWOT analyses and another 45.5 percent ratio analyses. However, other strategic instruments that are known from and were originally developed for larger enterprises, such as GAP analyses (8.2 percent), PEST analyses (8.1

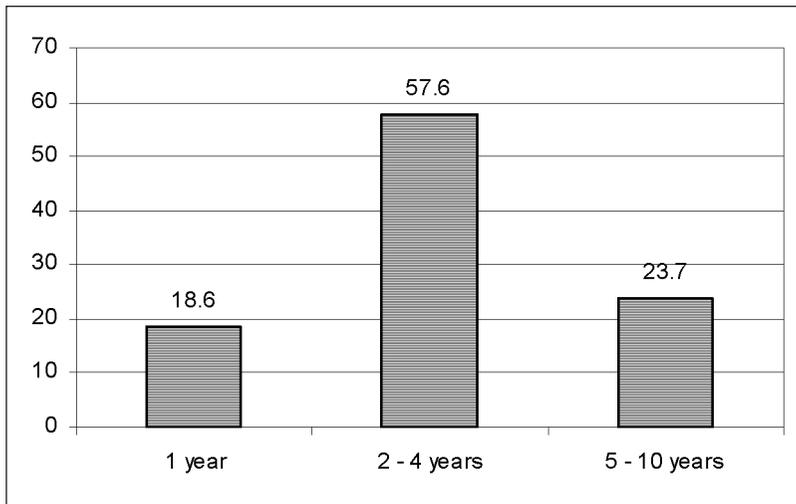


Figure 3.2 Time horizon of strategic planning.

percent) or life cycle analyses (6.6 percent), are only rarely applied in the surveyed SMEs. It is particularly striking that more than half (53.1 percent) of the SMEs in this study only plan at the overall company level but not for the individual functional areas. Only 20 percent of the companies plan for up to two, and a further 20 percent even for up to four functional areas. Among the functional areas, personnel planning (63.8 percent), sales planning (56.7 percent) and marketing planning (46.6 percent) dominate.

Specific analyses of the planning-related results concerning *company size* show that know-how about, attitude towards and the use of strategic planning are related to company size. A *t-test* on mean differences for the *use of planning* reveal significant differences ( $p < .01$ ) between small and large firms, with large companies using more planning. In addition, a chi-square contingency test demonstrates a significant positive relationship between company size and *positive attitude* towards planning ( $\chi^2 = 19.70$ ;  $df = 2$ ;  $p < .01$ ). As for the strategic planning instruments, significant although weak differences could be detected for scenario and portfolio analyses, the NVP method as well as PEST analysis, but not for the other instruments. As Figure 3.3 shows, the number of planning instruments, the number of instruments for strategy documentation and communication as well as the number of functional strategies is higher in large enterprises than in small.

Also, the time horizon of strategic planning and the degree of formalization increases with company size. This is consistent with previous research. Haake (1987), for example, identified a relationship between company size and the application of strategic instruments. In a similar vein, Perry (2001) found in his study of 152 American SMEs that formal strategic planning is rarely

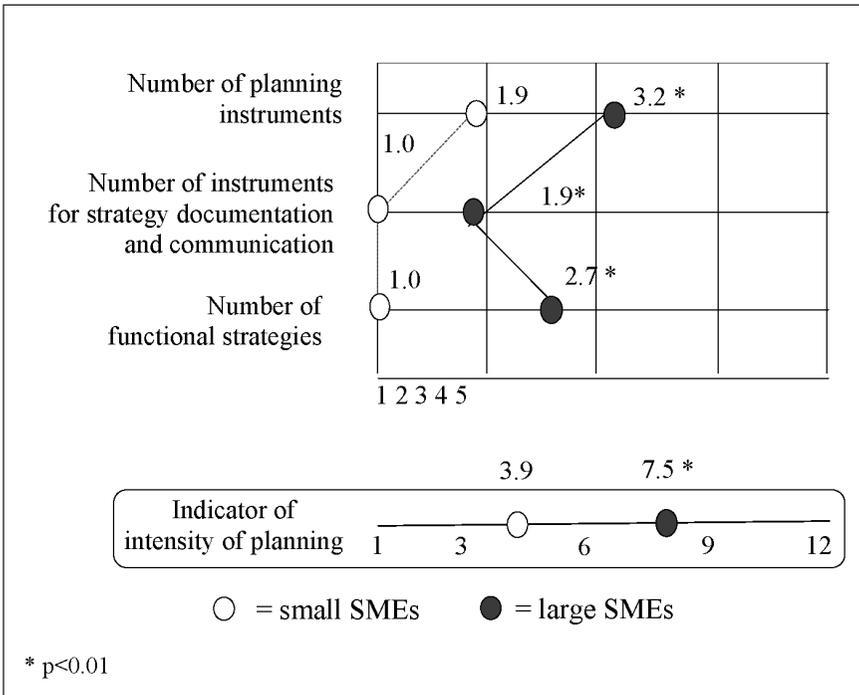


Figure 3.3 Planning intensity related to company size.

applied in companies with less than five employees, and concluded that there must be a certain minimal SME size for strategic planning to make sense.

Specific analyses with regard to *ownership structure* provide additional insights. Owner-run enterprises appear to:

- plan less frequently.
- have a shorter time horizon for planning.
- have less know-how about strategic planning.
- possess a more negative attitude towards strategic planning.
- plan in a less formalized, less detailed and more quantitatively oriented manner.
- less frequently integrate specialists and consultants into the planning process.
- develop plans for individual functional areas on a less frequent basis.

### Motivators and Barriers for Applying Strategic Planning

Asked for their own, *subjective evaluation of strategic planning*, 89 percent of the respondents stated that they expect a more successful

position in the market as a result of planning. The *major reasons for using strategic planning* were primarily considered to be internal, such as the analysis and improvement of the enterprise's competitive position. External reasons included, for example, explicit requirements by shareholders or financial institutions.

Although only a minority (11.4 percent) of the companies that do not plan strategically asserted they have problems with the term 'strategic planning', 59.5 percent of these companies stated 'missing know-how' as the *major obstacle for the use of strategic planning* in their companies. However, the primary reason for not applying strategic planning in the German Mittelstand concerns scarce time resources (65.8 percent). In contrast to larger companies, SMEs normally maintain a lower level of resources, have more limited access to human, financial and customer capital and lack a well-developed administration (Karagozolu and Lindell 1998). Indeed, although respondents considered it necessary and important, they also regarded strategic planning as too time-consuming. In many cases, the necessity to plan is seen as secondary to more urgent requirements of day-to-day business. This finding corresponds to the results of both previous empirical studies and anecdotal evidence in the nonempirical SME literature. For example, Bernasconi and Galli (1999) argue that management is often so deeply rooted in daily business that there is simply no time for the development of plans. Also, many SME managers are convinced that 'real entrepreneurs don't plan' (Posner 1985: 129) but should rather use their time more effectively for operational or sales activities. Additionally, SMEs often lack the knowledge of or possess wrong, negative or critical attitudes and even prejudices against strategic concepts. Planning is often associated with complicated methods of calculation or extensive market investigations that, however, are often neither necessary nor reasonable in SMEs (Brouthers *et al.* 1998; Barilitis 1994). Furthermore, it is often argued that the implementation of formal planning systems restricts the culture of entrepreneurship and innovation inherent in SMEs (McKiernan and Morris 1994).

### **Relationship to Corporate Success**

To address Research Question 3, we examined whether there is a statistically significant relationship between the application of strategic planning and corporate success. The measurement of corporate success is a key construct in entrepreneurship research and therefore also in the context of SMEs. *Return on equity (ROE)* and *growth in revenues* were chosen as success indicators. This is in line with the majority of existing empirical studies on the performance/success relationship of strategic planning in SMEs, which also use financial indicators as dependent

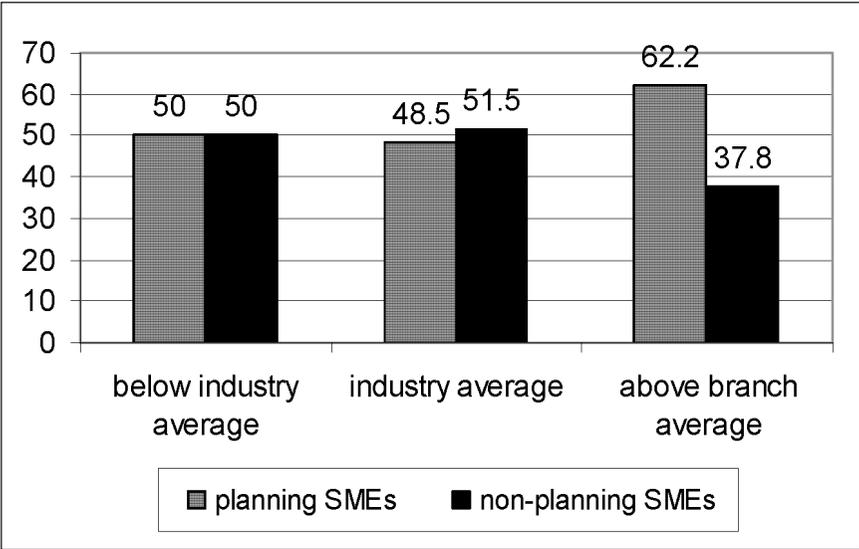


Figure 3.4 Corporate success (ROE compared to industry average).

variables (Pearce *et al.* 1987; Rue and Ibrahim 1998; Carton and Hofer 2006). Figure 3.4 gives an overview of ROE differences between planning and nonplanning SMEs.

For both success indicators, no statistically significant difference between strategically planning and nonstrategically planning enterprises could be identified, using a chi-square test (see Table 3.2).

Accordingly, the present study cannot confirm that the use of strategic planning is significantly related to greater corporate success in SMEs in the German-speaking context. Nevertheless, some indicators point towards the fact that SMEs can be divided into the group of ‘planners’ and ‘nonplanners’. Table 3.3 shows their characteristics.

Table 3.2 Chi<sup>2</sup>-Test for Group Differences

Success Indicator	Method	Value	df	Asympt. Significance
Return on Equity	Chi <sup>2</sup> (Pearson)	1.414	2	0.493
	Likelihood Ratio	1.420	2	0.492
Growth in Revenues	Chi <sup>2</sup> (Pearson)	1.729	2	0.421
	Likelihood Ratio	1.770	2	0.413

Table 3.3 Planners vs. Non-Planners

<i>Planners</i>	<i>Non-Planners</i>
<ul style="list-style-type: none"> <li>• are mainly larger SMEs (sales revenues &gt; € 5m)</li> <li>• are predominantly from the Industry and Trade sector</li> <li>• often belong to larger corporate groups</li> <li>• show a more positive attitude towards strategic planning</li> <li>• use strategic planning to analyse the enterprise's competitive situation</li> </ul>	<ul style="list-style-type: none"> <li>• are mainly smaller SMEs (sales revenues &lt; € 5m)</li> <li>• are predominantly from the Service and Crafts sector</li> <li>• are typically managed by their owners</li> <li>• show a more negative attitude towards strategic planning</li> <li>• do not use strategic planning for internal governance purposes</li> </ul>

## DISCUSSION AND CONCLUSION

### Discussion of Results

The results of both the literature analysis and the empirical investigation demonstrate that strategic management is still infrequently used in SMEs, despite an increased perception of the relevance of this topic. Although about 75 percent of the surveyed enterprises regard strategic planning as 'important' or 'very important', only 40 percent of these companies conducted written and formal planning procedures. In this regard, the main arguments of SME managers against the application of strategic instruments were scarce resources and missing relevant know-how. In addition, the planning horizon within those SMEs that did apply some type of strategic planning was rather oriented towards the short or medium term. Accordingly, 75 percent of these companies plan from one to four years while only 25 percent plan for a period of more than four years.

It was also found that the use of strategic management procedures seems to grow with increasing firm size. Furthermore, the application of quantitatively oriented strategic instruments such as financial analysis, cost analysis, productivity analysis or operating figure analysis is most widely spread. Strategic planning mainly takes place at the overall company level. Eighty-two percent of the smaller and 64 percent of the larger enterprises have no individual strategies for functional areas (such as marketing, human resources etc.).

Moreover, there seems to be a certain 'minimum firm size' below which strategic management procedures do not make sense. This critical size appears to involve around €5m in revenues and a workforce size of more than fifty employees. The owner-run SMEs have a particular role

within the SMEs in this study since they differ from the other SMEs in terms of strategy development, planning intensity and a range of other indicators. For example, the communication of strategy is far more patriarchal and the inclusion of other employees in the strategic processes much lower. Finally, our data did not reveal any statistically significant relationship between strategic planning and SME success. This could possibly be due to a relatively low sample size, methodological problems of using strategic planning as a dichotomous variable or the utilized success indicator variables.

## Conclusion

The aim of this article was to investigate the extent of strategic planning in SMEs in German-speaking countries, the so-called 'Mittelstand' companies, mainly based on a descriptive analysis. We found that systematic strategic planning is still underused in SMEs although the relevance of strategic planning for successful management is known to the entrepreneurs.

We can derive a number of implications for research and practice. For example, SMEs should deal in more detail with the identification and development of their own success potentials and competitive advantages given the more rapidly changing competitive environment. In this vein, as the review of literature suggests, strategic management can serve as an important success factor for SMEs even though the present study did not detect a significant relationship between strategic planning and corporate success. Consequently, it seems necessary to raise the awareness for the necessity of strategic processes in the Mittelstand companies. Entrepreneurial knowledge with regard to corporate strategy in SMEs needs to increase in order to further diffuse strategic planning in SMEs. A more far-reaching involvement of employees can play an important part in this process. Strategic planning can only lead to greater success if committed employees provide it with energy and intensity (Mintzberg 1994).

Since SMEs are only rarely considered *small large enterprises*, it is crucial to adapt the strategic concepts, contents and processes, which have originally been developed for larger enterprises, to meet SME requirements. The Mittelstand needs specific strategic instruments that are easy to handle and tailored towards their requirements in order to develop small-scale strategic planning for their companies. In particular, as the present study indicates, differences in the required degree of *formalization* of strategic planning in SMEs should receive further attention. Overall, the main question then is not whether strategic management in SMEs pays off, but rather for which groups of SMEs and under which circumstances it pays off. In this regard, a possible avenue for future research consists of identifying 'clusters' or 'configurations' (see, e.g., Harms *et al.* 2007) of similar and comparable enterprises.

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# 4 Discourses of Strategic Planning in Small and Medium-Sized Growth Firms

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## INTRODUCTION

In recent years, the focus in strategy research has shifted from resource-based strategies and competitive strategies towards strategy-making. While content-focused strategy research views strategizing as economizing, the strategic planning perspective takes a more comprehensive view, arguing that we need to understand the practice of strategy, that is what the strategy-makers actually do (Whittington *et al.* 2006). This perspective is interested in the tools being used and actions taken within the strategy process (Stenfors 2007), while it also emphasizes that the process should have an innovative dimension rather than being merely analytic. There are tools to support both innovative and analytic thinking.

However, the strategic planning approach has also been subject to criticism (Taylor 1997). Because of the extensive strategic planning used in multinational corporations, their strategic planning units added personnel and consequently often became slow and bureaucratic. As these units were downsized in the 1980s, strategic planning was almost ‘pronounced dead’ (Mintzberg 1994; Taylor 1997). Then again the criticism contributed to the rise of a new and more practical view of strategy. This perspective, often referred to as ‘strategy as practice’, looks at strategy processes and practices and considers strategy rather as implementation than as a slow planning process (Stenfors 2007). This means that strategy exists only as it is implemented. The ‘strategy as practice’ approach is comprehensive, action oriented and process based.

The understanding of strategy in the present chapter is in the middle range between the strategic planning and ‘strategy as practice’ approaches as we set out to examine the managerial perceptions of strategy in small and medium-sized growth firms. Studying strategic planning in growth firms contributes to our understanding of the growth process, which bears broader economic relevance in, for example, terms of growth firms being a major source of job creation (Parker 2004).

The contribution of this chapter is twofold. Firstly, given that the majority of strategic planning research has focused on large businesses, there is a need to apply these concepts to small and medium-sized enterprises (SMEs) as these are not miniature versions of large enterprises (Curran and Blackburn 2001). Secondly, researchers have conducted a modest amount of research concerning strategic planning in small and medium-sized growth enterprises even if it is eminent that strategic planning facilitates environment–strategy fit by developing organizational integration, which contributes to motivation and performance (Hutzschenreuter and Kleindienst 2007). Thus, it is advisable to adjust strategy concepts to the specific characteristics of growth SMEs in order to develop theories, methods and tools that are suitable for this context.

This chapter seeks to increase our understanding of small business managers' perceptions of strategic planning by means of discourse analysis. For this purpose, thematic interviews focusing on the topics of strategy and strategic planning were conducted with twenty-two managers of Finnish SMEs that had experienced continuous growth within three years between 2002 and 2004. The analysis distinguishes three discourses of strategy-making in these companies: emergent process, formal process and shared process.

The chapter is arranged as follows. First, we take a brief look at previous research in the field of strategic planning. Second, the method applied in the empirical study is described, followed by a presentation and discussion of the results. Finally, the concluding section summarizes the main results and discusses their implications.

## STRATEGIC PLANNING RESEARCH

The literature offers various definitions for the strategic planning process. Strategy-making can be understood as formal or emergent (Mintzberg and Waters 1985; Fuller-Love and Cooper 2000; Mintzberg *et al.* 2003; Johnson *et al.* 2006). From the formal viewpoint, strategy-making becomes a rational, systematic and logical process that leads to a choice of the strategy to be pursued and its implementation (Huff and Reger 1987; Hutzschenreuter and Kleindienst 2007). In contrast, Mintzberg and others (2003) suggested that strategy is often formed in an emergent process, which can be constructed and rationalized *ex post*. Emergent strategy is often created through several problem-solving situations. This process of figuring out solutions is claimed to be informal, emergent and often irrational from a long-term perspective. Problems are solved on a case-by-case basis as they arise and the solutions and prioritizations are not made according to a broader strategic concept (Mintzberg *et al.* 2003). Even if both of these perspectives are relevant, we suspect that it is more common that SMEs see their strategies as emergent.

There is a considerable amount of research—mainly conducted in large corporations—regarding the effects and antecedents of strategic planning. In the following, we review some of this literature and apply the results to the context of SMEs.

A particular concern in the strategic planning literature has been its effect on company performance. Early studies proposed that the extent of formal strategic planning explains firm performance (Rhyne 1986; Bracker *et al.* 1988). Other authors have argued that there is no correlation between strategic planning and performance, or that the relation between these two phenomena is too weak to be detected in survey studies (Hogarth and Makridakis 1981; Pearce *et al.* 1987; Ketchen *et al.* 1996). However, some evidence of the existence of a relationship between strategic planning and company performance exists. For example Bracker and others (1988) found that the structure of strategic planning explains growth in revenue, present value growth of the firm and CEO cash compensation. Further, Delmar and Shane (2004) discovered that strategic planning increased the survival rates of young Swedish SMEs. However, some studies have also showed that the relationship between strategic planning and financial performance is not undisputable (Boyd 1991). In some studies, researchers have found no relationship between planning and performance or the relationship has been seemingly weak and possibly moderated by some contingency factors (Gable and Topol 1987; Schulte 2007).

Furthermore, it has been argued that high levels of political activity and information usage in strategic planning affect performance. A high level of political activity has been argued to decrease performance because a high level of internal lobbying concerning strategic decisions distracts managers in the strategy-making process (Eisenhardt and Bourgeois 1988). It has also been argued that politics often distorts information and therefore decreases performance (Collier *et al.* 2004). On the other hand, processing information is important when pursuing rationality (Fredrickson 1984). Thus, an increase in information processing capabilities may lead to better performance (Ketchen *et al.* 1996).

Besides the effect of strategic planning on company performance, previous research has also examined the factors that affect the level and types of strategic planning in business organizations. The various antecedents of strategic planning found in these studies can be roughly categorized on three levels: individual manager, organization and the business environment.

At the individual level, previous research suggests that at least the manager's age and educational level affect the use of strategic planning (Kohtamäki *et al.* 2008). At the organizational level, it seems that the involvement of personnel (Collier *et al.* 2004), consensus-based decision making (Dooley *et al.* 2000) and procedural justice (Kim and Mauborgne 1993, 1998) have positive effects on employee commitment and further on the successful implementation of strategy (Hutzschenreuter and Kleindienst 2007). Moreover, the age and size of the organization have also been

argued to have an effect on the strategy process, for example, via decision speed (Forbes 2005). At the business environment level, it appears that at least the munificence, complexity and dynamism of the operating environment impact on the strategy process (Dess and Beard 1984; Hutzschenreuter and Kleindienst 2007). Firstly, it has been argued that entrepreneurial companies seek environments that support growth. Secondly, companies operating in complex environments need a strategy process to cope with all the information relevant for decision making. Thirdly, an extremely dynamic business environment may require the company to react quickly to changes without having resources to develop new strategies. Conversely, in more stable environments companies have the time and resources to plan strategies that are more accurate.

In our earlier research, we analyzed the strategic management competence of SMEs, defined as the firm's ability to involve different actors in a strategy process characterized by formalization and the use of different strategic tools (Kohtamäki *et al.* 2008). This survey-based research indicated that SMEs have relatively low levels of strategic management competence. We know that the managers of these companies tend to oppose strategic planning and the use of external consultants. However, our data also showed that there are many companies that conduct explicit strategic planning. The following qualitative analysis aims to bring more depth to our understanding of strategic planning in SMEs. In particular, we learn to understand how the managers of SMEs perceive strategic planning and why certain managers believe in strategic planning while others oppose it.

## METHODOLOGY

The ontology underlying this research is a weakly constructionist one. According to the constructionist philosophy, reality is constructed and constantly reconstructed within a social community (Berger and Luckmann 1966). This means that the views of the interviewee are not independent from the interviewee's self and beliefs, but the interviewee rather constructs reality in a subjective way and in a dialectic relationship with his environment (Mir and Watson 2001). Therefore, the interviewee's perception of his company's strategy and strategic planning is a subjectively constructed representation of reality.

Discourse analysis was chosen as the method of analysis in this study. Discourse analysis is a method that is often utilized to understand the meanings embedded in speech or text, or the meanings that speech or text might create (see Fairclough 2005). In this study we apply the former approach as we try to understand the meanings that the managers of small and medium-sized growth companies give to their strategies.

Our research object is strategic planning and we are interested in the way the SME managers speak about it. Therefore, the semi-structured interviews

included topics concerning the company's strategy, use of strategy tools, how strategies are explicated, how personnel are involved in strategic planning and whether and how external consultants are used. A total of twenty-two managers were interviewed in late 2006. Most of the interviewees were owner-managers but the sample also includes a few professional managers. All interviews were fully transcribed.

## DATA ANALYSIS

The interview transcripts were read several times in the first phase of analysis. During the course of this process three different discourses of strategic planning were identified (Figure 4.1).

The first group of interviewees focused on problem solving. They emphasized that they do have some idea about the market, but that they do not need formal plans to analyze it. For these individuals, strategy appeared as an *emergent process* of reactive problem solving. Fourteen interviewees were classified into this category. The second group of interviewees emphasized the importance of strategic planning. These

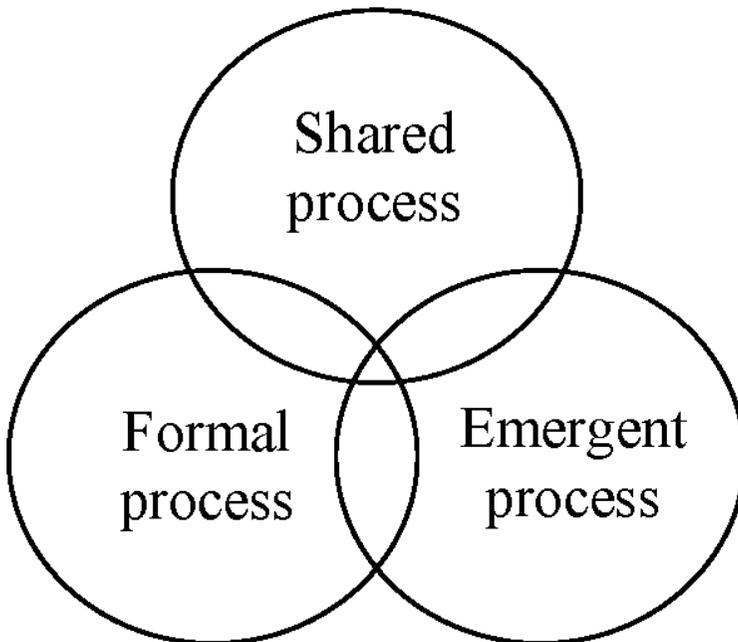


Figure 4.1 Discourses of strategic planning in small and medium-sized growth firms.

managers perceived strategy as a proactive and *formal process*. In the first round of analysis, eight interviewees were placed into this category. However, further analysis pointed to the need to create a third category in which three interviewees were placed. This third discourse was related to strategic planning as a *shared process*. The core idea was that strategic planning is about sharing and developing a strategic idea. For these interviewees, strategy was about creating a shared purpose. The following sections describe the discourses in these three categories in more detail.

### **‘Muddling Through’—Strategy as an Emergent Process of Reactive Problem Solving**

A number of interviewees showed a somewhat critical attitude towards strategic planning. These companies had neither explicated nor actually made their strategy. It was rather the owner-manager’s subjective idea about the nature of the company and its business. However, these interviewees often emphasized that they know their resources and markets. Some seemed to think that strategy is formed in their actions. They argued that it is more important to implement and act than to plan.

*‘I have noticed that I don’t need one [strategy]. Everything is in my head and in my fingers, that what we have done.’*

*‘. . . that it came more like via a belief in what you are doing that we have a lot of competence and good experience within these walls.’*

Mintzberg and others (2003) have argued that strategy is most often formed in the course of actions in the empirical world and that it may be rationalized ex post. However, lack of planning ex ante may lead to actions that are not in line with earlier decisions or are suboptimizing. Some of our interviewees also point out the danger inherent in inconsistent decisions. While they seem to acknowledge the dangers, they are not awfully concerned about them. It almost seems that the actors accept the inconsistencies and do not see either the need or the ways to fix them.

*‘Well let’s say that we are lacking a system . . . ’*

*‘Salesmen just push ahead or project managers sort of work on the current project or tenders blindfolded, so I kind of wake them up by asking if there might be something for us.’*

*‘It is more like a gut feeling about the situation.’*

*‘[I]t was like a gut feeling, more or less.’*

Some of the interviewees seemed to relate this ad hoc approach to doing things to opportunity recognition and persistency. These may reflect some of the elements of entrepreneurial strategies. For example, Mintzberg and others (2003) described a strategy based on a vision of the entrepreneur as an entrepreneurial strategy. An entrepreneurial strategy is based on the entrepreneur's person and is thus crucially dependent on him.

*'I went to a kind of world without knowing what I am up against. I knew I was doing something unique, I believed in myself.'*

Entrepreneurial strategy is probably closer to a 'gut feeling' than an outcome of a systematic strategic planning process. The following quotations reflect entrepreneurial strategies:

*'Well, it's sort of like walking with your eyes open, but we don't have any systematic tool for it.'*

*'No clear plans, it has all been in my head. For real, like running head-first against the wall.'*

*'Frankly, I didn't really know what I was doing, that's the way it is. But I didn't lose my good night's sleep for it; I had an urge to do things!'*

Some of the interviewees appeared critical towards using external sources of support, such as consultants. Welter and Kautonen (2005) found similar results in their study of East and West German small businesses, where some of their interviewees expressed a 'collective distrust' towards consultants as a profession. One of the interviewees cited in their paper explained that this was due to the feeling that consultants are not really interested in small customers but simply want to make some quick money. However, many of Welter and Kautonen's (2005) interviewees also had positive experiences with consultants and other external sources of advice and support. Similarly, a number of owner-managers in the present study reported that especially their accountants provide valuable support:

*'I haven't gone through this business on paper with any outsiders, except that I have a really competent accountant. He has a broad knowledge of the industry; he can evaluate how I'm doing. The accountant has been the external support that I've used.'*

Even though some interviewees seem to be somewhat critical towards strategic planning, their discourse clearly reflects an in-depth knowledge as to the value of their company's resources in the market. It seems that these actors know their resources and their markets, but do not explicate their strategies, use strategy tools or have any strategic discussions. It might be

fair to say that they do not plan their strategies, but rather act tactically without a strategy. As Goldsmith (cited in Taylor 1997: 343) has noted:

Muddling through is a euphemism for failing to plan forward. It means acting tactically and without strategy; it means confusing the means with the end . . . If we continue to avoid facing the facts . . . the epitaph on the grave of our democracy will be: 'They sacrificed the long-term for the short-term, and the long-term finally arrived'.

### **'Strategic Planning'—Strategy Process as Formal Planning**

Altogether eight interviewees reported practicing formal strategic planning in their firms. They say that they do not only plan their strategies but that they explicate them too. These interviewees speak about the steering effect of the strategy process. They speak about the importance of having a clear vision, which shows where the company is going. Strategic management literature recognizes the importance of vision (e.g., Senge 1990; Mintzberg *et al.* 2003), for example, as a tool for the manager to govern the behavior of their employees.

*'Yes it is, we have followed that and, yes, it is much easier to navigate when you have some point towards which you are going.'*

*'That kind of meaning, that sort of recap, that you don't start wandering about aimlessly.'*

The interviewees highlighted the importance of consistency in strategic decisions. Part of the planning process is to make sure that all strategic decisions are carefully considered and consistent.

*'So they [strategic decisions] can't be based on an impulse, but there has been a solid basis created for them.'*

*'That [strategy] is very important. It can change, but the basics, they stay the same.'*

*'Yes, we have developed a strategy ever since the business was started, yes we have changed it and you need to have a clear direction to what you are going to do.'*

*'[W]e have certainly made and written down [the strategy] for ourselves; where we are and what is our market share. [ . . . ] we have analyzed competitors, where they are strong and where we are and so on.'*

The previous quotes also demonstrate the importance of the explication of strategy. A business plan can be read, checked and updated. If

the strategy is not written down, it is more difficult to make changes and make sure that everyone understands them. The interviewees also pointed out that a written business plan makes it possible to monitor the achievement of targets. Also, scholars have emphasized the importance of monitoring and measuring the implementation of strategy (Lorange 1980; Johnson *et al.* 2006).

*‘And then we evaluate how we have succeeded. It is more important than making the strategy, that you monitor it and see how you have succeeded in it.’*

One interviewee also emphasized organizing as a part of strategy. He sees strategy as actions, which lead the organization towards its vision. He also stressed the dynamics that an attractive vision and a plausible strategy may develop.

*‘[W]e were a debtless company when we came here so that’s alright, but then when we made the plan and set the target, then we got forward in an organized way.’*

### Shared Strategy—Strategic Planning as a ‘Shared Process’

Our data contained four managers who talked about strategy as a shared mind-set or a shared idea. They described strategic planning as a shared process in which the entrepreneur involves key personnel. One of the interviewees referred to similar ways of speaking about strategy. He highlighted one of the important topics of strategy discourse: shared purpose. Also Ghoshal and Moran (1996) have referred to the idea of shared purpose as an alternative governance mechanism for a company. A similar way of speaking about strategy reflects similar ways of thinking about it and leads to a shared construction of company strategy. A shared strategy is a shared construction of the actors, which steers their behavior to the same direction.

*‘Yeah, it happens all the time and we have traveled a lot with Heikki [pseudonym] around the world and discussed it when traveling. We have had a very, very, you know, good relationship. No matter which one of us has spoken, it’s pretty sure we have spoken quite similarly.’*

Some of the organizations that participated in the study involved employees in strategic planning. In previous studies, personnel involvement has been found to affect their commitment and even company performance (Wooldrige and Floyd 1990).

*‘[W]e have tried to commit more people to the process over the years, so that it’s not just my and Heikki’s [pseudonym] private thinking but*

*we have tried to share the knowledge to the whole organization and get participants.'*

The interviewee also acknowledged that strategy cannot be brought into the company from the outside. It cannot be implanted, but it needs to be constructed by the individuals who have to implement it. The value of strategy is in the steering effect that is created in the shared strategy process. Thus, the strategy process may be characterized as an interactive learning process.

*'And I have found it very fruitful that dialogue is of a totally different type, it gives more to both parties.'*

*'[I]t cannot be some training, which has a goal, but it is something that you train yourself into while you are making the strategy, you think it over from different viewpoints. It's a learning process for everyone.'*

For these interviewees the strategy process appeared as an interactive learning process, which produces a shared purpose and a shared mind-set (Berger and Luckmann 1966). From this perspective, the strategy process becomes a process of building a common and shared idea instead of a tool to produce an exact plan.

## CONCLUSION

This chapter described and illustrated three discourses of how the managers of growing SMEs perceive strategic planning: (a) strategy as an emergent process of reactive problem solving, (b) strategic planning as formal planning and (c) strategic planning as a shared process.

The first group of interviewees talked about how strategies are formed when solving problems. For this group of managers, strategy is something that is not proactively planned, implemented or monitored. Strategy is rather an idea that develops in the course of handling everyday problems. Strategy is thus a product of an emergent problem-solving process. In prior research there has been a debate whether an emergent strategy is a strategy at all. For example, Porter (1990) has argued that an emergent strategy is not a strategy, because strategy consists of conscious decisions and trade-offs. In this view strategy is deliberate and deductive. On the other hand, Mintzberg and Lampel (1999) argue that the emergent strategy refers to strategic learning. Strategic learning is a shared, adaptive and continuous process that aims to find a strategic fit.

For the second group of interviewees, the strategy process appeared as an interactive learning process. This group emphasized the importance of strategic planning and reported formal planning taking place in their organizations. Moreover, they emphasized not only the importance of strategic

planning, but also that of monitoring and measuring the implementation of the developed strategy.

The third group described strategic planning as a shared process. For these managers strategic planning is both a formal and an informal process. It is an interactive process between the participants of the strategy process, which aims at producing a written document, such as a business plan, that all participants can accept.

This study provided descriptive discourses on how managers of growing SMEs perceive strategic planning. Further research is, however, required to investigate *why* particular managers perceive strategic planning as an emergent, formal or shared process, while controlling for the effects of personal, firm and industry characteristics. Such deeper understanding of strategy in SMEs would constitute a solid foundation for investigating *how* different perceptions of strategy actually impact on the firm's *performance* and *growth potential*. While the managers' discourses reflect their own social reality of strategy, simultaneously their discourses also create a social reality of strategy-making in their organizations (Fairclough 1992). Hence, each of the identified discourses is likely to have different implications on the firm's strategic behavior. Examining these implications remains a task for further research.

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**Part II**

# **Human Resource Management**



# 5 The Impact of Age and Reading on the Desire for Training of Managers in Entrepreneurial Ventures

*George Solomon and David Tomczyk*

## INTRODUCTION

Media attention often focuses solely on the entrepreneur as a brash, forward-thinking individual. However, behind each leader is usually a team of employees who work with and support the entrepreneurial venture, leading it to success. These employees, while rarely given the same level of attention as an entrepreneur, are vital to the continued operation and growth of the business. As such, many entrepreneurs encourage employee training to develop their employees into optimal workers. Employee development, and especially manager training, is such a popular topic that many business periodicals now discuss the benefits and costs of training, and advertisements in such media often include classes and seminars on a variety of management topics.

Not surprisingly, the lack of skilled human resources along with employee training and development has been attributed to why American companies are losing market share in the global marketplace (Lichtenstein 1992; Senge 1994; Cross and Funk 1997; Yochelson 2000; Carnevale 2005). *Winning the Skills Race*, a report issued by the Council on Competitiveness, states that there are severe skill shortages in every region of the United States that threatens the very foundation of American competitiveness (Yochelson 2000). A National Federation of Independent Business Small Business Poll entitled *The Changing Search for Employees* indicates that 71 percent of small employers feel that qualified employees are 'hard' to find (Dennis 2001). In addition, a 2004 Administristaff survey of small and medium firms found that the most significant problem facing these organizations was finding and retaining competent employees. Although respondents were somewhat optimistic about the future, they were still concerned about providing adequate training and motivation for employees (Administristaff 2005). As a final point, the Bureau of Labor Statistics projects that during the next decade, 30 percent of new jobs will require some postsecondary education or vocational training (Carnevale 2005).

Assuming current projections and research findings hold true, owners and managers of small and medium enterprises will have to rely on less qualified employees, requiring more training and development in order to be productive, as well as find ways to retain existing productive employees

while continuing to train and develop them (Carnevale 2005). As a result, these firms must consider employees as an investment, much like new machines, and apply the same effort to keep employees well maintained. Training and development of employees becomes an imperative.

## TO TRAIN OR NOT

Employee training and development is provided by employers for numerous reasons. Initially, employers may wish to orient new hires to the organization or teach them how to perform in their positions. Many organizations later wish to improve the performance of some employees or prepare other employees for pending promotions or revisions to their current positions in terms of design, processes or technology (Fisher *et al.* 1999).

Since 1991, more than twenty-one million new jobs have been created, and the majority of these have been in small businesses (Dennis 2001). Small employers have become increasingly sensitive to the need for flexible employees in their workplaces. Unfortunately, many small firms have learned the hard way that it is usually cheaper to retain and retrain workers than fire and rehire (Wells 2001). Thus, there appears to be a renewed emphasis in ongoing training and development of employees in small and medium enterprises.

A recent study conducted by the American Society for Training and Development concluded that there is evidence of a direct relationship between how much a firm spends on employee training and the percentage of increase in organizational performance (Pangarkar and Kirkwood 2002/2003). Thus, it is evident that organizations may be rewarded financially for investing in their employees through increased profits and low employee turnover. Yet small firms are not training their employees.

Tracey (2001) identifies reasons why owners and managers tend not to train and develop their employees. These include: (a) knowing how to give employees the training they need, (b) not knowing what materials are relevant to necessitate proper training, (c) not knowing how to measure the effectiveness of training and (d) not knowing how to encourage employees to use the new skills learned or evaluating whether learning has actually occurred.

## TRAINING ACCORDING TO THE EXPERTS

Seventy percent of all employers provide some type of formal training for employees (Noe 1998). In one research study, 75 percent of respondents in firms with fewer than five hundred employees received some training, compared with 82 percent in companies with more than one thousand workers (Schaaf 1998).

Small and medium enterprises can raise organizational productivity by training and developing their employees. By conducting training, these firms can ensure that the right people learn the right things at the right time

and in the right priority order (O'Connor *et al.* 1996). Due to the size and quality of the labor market that has been projected for the next decade, it is imperative that small and medium enterprises have a better understanding of and ability to conduct employee training and development. Interestingly, Dennis (2001) contends that 64 percent of small employers have elected to increase training in response to labor shortages.

There is a lack of research on employee training in small firms, particularly by firm size. There are many questions of interest. What are the areas of training owners seek for their managers? How do factors like age and amount of reading impact the perceived need for training? Our pilot study attempts to answer these questions.

## METHODOLOGY

### Research Problem

This chapter will examine whether the desire to train managers is moderated by two factors: the age of the entrepreneur and reading popular business periodicals. In the first case, we hypothesize that older entrepreneurs have a different view of manager training than their younger counterparts. The second hypothesis is that reading periodicals like the *Wall Street Journal* and *Entrepreneur* affects an entrepreneur's desire for employee training. The actual impact of both age and reading is beyond the scope of this chapter. Rather, the goal is to determine if there *is* an impact, and as such, if these factors warrant further exploration.

### Sample and Data

The data for this chapter comes from a small business training and Internet questionnaire conducted by the Center for Entrepreneurial Excellence (CFEE) at George Washington University. CFEE sent the survey to three hundred entrepreneurs in the DC area. One hundred and thirty-five surveys were completed and returned to the Center. The survey used Likert scale questions where the entrepreneur noted how much he agreed with a statement or how useful a given item is to his or her business. Please see Appendix 5.1 for the exact text of the survey questions.

### Methodology

This chapter uses two methods to determine whether age or reading periodicals impacts perceived employee training needs. For testing differences across ages, we used a repeated measures ANOVA test to highlight the impact of age on training proclivities. One challenge in using this test was that the sample groups for each of the three age categories (18–25, 26–35 and 36–45) are different sizes. A Box's M test resulted in a  $\chi^2$  value of

368.95 and a p-value of less than .0001, which means the variance-covariance matrices are not equal. As such, to use a repeated measures ANOVA to evaluate the null hypothesis that the means of the three sample groups are the same across each of the training topics requires a Greenhouse-Geisser epsilon adjustment. This adjustment creates an approximate F-test for effects involving the repeated measures. It does so by reducing the numerator's and denominator's degrees of freedom by the following factor:

$$\varepsilon = \frac{[\text{tr}(\Sigma - J\Sigma/p)]^2}{(p-1) \text{tr}(\Sigma - J\Sigma/p)^2}$$

where J is a  $p \times p$  matrix comprised solely of 1's for all its elements.

To minimize the family-wise error in the model, we used Bonferroni's Method. Since we have nine groups, the  $\alpha$  for each test was set equal to  $0.5/9 = 0.00556$ . In addition, an ANOVA test for differences between the mean vectors for each age group will show if any differences come from combining all of the training variables into one model.

For the effect of reading on an entrepreneur's view of training, the results of the survey were summarized into four variables (three dependent and one independent). The independent variable was called Literacy. Each respondent was asked to rate on a five-point Likert scale how useful they found nine written sources of information (*Wall Street Journal*, *Entrepreneur*, *Newsweek*, *BusinessWeek*, *Time*, *Inc.*, *Fast Company*, trade journals and textbooks). The values were coded as 0 for 'Extremely Useful' to 4 for 'Not Useful' and summed for each respondent. The range of responses was 0 to 18. In order to preserve degrees of freedom, we established three ranges of Reading: High reader (0–6 points), Medium reader (7–12 points) and Low reader (13–18).

For the dependent variable, each entrepreneur was asked to '[i]ndicate which areas you believe your managers need additional management training' by selecting the corresponding answer in a five-point Likert scale. We then created three dependent variables by combining the nine types of management training into three overarching categories and determined a category score by summing the scores of the subordinate types of training as shown in Table 5.1.

Since the three samples of reading levels are of different sizes, a Box's M test was again used to determine if the variance-covariance matrices are statistically similar to each other. The  $\chi^2$  value for the test is 18.91, which is less than the critical value of 23.99, given three variables and twelve degrees of freedom, which means that the hypothesis of equal variance-covariance matrices is not rejected. Since the samples have statistically equal variance-covariance matrices, we used a discriminant analysis to determine if there is a significant difference between the three groups' means. The discriminant analysis was followed by using Tukey's method on each of the three conglomerate dependent variables to verify any difference between the group means.

*Table 5.1* Categorization of Training Types

<i>Personal Development</i>	<i>Employee/Subordinate Development</i>	<i>Business Processes</i>
Interpersonal financial communications	Listening and giving useful feedback	Business and basic skills
Conflict management and problem solving	Providing career development to employees	Quality management training
Time management	Training employees on the job	E-commerce

**INTERPRETATION OF RESULTS**

The repeated measures ANOVA test for age found statistically significant differences between at least one of the three age categories for each type of training (Table 5.2). In addition, the MANOVA tested and verified that at least one of the mean vectors for the three age categories is statistically different from the others. Thus, the age of an entrepreneur affects whether or not he believes that his employees require additional management training. The high test statistics for all of the training variables indicate that not only does a difference exist, but that the difference is strong across all of the data.

*Table 5.2* Repeated Measure ANOVA for Age vs. Demand for Training

<i>Type of Training across Categories</i>	<i>F value</i>	<i>Critical Value<sup>a</sup></i>	<i>Statistically different?</i>
Interpersonal communications	401.04	2.8344	Yes
Listening and giving useful feedback	471.70	2.8344	Yes
Conflict management and problem solving	341.08	2.8344	Yes
Providing career development to employees	240.76	2.8344	Yes
Time management	390.25	2.8344	Yes
Training employees on the job	439.69	2.8344	Yes
Business and financial basic skills	256.65	2.8344	Yes
Quality management training	291.60	2.8344	Yes
E-commerce	11927	2.8344	Yes
<i>MANOVA for Age versus Training types</i>	<i>Test Statistics</i>	<i>P-Value<sup>b</sup></i>	<i>Statistically different?</i>
Uncorrected Model	$\lambda$ value=2.26	0.0297	Yes
With Greenhouse-Geisser epsilon <sup>c</sup>	F value=3.47	0.0006	Yes

<sup>a</sup> Calculated at  $\alpha = 0.005556$

<sup>b</sup> Calculated at  $\alpha = 0.05$

<sup>c</sup> Greenhouse-Geisser epsilon = 0.7537

Table 5.3 Discriminant Analysis of Reading vs. Demand for Training

<i>Eigenvalue</i>	<i>Eigenvector</i>	<i>F value</i>	<i>P-Value*</i>	<i>Statistically Different?</i>
0.0200	(0.3346 0.4892 0.9758)	0.47	0.8309	No
0.0093	(0.8731 0.3040 0.1328)	0.45	0.6379	No

\* Calculated at  $\alpha = 0.05$

The discriminant analysis, on the other hand, found no such differences between the high, moderate and low categories of reading across each of the conglomerate training variables (Table 5.3).

While combining the training variables into three groups may mitigate some existing differences, the fact that the greatest difference between means across all of the groups is less than 0.43 casts serious doubt that a discriminant analysis of any individual training variable will yield significant differences (Table 5.4). The goal of using Tukey's studentized range tests was to capture any possible variation that may have been suppressed or minimized by evaluating the model as a whole. However,

Table 5.4 Tukey's Studentized Range Tests

<i>Personal Development Training</i>				
<i>Literacy Group Comparison</i>	<i>Difference between Means</i>	<i>Confidence Limits*</i>	<i>Statistically different?</i>	
High—Moderate	0.0586	0.7809 0.8981	No	
High—Low	-0.2414	-1.0392 0.5564	No	
Moderate—Low	-0.3000	-1.2899 0.6899	No	
<i>Employee Development Training</i>				
<i>Literacy Group Comparison</i>	<i>Difference between Means</i>	<i>Confidence Limits*</i>	<i>Statistically different?</i>	
High—Moderate	-0.0914	-0.9025 0.7198	No	
High—Low	-0.1979	-0.9687 0.5729	No	
Moderate—Low	-0.1065	-1.0629 0.8499	No	
<i>Business Skills Training</i>				
<i>Literacy Group Comparison</i>	<i>Difference between Means</i>	<i>Confidence Limits*</i>	<i>Statistically different?</i>	
High—Moderate	-0.3534	-1.3991 0.6922	No	
High—Low	-0.4295	-1.4232 0.5641	No	
Moderate—Low	-0.0761	-1.3089 1.1568	No	

\* Calculated at the 98,33% level

the tests confirmed that the groups are similar and found no significant variances between the groups. The results indicate that an entrepreneur's reading behavior does not affect whether the entrepreneur believes his employees need management training.

## DISCUSSION

The results of the tests were surprising in two key ways. The first is that the repeated measures ANOVA of age resulted in strong results. While some variation was expected, a strong rejection of similar means across all of the training variables greatly exceeded the anticipated results. Further exploration into the effects of age on entrepreneur's views of training for management could yield fascinating generational differences in views of training. It would be interesting to see which of the age groups differ and by how much that difference is. The repeated measures ANOVA does not indicate how persistent the different views are—that is, a follow-up study could explore if the differences are generational trends. Extending the survey to older entrepreneurs could provide more data points on which to develop a prediction of future trends in managerial training.

The second surprising conclusion was that reading business materials, including magazines, textbooks and trade journals, has no effect on entrepreneurs' desire to seek training for their management. Many such documents discuss the importance of training and several include training references or advertisements. Two possible interpretations of the results indicate that entrepreneurs may ignore such material, or they instead have formed their views on training prior to reading and, as such, use such advertisements and articles to maintain those views. For example, if an entrepreneur thinks that training is too time-consuming, reading advertisements for week-long training will do little to change that perception. Follow-up studies should examine if advertisements impact entrepreneurs' perceptions of training and whether or not such views are mutable at all.

We also faced several limitations when conducting this survey. All of the respondents were male. As such, we do not know if the lack of gender diversity influenced our results as women entrepreneurs may respond differently than men. In addition, we had fewer than three respondents for the 46–55, 56–65 and 66 and over age categories, and as a result, they were excluded from the analysis. While the results clearly indicate that age influences demand for management training for managers, in order to determine the presence of generational trends, we need more respondents from these categories. Finally, the sample size we worked with was small ( $n = 102$ ) after we removed respondents who did not complete the necessary portions of

the survey. We would like to conduct a survey with a larger response rate to see if the results are consistent. We believe that our results indicate the presence of a strong difference for age and the lack of such a difference in reading that will be born out in future studies.

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**APPENDIX 5.1 SURVEY QUESTIONS AND RESPONSES**

Below is the text of the survey questions as they were presented to the entrepreneurs.

7. Indicate which areas you believe your managers need additional *management* training by circling the most appropriate response.

Strongly Agree=SA, Agree=A, No Opinion=No, Disagree=D, Strongly Disagree=SD

<i>Interpersonal communications</i>	SA	A	NO	D	SD
<i>Listening and giving useful feedback</i>	SA	A	NO	D	SD
<i>Conflict management and problem solving</i>	SA	A	NO	D	SD
<i>Providing career development to employees</i>	SA	A	NO	D	SD
<i>Time management</i>	SA	A	NO	D	SD
<i>Training employees on the job</i>	SA	A	NO	D	SD
<i>Business and financial basic skills</i>	SA	A	NO	D	SD
<i>Quality management training</i>	SA	A	NO	D	SD
<i>E-commerce</i>	SA	A	NO	D	SD

9. How useful are the following publications in helping you deal with management and training issues facing your business? Circle the most appropriate answers.

Extremely Useful=EU, Useful=U, No Opinion=No, Somewhat Useful=SU, Not Useful=NU

<i>Wall Street Journal</i>	EU	U	NO	SU	NU
<i>Entrepreneur</i>	EU	U	NO	SU	NU
<i>Newsweek</i>	EU	U	NO	SU	NU
<i>Business Week</i>	EU	U	NO	SU	NU
Trade journals	EU	U	NO	SU	NU
Textbooks	EU	U	NO	SU	NU
<i>Time</i>	EU	U	NO	SU	NU
<i>Fast Company</i>	EU	U	NO	SU	NU
<i>Inc.</i>	EU	U	NO	SU	NU

13. My age range is:

- \_\_\_\_\_ 18–25
- \_\_\_\_\_ 26–35
- \_\_\_\_\_ 36–45
- \_\_\_\_\_ 46–55
- \_\_\_\_\_ 56–65
- \_\_\_\_\_ 66 and over

## 6 HRM in SMEs

### Linking Embedded Human Resources Practices to Performance and Employee Well-Being

*Essi Saru*

#### INTRODUCTION

At the end of the 1990s research on human resource management (HRM) was ignored in many writings on small and medium-sized enterprises (SMEs) (Wilkinson 1999). However, that situation has now changed and HRM within smaller contexts has attracted considerable research interest (Bacon and Hoque 2005). First of all, the theoretical foundations in general were concentrated on by researchers and academics (e.g., Hornsby and Kuratko 1990, 2003; Bacon *et al.* 1996; Heneman *et al.* 2000; Nguen and Bryant 2004; Cardon and Stevens 2004; Bacon and Hoque 2005; Harney and Dundon 2006; Marlow 2006), as were the unique features of small but growing firms (Mazzarol 2003; Kotey and Sheridan 2004; Kotey and Slade 2005; Barrett and Mayson 2007). Questions about recruitment and staffing have since become one of the most studied SME topics (e.g., Carroll *et al.* 1999; Taylor 2006; Kotey and Folker 2007; Barrett *et al.* 2007). This growing interest can also be seen in the fact that special issues of academic journals have been devoted solely to the discussion of HRM in SMEs (e.g., *Entrepreneurship Theory and Practice* [Fall 2000] and *Human Resource Management Review* 16 [2006]).

Previous literature on the subject has aimed at describing the current state of HRM in small firms as well as finding ways to show that HRM also matters in the small context. One of the difficulties of this research subject is that defining the terms of HRM and SMEs is problematic (Katz *et al.* 2000). Katz and others (2000) claim that the multitude of definitions makes the management of human resources confusing for both scientists and practitioners. Therefore, for the purposes of this chapter, the term *small firm* refers to an organization with over ten, but less than fifty, employees. In addition, a small firm is regarded as an established and growing firm. This further clarification is needed because there is a difference in HRM between new and established firms as well as between stable and growing firms (Cardon and Stevens 2004).

HRM, on the other hand, is a more complicated concept to define. It is often characterized as informal, which indicates that there are no written HR procedures and that HR is the responsibility of the manager (Hornsby and Kuratko 2003; de Kok and Uhlener 2001). Furthermore, it is restricted by scarce resources such as time and money. To overcome this difficulty Cassell and others (2002) call for a SME-friendly way to operationalize HR practices. They propose that we talk about practices that are actually applied in SMEs, e.g., selection, appraisal, rewards and development. These functional forms of HRM derive from the work of Tichy and others (1982) and have been applied to the small context by Sels and others (2006a) and Cassell and others (2002). It can be argued that these functional forms of HR remain valid because there is a broad understanding of the meaning of these concepts among practitioners and scholars (Cardon and Stevens 2004).

Therefore, HRM in this chapter is also referred to through these functional forms of HR, although it must be kept in mind that these practices can be well developed and include new management initiatives (see Bacon *et al.* 1996). In addition to these functional forms of HR, open communication and the availability of competent and committed staff are also relevant factors for small firms (Finegold and Frenkel 2006; Bacon and Hoque 2005; Mazzarol 2003; Rutherford *et al.* 2003; Cassell *et al.* 2002; Hornsby and Kuratko 1990, 2003).

The aim of this research is twofold. Firstly, the aim is to briefly review a few HRM models for small firms and point out the effects of HRM on the overall performance of an organization. Secondly, the aim is to describe existing HRM practices in one small but growing firm and to make explicit those practices' connection to employees' well-being in that organization. The underlying construction is that the meaning of HRM can be explained through the concept of embeddedness. This refers to the observation that in a small company the manager responsible for the success of the company may not see any of his/her basic daily management initiatives as being especially human resource practices. Nevertheless, HRM practices are present and applied regularly. Therefore, it is argued that HRM is embedded in the daily business routines of a manager and in consequence difficult to explicate.

## LITERATURE REVIEW

### HRM Models for Small Firms

HRM in SMEs can be studied by modeling or by concentrating on a bundle of HR practices. HRM in SMEs has also been characterized as *small is beautiful*, but also as a *bleak house* (e.g., Bacon *et al.* 1996). Harney and Dundon (2006: 49), on the other hand, have stated: 'HRM

in SMEs is . . . neither beautiful nor bleak but rather is best understood as complex'. They refer to previous studies that indicate that HRM research does not adequately capture the complexity or heterogeneity of HRM in SMEs. By complexity they refer to the close link of an SME to its external environment and the complexity of its internal dynamics. Heterogeneity on the other hand refers to the multitude of different SMEs and their different ways of coping with the competition. With these factors in mind, Harney and Dundon (2006) present an open systems model to describe HRM in SMEs.

In their model, Harney and Dundon (2006) argue that both external factors such as market structure, HR supply, and industry or sector and internal factors such as ownership, management style and size affect emergent HRM in small firms. Emergent HRM means that it is not formally planned but is based on and takes its form from the current external and internal factors of the firm. Harney and Dundon (2006) state that this emergent HRM can lead to better labor productivity, flexibility, social legitimacy and the informality/formality of relations. This means that although HRM emerges from the interaction of external and internal factors, Harney and Dundon's (2006) model can be regarded as strategic because it aims at improving our understanding of the situational factors involved in HRM.

The difficulty of their model is that all of these factors are complex to measure and it is challenging to show the link to improved performance. However, Harney and Dundon (2006) make the important conclusion that in the case of small firms one needs to pay more attention to the issue of survivability and should not only discuss competitive advantage. Therefore, managers often work on an intuitive basis and apply more informal measures such as ensuring that there is work to do all the time (the 'keeping busy' measure) (Jarvis *et al.* 2000). As Jarvis and others (2000) point out, the amount of cash available is also often regarded the most relevant performance measure.

Cassell and others (2002) present a different model that assumes that the application of a single HR practice is need based rather than being the result of a strategic decision. They propose that the decision to apply an HR practice in a small firm is affected by prior HR experiences, resource availability and a managers' interest in HR (see also Finegold and Frenkel 2006). If a certain HR practice is implemented its outcomes are monitored and its subsequent evaluation then possibly affects the next application of a different HR practice. This model may not be visible in a small organization, but HR practices are often unconsciously applied just as this model suggests, especially in the early stages of a new firm.

Previous studies on HRM in SMEs tend to examine the existence of HRM practices without examining the impact of the HRM practices on SME performance (Zheng *et al.* 2006). Zheng and others (2006) argue

in their model that HRM affects outcomes that have a direct effect on performance. All three models capture the complexity of managing a small firm's human resources. Furthermore, despite the complex environment, the small context makes it easier to see the effects of HR practices on a firm's performance and the small context is therefore at least suitable for this type of study (Sels *et al.* 2006a).

### Formal and Embedded HR Practices as Performance Drivers

One of the most crucial issues in the HRM performance discussion is the problem of hiring employees who are competent and would also fit into an organization's current team of employees and the work culture (Marlow 2000; Finegold and Frenkel 2006). As Marlow (2000) points out, the benefits of choosing a new employee who fits outweigh the potential costs of employing someone well qualified who does not fit into the company work culture (see also Heneman *et al.* 2000). The selection process is important for a small firm because the costs of a selection error are very high (Heneman *et al.* 2000) and it is very difficult for a company to unburden itself of the wrong choice. The better the choices that are made when choosing new employees, the more the organization is likely to benefit.

Investments in training have direct and indirect effects on total performance. However, as Patton and Marlow (2002) argue, there are reasons why small firm owners are reluctant to invest in training. These include ignorance of potential benefits, time issues, fear of increased employee mobility and a lack of evidence for enhanced firm performance. Informal training is therefore preferred.

The role and importance of formal and informal HR practices is growing in SMEs because it is essential to keep employees satisfied with their work. They need to compete with larger organizations for competent workers. Therefore, questions of well-being and the work climate become essential to consider when attracting and retaining employees. There is no single thing that affects SME performance but the elements discussed here would seem to be the ones SME managers show concern about. The question of whether HRM is embedded in daily routines or formally planned practices does not really matter if a link to performance can be detected.

For all organizations it is ultimately the performance of the organization that is the driver for business decisions. Therefore, the link between HRM and performance is at the top of such discussions. It has been stated, and to a certain extent also proved, that HRM has an effect on performance in large organizations (e.g., Delery 1998; Lähteenmäki 2001; Guest 2001, 1997), as well as small ones (Chandler and McEvoy 2000; Sels *et al.* 2006a, 2006b). However, this area still needs more research to be fully demonstrated.

## METHODOLOGY

HRM in SMEs has been studied through a variety of approaches and methods. There have been quantitative surveys (e.g., Horsnby and Kuratko 1990, 2003; Carroll *et al.* 1999; Nguen and Bryant 2004; Bacon and Hogue 2005; Kotey and Slade 2005) as well as qualitative case studies, such as those by Harney and Dundon (2006), Barrett and others (2007) and Cassell and others (2002). Both forms of research have been able to bring important issues to researchers' attention, but so far research has not been cumulative enough and there is no common agreement on what the most central factors are with regard to HRM within small firms. This is why there is a need to take a closer look at a single small company to see how they deal with human resources and in doing so try to verify some of the findings from previous research. Therefore, this is a qualitative case study with a practical perspective. Case research has been popular in small business research for some time (Curran and Blackburn 2001) and it has a long history in the social sciences (Perren and Ram 2004). This is very understandable because the small context makes it easier to keep the approach simple. Moreover, the case study's ability to provide descriptive results (Eisenhardt 1989) is appropriate in this context.

### Data Collection

The data for this study has been gathered from interviews with the case organization's owner-manager and some of its employees. In total, ten interviews were conducted during December 2006 and January 2007. They lasted from thirty to sixty minutes and they were recorded (with the permission of the interviewees) and transcribed afterwards. The aim of the interview with the manager was to develop a thorough picture of the organization, its values and development plans. The employees, on the other hand, talked about their work and about the social side of the work environment. The aim in their interviews was to gather their views on the management process and discover possible areas of agreement and disagreement.

The overall purpose of the interviews was to find out if the functional forms of HR are relevant for this organization and which elements of HR the employees value. This was carried out by analyzing the transcribed interviews according to three functional HRM elements: recruitment, training and communication. These three elements have been regarded as central for SMEs (Finegold and Frenkel 2006). The connection to overall performance can be discerned from the interviewees' impressions and descriptions. Financial performance is not considered here.

### Case Description

The case organization is a sales organization in the IT field. The company sells and markets IT equipment and software to public- and private-sector

organizations. It consists of a group of organizations with two new affiliations and a separate service organization. The parent company and the service organization together employ about twenty people. There are about ten more employees in the affiliations but they are not included in this study.

The organization is led by a young owner-manager who acquired the company five years ago. The company had been in operation for over twenty years and it was locally well established but it needed a new and fresh management style. The new manager started to train the workers and demand more of them. New work values such as respect for others, togetherness and the joy of working were brought in. The cumulative effect of the new values resulted in improved performance. The values also serve the purpose of keeping the organization flat and flexible and therefore give employees clear areas of responsibility for their own work.

Since the change in management the number of employees has grown, financial results have improved, a service-oriented organization has been established and new affiliations have been acquired. All those changes have taken the business to a new level. Crucially, a straight link between the applied management practices and company performance can be detected. These practices are described in more detail in the following section and the results can be linked to the HRM models presented earlier.

## FINDINGS

### Recruitment Channels

The factor that separates this particular organization from other organizations operating in the same field (either large or small) is their attitude towards new recruits. The company does not require that the new workers be professionals when they begin their career in this organization. Instead, they educate people that seem to have the potential to grow and develop and who enjoy the sales job. They are happy to recruit young people as interns or recruit someone they know from previous contacts who is seeking their first or second permanent job. The newcomers start with smaller projects and then continue to bigger ones when they have acquired enough skills. This organization is in a fortunate financial position to be able to operate this way. The manager describes it like this:

*'I do not care whether the sellers are highly educated or not. If you have the right sales attitude and human relations skills you can do the job.'*

The company has recruited many new employees within the past two years. The recruitment process has been both need based (see Cassell *et al.* 2002) as well as strategic. The field of information technology is growing and clients are demanding more high-quality services. Therefore, to be able to

offer competitive services and stay in business the organization needs to have new talent that is developing all the time as well as be willing to invest in recruitment and training.

Their recruitment process is very typical for small firms (e.g., Cardon and Stevens 2004). They have chosen to use informal networks and word of mouth (Cassell *et al.* 2002) as their major recruitment channel, although they have also tried formal recruiting through newspaper ads. The manager also sees the difficulty in finding the right people to fit the current team of employees and states that there is valuable time and money lost if:

*'[T]he one you have recruited proves to be unsuitable to the profession and you have to start the recruitment process all over again. If you see potential in someone it is wise to bring that person into the company so that they can grow with the company, even if you would not need any new employees at that moment.'*

Although informal recruitment methods are typical for small companies, some recent studies show that as a firm grows formality actually brings better results in finding people with the right attitude (Barrett *et al.* 2007). Another negative side to informal recruitment is that it tends to be exclusive (Carroll *et al.* 1999), which means that there are many potential competent recruits who do not get a chance to apply for the job. Hence, it can also be costly because there are no guarantees that the person selected is going to cope well in the job and bring in the results that are expected.

The idea behind informality in recruitment is that a network recruitment will find employees about the same age, who think similarly about their work and are highly competitive. That makes the group very productive and it also increases their performance. This is how one of the employees describes it:

*'I did an aptitude test before I came here because it was clear from the beginning that they wanted a guy that can fit in and gets along with the others. We all get along well, which is important, even more so than I thought in the beginning.'*

## **Training and Learning**

Some training and personnel development is essential for the success of every firm (Cardon and Stevens 2004). For the case company this means formal classroom training and also learning at work. Learning at work refers to socializing the newcomers in the culture of the workplace and also learning to do the job. The company aims at training employees regularly. This again supports the results of the study by Cassell and others (2002). In their study they found that the training that small companies attended was tailored to specific, identified needs.

In the case company here most of the training was carried out by the representative heads of the product lines. In addition to product training some of the employees also attended leadership courses. Product training is seen as a prerequisite for keeping the sales licenses valid and the business in operation but it demands resources from the company. When an employee is in training he misses a day at work, which means a reduction in sales. This has been dealt with by assigning individual product lines to different sellers to ensure a more even distribution on training days. The company has had positive experiences with this type of training. It was noted that in their line of business the products change so fast that constant retraining was necessary in order to keep knowledge up-to-date.

*‘When you train several times a year you do not necessarily see the benefits of that training but if you miss training for two years in a row then you are automatically out of the game. You always learn something even though you do not notice it right away.’*

As training is time-consuming and requires resources (both money and time) (Kotey and Folker 2007) the question raised is: How well can a company take advantage of the training provided and benefit from it without losing any valuable income or wasting resources? The solution to this equation affects the performance outcome.

### Open Communication

The importance of open communication was one of the most significant findings gained from the interviews. All the employees interviewed emphasized that this was a prerequisite for a good work environment and the development of the willingness to perform to the best of their ability. In a small organization communication is usually easy to do and a natural part of daily work. This is because of the inherent informality and close relationship between the manager and the employees. Information flows naturally up and down and there is no question that the employees would not know the meaning of their own work and its importance to the whole performance of the firm. Therefore, formal meetings are seldom needed in the company. The employees sense this:

*‘One thing that is good here too is the openness. The management does not have any big secrets and we talk very openly inside the company about business issues.’*

Appraisals can be regarded as a part of the communication in an organization as well as an opportunity for performance evaluation. An appraisal discussion is a formal management practice that in a bigger organization is an established procedure. Small firms tend to talk informally but in this organization

the manager was aware of and interested in the HRM side of business and introduced formal appraisals at the beginning of his career as a manager.

At first the discussions were held twice a year but that turned out to be too often and they changed it to once a year. Having tried this for a while he decided that it would be more profitable to let the employees choose a time for discussion when they felt that they needed to discuss something. According to the manager, 'the initiative has to come from the employee because they need to want to talk and be interested in the discussions'. At this point only one or two have wanted to have an official discussion. The conclusion drawn from this was that the company is so small that the employees talk with their manager about their work and problems anyway and it does not need to be at a set time and place. They still conduct appraisals in the company but on a voluntary basis.

In brief, they went from official appraisal to a more informal and voluntary discussion. This supports the finding by Cassell and others (2002) that appraisals are used in small companies but formal systems are rare. Although the small company manager is aware of different HR practices and their value, these practices are not necessarily worth applying in a small company. The conclusion drawn here is that the manager had a positive attitude towards the appraisals but the experience was not as good as the intention behind it, and therefore they were not formally applied after the trial round.

Instead of conducting discussions officially the manager has introduced some unofficial practices that make up for the missing or rare appraisals to some extent. One unofficial practice is a lunch provided for the employees by the company on the last Friday of every month. They sit down and relax together and talk about what is going on with their work. These Friday lunches take care of the more informal side of intercompany communication quite well and it also increases solidarity and togetherness among the employees. The manager says:

'I try to take advantage of these events and talk to everyone and be part of the team. It is very informal and everyone feels that there you can bring up issues about work that you need to talk about.'

Thus, it would appear clear that the appraisal discussion is embedded in the informal meetings but official discussions are also available for those who feel they need them. The more the employees in the case company receive feedback, the better they tend to perform. Ultimately, there is a clear link between company performance and the open communication style of the company.

### **Company Strengths as Prerequisites for Good Economic Performance**

This company has taken its main strength from its pay structure. Pay is based on sales commission, which means that it is tied to performance. This

has the effect of ensuring that people are hardworking and self-motivated and the manager does not need to get involved in supervising staff.

The basic driving force behind the whole business is that they do things together. This means that they are able to rely on each other for help. Their competitive advantage stems from their good customer service and respect for the customer. They try to get better at what they do all the time and also develop as people. The bottom line supporting everything they do is that the work must be fun. Thus, it is possible to state that the company's HR practices have emerged from a combination of internal and external demands (see Harney and Dundon 2006).

In general, the workers are very happy with the company. The social network that they have there is excellent and it makes them want to work for the company. This is how the employees describe the atmosphere.

*'It somehow feels like the atmosphere is the thing that keeps people here. We are a group of young, ambitious and competitive people. It is easy to be here.'*

*'It never bothers me to come to work. We understand each other quite well. I know that in some other companies the situation is not this good but here no one tries to steal your customers if you are gone.'*

They are embedded in the organization and feel that it is their responsibility to do their share of the work in order for the company to meet its objectives. The sales job itself is not something that ties them to this particular company, rather it is the feeling of enjoyment gained from being part of the job's social network and the work itself. It seems that they are thriving in their work. This concept of thriving is associated with social embeddedness in an organization (Spreitzer *et al.* 2005). When people feel that they are learning and have a sense of being alive and vital they are said to be thriving at work. Thriving is the subjective experience an employee has with regard to how they feel they are doing in a job if it is experienced as leading them in a positive direction (Spreitzer *et al.* 2005).

*'I could not imagine working in a bigger company. I need to have a manager to look after me at work and to ask advice from if I need suggestions on another way of working.'*

## DISCUSSION

The successful performance of the company can be explained through the concept of embeddedness. It is a concept taken from economic sociology and it has gained popularity since the publication of Granovetter's (1985) writings. When Granovetter (1985) introduced the concept of embeddedness

he argued that behavior and institutions are constrained by ongoing social relations and they cannot be studied independently. Later Uzzi (1996) argued that organization networks operate with a different logic to those of markets and this logic is referred to as embeddedness. It has been called network embeddedness and these networks are said to be related to both individual and group performance (Granovetter 1985; Uzzi 1996; Sparrowe *et al.* 2001; van Emmerik and Sanders 2004). The spread of this concept into economic sociology has been questioned and criticized by Krippner (2001). However, at the beginning of the 1990s, the need to understand the effect of social structures on economic performance was increasing (Uzzi 1996) and the concept became relevant.

Network embeddedness can be seen as a relationship between employees in one company (van Emmerik and Sanders 2004) or between several companies (Granovetter 1985; Uzzi 1996; Sparrowe *et al.* 2001). An employee may also become embedded in the job he or she is doing. Job embeddedness was introduced by Mitchell, Holtom, Lee, Sablynski and Erez (2001). They describe it as being like a net or web in which an individual can become stuck.

Job embeddedness consists of three aspects: first, the formal and informal connections between a person and institutions or other people (links); second, an employee's compatibility or comfort with an organization and with his or her environment (fit); and third, the cost of material or psychological benefits that may be forfeited by leaving a job (sacrifice) (Mitchell *et al.* 2001). This means that the more an employee is connected to the organization he works for and the better he fits in then the more embedded he will be and thus less likely to leave. Moreover, if leaving involves a major financial sacrifice (loss of vacation days, loss of benefits, etc.) then employees usually do not leave. Job embeddedness includes elements that tie employees together as a group both on and off the job and this is seen as a key mediating construct in employee retention (Mitchell *et al.* 2001).

This conception of embeddedness is close to the modes of commitment introduced by Allen and Mayer (1990). The affective, continuance and normative components of commitment are similar to the definition of job embeddedness. It is important to note that embeddedness could have been labeled commitment. However, the concept of embeddedness was chosen because it covers a wider range of issues (see Mitchell *et al.* 2001) and it better fits with the idea of an employee being embedded in a social network and the embeddedness of HR practices in a manager's routines. Therefore, the concept has been applied to this chapter instead of commitment.

These two forms of embeddedness explain the case company performance. First of all, the HR practices are embedded in the daily routines of the manager, which makes the management process informal and flexible. In brief, the HR practices are part of the recruitment, training and communication decisions. Second, the employees are embedded in the social network as well as the job they are doing. Professionalism is the main driver

of their work as it requires a high level of expertise. However, the social network has become the driver for good employee performance and a reason for staying in the company. This means that the manager has a role in creating forward-looking drive and a positive atmosphere within a company and therefore embedded management practices have a significant role to play in HRM.

## CONCLUSIONS

One theoretical implication to be drawn from this study is that functional forms of HR are important and relevant for small firms and should be made the foundation stones of any small firm's HRM. In theory it is tempting to create rational models to describe HRM in the small context but in reality exact models are not that relevant for small business owners. Also Cassell and others (2002) argue that management in small firms is not so straightforward and rational as the models lead us to believe. Some practices may be implemented first and justified afterwards. In addition, new practices are sometimes introduced without thorough consideration. Harney and Dundon (2006) also make the important point that employees' attitudes and behavior are crucial to the equation and can be influenced by HR practices.

As can be seen from the case company study, employees seem to appreciate good communication and openness. This would seem to be of central importance to HRM as the more these employees know about their company's goals the better they can apply that information to their work.

Informality seems to be the key in small business HRM as has been stated in many previous writings. The conclusion that can be drawn from this is that official HR practices are easier to cope with if they are embedded in daily management processes. However, HRM is a combination of both internal and external factors and there is no single practice or model that would fit all small companies because they operate in a very complex and heterogeneous world (see Harney and Dundon 2006). Nevertheless, the better a company mixes and matches a set of practices and work values to fit its context the better the employees will perform.

More practical implications gathered from the research are that the work environment is an important factor in employee well-being in small firms. This can be concentrated on as it demands fewer resources and is therefore available to all firms. The case study suggests that HRM has a role to play in creating that environment. Essentially, the things that affect employee well-being are good communication, challenging work assignments, the possibility to learn and develop and a good work atmosphere. HRM has a role to play in fostering all of those things.

As HRM is further considered in the SME context it is important to take into account the effects of the field of operation and also the state of maturity

of the firm. The field of operation forms a basis for HR possibilities. In some fields remaining competitive is easy and in some others it is more challenging. Also, newly established firms operate with a different logic to growing or stable firms. The case organization here is in the fortunate position of being able to invest in the well-being of its workers, which in turn is something that also affects HR decisions. A final point that should be emphasized is that the case company has been able to create an environment where its employees are willing to learn and develop. Thus, to take this study a step further and increase its relevance the effects of workplace learning on overall firm performance would need to be researched more thoroughly.

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# 7 Human Resource Management in Small Firms

## Effective Informality

*Kate Lewis and Alan Coetzer*

### INTRODUCTION

The backbone of any firm (be it large or small) is its resources—in particular, its human capital. Frequently, when attempting to understand how best to manage those human resources, models of large firm human resource management (HRM) are applied to all firms (irrespective of their size). Indeed, the literature on HRM is frequently based upon models of practice that were developed in large firms (i.e., ‘little big business syndrome’; Welsh and White 1981), and assumes that small firm practice is inferior. Such an approach has subsequently been described as inadequate, especially given the diversity of the small and medium enterprise (SME) sector and the employment relationships within it (Atkinson 2007). The result has frequently been a situation where SME owner-managers implement generic HR practices that come to their attention (which they typically find unsuitable) or don’t implement any practices at all—potentially resulting in diminished firm performance (Bacon and Hoque 2005).

In the twenty-first century, understanding of the small firm sectors of countries throughout the world has vastly improved and a more detailed understanding of issues such as HRM and related practices has emerged. The uniqueness of the sector is now established and calls for firm-size appropriate practices are consistent and vocal, if not always heeded (Marlow 2002). However, many studies have continued to report criticisms of the HRM practices executed in small firms, irrespective of their ‘size appropriateness’. Typically the practices are judged as lacking due to their informality. Meaning ‘the practices used to recruit, select, manage and appraise employees’ performance are not written down . . . regularly applied . . . or guaranteed that they take place’ (Barrett *et al.* 2007: 688).

The perceived lack of sophistication in practice is assumed to represent a lack of attention to, or understanding of, good HRM practices. Such a position doesn’t acknowledge what Marlow has described as ‘the recognition of complexity in a context of informality’ (2006: 472). It also fails to attribute any specific advantages to such an approach to HRM in the small firm (Atkinson and Curtis 2004; Mayson and Barrett 2006). In New Zealand, a

nation in which 99.4 percent of the business population are SMEs<sup>1</sup> (Ministry of Economic Development 2007), there is a paucity of empirical research that addresses issues of HRM within the context of SMEs.

## LITERATURE ON HRM IN SMALL FIRMS

There are a growing number of international studies on HRM in smaller firms (see, for example, Barrett and Mayson 2007; Kotey and Folker 2007; Kotey and Slade 2005). Several of these studies indicate that small firms tend to employ a narrow range of mostly informal HRM practices (Bartram 2005; Barrett and Mayson 2007; Wiesner and McDonald 2001). Some researchers (e.g., Gilbert and Jones 2000) argue that there are sound reasons for adopting such practices in the small firm sector. Others point out that neglecting formal HRM practices might well hinder progress toward sustainable competitive advantage in SMEs (e.g., Bacon and Hoque 2005). In their opinion, a strategic approach to managing employees is vital for the success of all firms, including small firms. More specifically, they contend that a firm's ability to develop an appropriate 'bundle' of interlinked HRM practices aligned with business strategy is a source of sustainable competitive advantage (Barrett and Mayson 2007).

From an analysis of the literature, it is possible to identify some common features in small firm HRM practices that are related to the three broad goals of HRM.

### **Attracting an Effective Workforce**

Several studies of HRM practices in SMEs have found that recruiting staff typically involves the use of methods that are convenient, inexpensive and directly controllable by the firm (Cardon and Stevens 2004). Such methods include personal referrals and referrals by trusted employees (word of mouth), unsolicited applicants and advertisements in local community newspapers. For example, mail survey research in Australia (Kotey and Slade 2005), and a study using a combination of a telephone survey and in-depth interviews in the United Kingdom (Cassell *et al.* 2002), found that word of mouth was the main source of recruitment in SMEs. Similarly, a mail and online survey of HRM practices in 408 small firms in Australia found that advertisements and referrals/'walk-ins' were common methods of recruitment (Barrett and Mayson 2005). The use of more formal recruitment sources, such as employment agencies and newspaper advertising, increases with firm size (Kotey and Slade 2005). This is because of the need to widen the search for suitable employees as the pool of potential employees from sources such as family and friends becomes exhausted, and the skills required to support firm growth are not readily available from these informal sources.

As with recruiting, there is strong evidence from the findings of several studies (Barrett and Mayson 2005; Kotey and Slade 2005) that managers have a preference towards a small number of employee selection methods. These studies indicate that the most preferred methods include informal interviews, work samples and work trials. To illustrate, Kotey and Slade (2005) used a mail questionnaire to investigate the rate of adoption of formal HRM practices with increasing firm size. They found that the use of a wider variety of selection techniques, such as testing and reference checks, increased with firm size, probably because new recruits are more likely to come from outside the network of family and friends. This increases the costs of recruiting, the need for more in-depth screening and the risks in selection.

### **Developing the Workforce**

Within the SME literature there has been a steady accumulation of knowledge on formal training practices. The research evidence has consistently shown that SMEs provide less formal training than larger firms (Patton *et al.* 2000). However, the extent to which there is a problem of limited training in SMEs may be related to definitions and measures of training that SME researchers commonly use. The claim, often made in the SME literature, that training provision is positively correlated with firm size is based on a narrow definition of training. There seems to be increasing recognition amongst commentators that widening the definition of training activity to include less formal ways of work-related learning may reduce the training gap between smaller and larger businesses. Related to this, there also appears to be wider recognition that comparing large and small firms' training practices with the same yardsticks (e.g., type of training, frequency of training, duration of training and cost of training) can be misleading. However, the reliance upon informal training within SMEs makes the documentation and analysis of such activity more problematic (Patton *et al.* 2000).

Our understanding of informal training practices and informal learning processes in SMEs is underdeveloped. This can be attributed to a seemingly persistent focus of SME researchers on formal approaches to learning, and their apparent strong preference towards snapshot quantitative surveys of training practices. However, there appears to be a growing awareness amongst commentators that the role and importance of informal training and learning processes in SMEs needs to be recognized. For instance, Kitching and Blackburn (2002) promote the suitability of a more informal approach to training and identify the limited relevance, and disproportionate costs, of formal training approaches for SMEs.

Performance appraisal is also used as a mechanism for improving employee performance. It is widely recognized as the primary HRM intervention for providing feedback to individuals on their work-related achievements (Waddell *et al.* 2000). Several studies have examined the conduct

of performance appraisal in SMEs (Gilbert and Jones 2000; Hornsby and Kuratko 1990; Knuckey *et al.* 2002). The findings show that formal performance appraisal is uncommon in SMEs and that performance appraisal varies by firm size. However, most of these researchers note that appraisal of employee performance in SMEs is likely to be informal and ongoing, because of the frequent opportunities for interaction between managers and employees.

### **Maintaining the Workforce**

After conducting an extensive review of the extant research on managing people within SMEs, Cardon and Stevens concluded that 'hardly any studies look at factors influencing employee turnover or retention in small firms' (2004: 316). This is surprising because some studies (see, for example, Hornsby and Kuratko 1990) have found that retaining good staff is an important area of concern for managers of SMEs. To illustrate, a recent mail and online survey in Australia (Barrett and Mayson 2005) found that the three primary concerns for small firms were finding the right staff, finding skilled staff and retaining good staff. Some commentators argue that SMEs have more difficulty in retaining employees because they are more likely to have lower levels of employer legitimacy than larger firms (Williamson 2000). In other words, SMEs are less likely to be perceived as desirable, proper or appropriate employers. This may be because SMEs are likely to lack the financial resources required to retain talented staff. It is also argued that there is limited scope for career development and advancement in SMEs (Marlow 2000; Patton *et al.* 2000). If employees in SMEs do face relatively poor career prospects, then managers are likely to experience considerable difficulty in retaining talented staff (Williamson 2000).

Despite the findings of several studies that suggest that basic and informal HRM practices are commonly employed in smaller firms, there is also strong evidence that HRM practices can be more sophisticated or formal than expected in the typical small firm. Although firm size is a strong factor in predicting HRM practices, it is clearly not the only factor, given the wide variation in the formalization of HRM practices found among smaller firms (Bacon and Hoque 2005; Cassell *et al.* 2002). To illustrate, de Kok and Uhlaner (2001) examined the relationship between organization contextual variables and the formalization of HRM practices. The trends reported in their research suggest that organizational contextual variables (such as the presence or absence of a large firm associate and collective labor agreement) in addition to firm size may predict HRM practices in smaller firms. Similarly, Bacon and Hoque (2005) assessed the extent to which a range of factors both internal and external to the workplace predict the extent to which HRM practices have been adopted in SMEs. They found that SMEs are more likely to adopt HRM practices if they employ highly skilled employees and are networked to other organizations. Finally, research that explores the intersection between entrepreneurship and HRM

(see, for example, Barrett and Mayson 2007) suggests that growth-oriented small firms are more likely than nongrowing ones to use formal HRM practices. Clearly, it is difficult to generalize about small business HRM practices, as several variables influence the way a small business manages its human resources.

### **The New Zealand Context**

Despite the growing number of international studies on HRM in smaller firms as outlined earlier, this research topic has received little attention in New Zealand. This is problematic, as New Zealand firms are considerably smaller than those found in Europe and the U.S. Therefore, research findings based on studies conducted in Europe and the U.S. do not necessarily represent the New Zealand case, for reasons of size as well as business context (Barrett and Mayson 2007).

In New Zealand, Gilbert and Jones (2000) interviewed eighty owner-managers of small businesses about their HRM practices. Their findings indicate that the HRM practices were predominately informal, but largely effective. They argue that there were sound reasons for the informal approaches and 'mainstream' HRM practices were inappropriate. *Firm Foundations* (Knuckey *et al.* 2002) studied business practices and performance in New Zealand. The model of business practices and performance applied in this study included employee practices. As noted previously, the findings of this study suggest that smaller firms are less likely to demonstrate best practice in relation to their employees. However, the survey questionnaire used in this study focused on the formal dimensions of employee practices.

Given the lack of data on HRM practices in New Zealand SMEs, it was considered appropriate to conduct an exploratory descriptive study that would provide rich, nuanced and contextualized information. The specific objectives of the study were to:

1. Determine what HRM practices SME owner-managers are using.
2. Examine the nature of such practices.
3. Ascertain why owner-managers are using such practice.

### **DATA COLLECTION**

Data was collected via in-depth interviews with the owner-managers of fifty SMEs throughout New Zealand. The fifty firms were in either the manufacturing or service sectors and were randomly selected from a database of five hundred firms employing five to fifty full-time equivalent (FTE) staff. Each firm was visited by one of the members of the research team.<sup>2</sup> The managers were interviewed and taken through a semi-structured interview schedule that included questions designed to get interviewees to elaborate

on the practices that the firm employed to attract, develop and maintain an effective workforce. Each interview lasted between forty-five and ninety minutes and was recorded. The interviews were later transcribed and sent to the interviewees for checking. The final transcripts provided rich, contextualized data and were used as the basis for analysis.

Content analysis (Weber 1985) was used to aid in classification of the textual interview data into three broad categories, namely, (a) attracting an effective workforce to the organization, (b) developing the workforce to its potential and (c) maintaining the workforce over the long term. All phrases, sentences and paragraphs in the textual interview data were reviewed in relation to these three broad categories and then classified into the most appropriate category. The main tactics for drawing meaning from the data were teasing out themes or looking for 'recurring regularities' (Patton 1990) in the data. This involved looking for both recurring phrases in the verbatim expressions of informants and threads that tied data together.

## FINDINGS

Forty-four (88 percent) of the fifty participating firms employed fewer than twenty FTE staff, and only one firm employed more than thirty FTEs. Annual turnover of the firms ranged from NZ\$100,000 to NZ\$20 million. Twenty firms (40 percent) described themselves as family businesses. Nineteen owners (38 percent) operated more than one firm (i.e., could be described as portfolio entrepreneurs).

Forty-one (82 percent) of the interviewees were male. Most participants had no postsecondary school formal education qualifications, and just five of the participants (10 percent) had tertiary business/management education qualifications. However, the participants did have considerable firm-specific experience. Only seven (14 percent) had been with the firm for less than five years. On the other hand, thirty interviewees (60 percent) had been with their respective firms for ten or more years. Thus, the participants were a potentially well informed and rich source of data on HRM practices in the sample firms.

### Hiring Staff

When asked to talk about hiring staff, the majority of interviewees supplemented their responses to specific questions with descriptors of how external influences (particularly those associated with the labor market) impacted upon their HR practices. For example, on the nationwide shortage of skilled workers:

*'[T]here's a national shortage of pipe-fitters and welders. When you're open you could take on another five hundred people, but you just can't get 'em. Nobody can get them.'* (Owner 23)

The impact of these external factors was variously described, including inhibiting growth.

*'[I]t has been our biggest sort of handbrake if you like in the last two or three years . . . Lack of skilled labor . . . We still haven't got over it . . . It's held us back for the last two or three years.'* (Owner 44)

The level of staff turnover that was reported varied according to a number of characteristics. Firms of a smaller size or those that were family firms reported low staff turnover. Firms that employed staff to carry out menial or repetitive work reported high staff turnover.

*'I don't have any turnover at all. I have been here four years with the same staff. So I don't have that problem. My systems seem to work. . . . Getting to know their personal life I think is the major reason why they are still there . . . I take an interest in their life really . . . do it how I would like to be treated.'* (Owner 7)

*'The tanning industry is very dirty and a repetitious type of industry to get involved in . . . the type of people that you attract to this industry are . . . probably not long term or loyal staff if you like . . . generally speaking we have quite a large turnover.'* (Owner 6)

In terms of attracting new staff, word of mouth was overwhelmingly the most preferred method of doing so. Whilst this might be expected of the small firms in rural or small-town locations, it was interesting that owner-managers of firms in large urban centers expressed a similar opinion. Whilst interviewees reported persistently using advertising, as a method it typically yielded few usable responses. Web sites as a means of disseminating job advertisements and/or recruiting new employees were infrequently used (other than by those firms seeking individuals with specialized skills or from overseas locations).

Some interviewees described how unsolicited applications for employment from individuals assisted them in filling vacancies. Others described how they were forced to poach competent staff from other firms, which implied that the current labor pool is insufficient. Personnel agencies were rarely used, other than for filling temporary positions.

In terms of selection practices owner-managers typically called for curriculum vitas (CVs) but emphasized that they found them less useful than 'gut feelings' or 'intuition' about the employability of the applicant.

*'I never listen to references, and I never really pay any attention to a CV. We do a lot on sort of gut feeling.'* (Owner 22)

Any interviews that were carried out with prospective employees were described as informal and more reliant on the impressions of those executing

the interviews than on the content of the written CVs. The information contained within such documents was variously described, from lacking in use throughout to misleading or false.

Some employers described how practical ‘tests’ were also a more informative way of learning about the skill level of a prospective employee than asking them questions in an interview setting.

*‘I don’t believe in CVs, only old-fashioned skill . . . if we had a welder come through here, I’d just say “well, you go down there, and weld a pipe up” and I could tell within two minutes whether he’s a welder or not.’ (Owner 23)*

However, when the responses of all the interviewees were considered it became obvious that other factors were considered to be more important than technical skill when it came to the final hiring decision. Specifically, ‘fit’ was seen as more important than skill. That is, the fit of the person with the firm and existing staff, not the job.

*‘So we try and find out a lot more about a person as a person as well, not just their skills, because obviously in a small team they need to get on, so fit is really important.’ (Owner 22)*

*‘At the time of the interview I spend a lot of time thinking how the person will gel into the organization, not necessarily their technical abilities but will they fit?’ (Owner 8)*

## **Developing Staff**

Keeping staff was frequently described by interviewees as more of a priority than developing them, and pay—especially paying ‘above average’—was seen as the primary method of retention.

Any performance management that was executed in the firms in the study was characterized by informality. Such activities occurred fairly regularly, but were typically undocumented and/or unreported to the employee concerned, and constituted part of a ‘chat’ with the employee about something primarily other than their performance.

*‘It would probably be over a coffee or over a beer on a Friday night or something like that.’ (Owner 3)*

*‘I like the more casual approach. I think you get more out of people who are happy in what they’re doing rather than the ones who are always looking over their back to see if you’re sneaking up to see what they’re up to.’ (Owner 11)*

On the whole, any training in the firms in the study was usually informal, in-house, on-the-job and incremental. Training that was undertaken was primarily directed at helping newcomers acquire job-specific knowledge and skills and safe work practices. The training process typically involved a workplace supervisor or experienced co-worker demonstrating key behaviors to replicate. Thus, workplace supervisors and co-workers were important resources for learning. Once newcomers were proficient at their tasks, the emphasis on training/learning diminished.

*'Well, it just means one-on-one for a while, show them a small bit you can do one hundred times . . . so it still keeps them busy for the whole day, or maybe two days, and then when he's mastered that, we can show him another bit.'* (Owner 16)

The reason given for this type of approach to training was typically resource scarcity (e.g., cost, time and labor to cover staff on training). Frequently it was perceived that the benefit of the external training might not necessarily outweigh the cost.

*'You have to weigh up whether the course they go on is actually going to benefit them here or are they going to be of more benefit to have stayed here and be working and learning here.'* (Owner 9)

## **Staff Leaving**

Around half of the interviewees had had to fire a staff member. Generally for incompetence—at least half a dozen times for theft (though prosecutions were typically not pursued due to either difficulty or cost).

The process of staff leaving was in many ways the most formally documented of all the human resource practices the interviewees engaged in. This was in most instances described as a safeguard.

How they leave (i.e., the 'farewell do') was often portrayed as more important than finding out why the person was leaving. Whilst this seems inappropriately casual, the reality was most interviewees said they knew why the person was leaving before they were even told by them they were.

*'We don't do exit interviews if that's what you're looking for. We are a small business. It's very personal . . . and loss of face is important. You want people to leave with dignity.'* (Owner 28)

*'We always make sure we put on a shout and have a cake and a couple of beers . . . I know people have like leaving interviews and stuff, but I'd like to pride myself as being so close to the staff I know why they're leaving.'* (Owner 20)

In terms of employment legislation two distinct groups of interviewees emerged when the data were analyzed: (a) those who thought legislation was necessary to a fair partnership with staff ('do unto others') and (b) those who thought it inhibited their rights to deal with staff as they saw fit ('I'm the boss'). Therefore, the two groups could be described as engaging in behavior that could see them labeled as: (a) 'flouters' or (b) 'followers' of employment law.

For example, a 'flouter':

*'I actually stand my ground. If I want to get rid of somebody, I deal with them instantly and I worry about the courts later because the person can cost me a customer and I've only got twenty-three of them. So that person, I'll just ask them to leave on that very day. And I think at the time there was about a two or three year queue in the courts.'* (Owner 20)

For example, a 'follower':

*'To me it works both ways which is how it's designed to work . . . if you're fair to your staff and they're fair back to you there shouldn't be a problem so no, I don't have a problem with it.'* (Owner 47)

## DISCUSSION

Most firms that participated in this study employed a narrow range of HRM practices. This is accordant with the findings of a national survey of HRM practices in Australian SMEs (Wiesner and McDonald 2001), which demonstrated that firm size does have a significant impact on adoption of HRM practices. Small-sized firms had a significantly lower adoption rate of HRM practices than medium-sized Australian firms. In our study only a small number of firms had adopted a somewhat wider range of HRM practices than most firms in the sample. These 'outliers' tended to be the larger firms in the study, those that were involved in strategic alliances with larger organizations, or those where the owner-manager had previous experience working for a large organization.

Analysis of the data suggested that the HRM practices in the sample firms were, on the whole, well founded. The practices seem to have evolved from the experience-based knowledge of the owner-managers. Most were able to provide reasoned justification for the practices that they employed. Appropriateness and cost seemed to be two decision criteria that were heavily weighted in their decision making regarding alternative practices. With regard to appropriateness, several owner-managers were intent on creating a comfortable, friendly, relationship-based workplace culture. Consistent with these cultural values, they preferred to provide ongoing informal feedback

to employees on their work performance, rather than formal performance appraisal meetings. As regards cost, owner-managers tended to have a preference towards low cost practices. They preferred to use word-of-mouth referrals as a recruitment method in preference to media advertising to recruit staff. This is not surprising, given that in SMEs resources are likely to be scarce and that advertising was not regarded as particularly effective.

In general, the practices that owner-managers employed were informal. Nevertheless, managers could generally clearly explain and justify their practices. The finding that practices were generally not documented is consistent with findings of previous research (e.g., Kotey and Slade 2005). Only in a small number of participating firms were practices relating to employee health and safety documented, presumably because of pressures of legal compliance. An even smaller number of firms also documented other HRM practices. Typically, these firms worked closely with larger firms, for example, as quality-assured suppliers, and had formalized their practices primarily to meet the requirements of the larger firms. Or the owner-managers of the firms had previous experience working for a larger organization.

## CONCLUSIONS

The majority of the owner-managers interviewed in this study operated their business using informal HRM practices. It is important to note that this informality does not imply a lack of focus on, or attention to, human resource issues. Instead, it signals knowledge on the part of the owner-managers of what works best for them, and an appreciation of how important it is to do 'what works'—as opposed to 'what *should* work'. However, many owner-managers admitted that if they had more resources (e.g., time and money) they might investigate other ways of doing things in relation to HRM. Some of the practices described by the owner-managers were also not as 'fair' or transparent as they might have been. In many instances tensions were described between implementing what works best and not contravening the relevant employment legislation.

Many of the owner-managers justified their choice of the pursuit of informal HRM practices as being most congruent with the characteristics of a small firm. For example, informality was described as being appropriate in work environments where having a small number of staff enables close relationships to develop through everyday contact between workers and managers. This is the sort of feedback and interaction that is not always possible in larger firms. Informality was also seen as a useful way of engendering a sense of belonging, or loyalty, from employees in a way that was more effective than formal initiatives.

There are several implications that can be drawn from the results of this study. Firstly, that careful thought should be given to whether small firms need large firm HRM practices in New Zealand. That is, should attempts be made

to perpetuate the transference of practices that have been proven to work in large firms to small firms? Or, more importantly, should SME stakeholders be focusing on gaining a better understanding of the HRM experiences of SME owner-managers so as to conceptualize, design and implement more 'small firm appropriate' HRM processes and practices? Secondly, SME stakeholders should acknowledge that 'the small firm way of doing things' is not always necessarily wrong or inferior. Instead we need to embrace the differences, commit to finding out more about how and why HRM practices are different in small firms and consequently bring different approaches to understanding the nature of the HRM experience for owner-managers and employees.

## NOTES

1. Employ 0–99 staff (Cameron and Massey 1999).
2. The authors wish to acknowledge the contribution of the other members of the project team who also collected data via interviews: Professor Claire Massey (Project Leader, Massey University), Dr. Candice Harris (Auckland University of Technology) and Dr. Alan Cameron (Massey University).

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# 8 Entrepreneurial Management of Labor Market Constraints and Human Resources

*Colin Gray*

## INTRODUCTION

Facing the pressures of *global competition* and the challenges of implementing a new *knowledge economy*, the European Union (EU) and its Member States committed themselves in March 2000 to the Lisbon Agenda. This aimed at implementing by 2010 ‘a challenging program for building knowledge infrastructures, enhancing innovation and economic reform, and modernizing social welfare and education systems’ with the goal of becoming ‘the world’s most dynamic knowledge-economy’ (European Council 2002). One of the key objectives was the creation of and support for innovative SMEs and the promotion of entrepreneurship. By February 2004, an entrepreneurship action plan was agreed upon (European Commission [EC] 2004), which noted, alongside its five key objectives, that ‘entrepreneurs should have access to quality and targeted support, mentoring and training’. However, by 2005—the midpoint of the Lisbon strategy—there were signs that the priority objectives were switching from a focus on global competitiveness to a concern over jobs and growth. Improving the capabilities and participation of the huge small and medium enterprise (SME) sector is now even more vital.

The vast majority (99 percent) of the twenty million or more firms in Europe are SMEs that employ fewer than 250 people. They account for two-thirds of jobs in the EU’s 170 million workforce and 55 percent of the total sales turnover (EC 2003a). They make a larger net contribution to the creation of new jobs compared with large firms. There is a similar pattern in Britain except that SMEs account for a slightly smaller proportion of jobs (59 percent) and the influence of large firms is more dominant. The eight thousand or so large firms that employ more than 250 people in Britain account for more than half of all private-sector employment (52 percent) and annual sales turnover (51 percent). Compared with SMEs (though not necessarily with their EU large firm counterparts), they are also much more likely to develop and train their staff and less likely to suffer skills and information gaps (Learning and Skills Council [LSC] 2006). They are also more likely to engage in research and development and to adopt and

develop innovations. As a consequence, large organizations dominate the labor markets, increasing the shortage of crucial competencies and skills sought after by the smaller firms. Furthermore, the skills shortages in Britain are acute—‘over one third of adults in the UK do not have a basic school-leaving qualification—double the proportion of Canada and Germany; five million people have no qualifications at all; and one in six do not have the literacy skills expected of an 11-year-old’ (Leitch 2006). This raises an important research question: Is it the more agile entrepreneurial firms that are more able to meet the skills gaps challenges than other firms?

In both the EU and the U.K., however, only a minority of SMEs can be described as entrepreneurial in the broad sense of having both the intention and capabilities to achieve growth through innovation. The focus of this chapter is on how these entrepreneurial firms develop their key capabilities. The chapter is also about organizational capabilities that support innovation in SMEs, which implies a focus on owner-managers of firms that employ at least another person. The creation of knowledge that is innovative, and the absorptive capacity that enables a firm to make effective use of external innovations, spring from the residual knowledge and the interactions between the people in the firm (Zahra and George 2002; Gray 2006).

Thus, the largest SME segment, the self-employed without employees (73 percent of all firms and increasing), are not included in this analysis except for purposes of comparison. In fact, apart from some professions and freelance specialists who are valuable to the innovation processes in other firms, this segment is the slowest growing and suffers higher exit rates (EC 2002b; Wiseman *et al.* 2006). Therefore, once the very entrepreneurial activity of startup and new-firm formation is past, very few of these very small SMEs are truly entrepreneurial in the sense of the definitions used in this chapter.

In Britain, owner-managers are defined as individuals with a controlling interest in the business they own or work for, and the authority to hire and fire full-time staff. Labor Force Surveys (LFS) reveal that of some 4.5 million SMEs in Britain, there are around 1.5 million owner-managers who employ other people. The vast majority of these firms are included among the 1.9 million firms registered for value-added tax (VAT) in the U.K., though the 2003 Small Business Service (SBS) survey estimated that 9 percent of SMEs with employees were below the VAT turnover threshold at that time. VAT-registered SMEs with employees tend to be more concentrated in hotels/restaurants, manufacturing, distribution and business services. Analysis of VAT de-registration data reveals that, apart from the hotels/restaurants sector, which has a high level of ‘churn’ (rates of entry and exit), these higher employment sectors are relatively stable. Even so, around half of all firms on average have de-registered from VAT within five years of trading. The churn among non-VAT-registered small businesses is even higher. Barclays Bank, the SME market leader in the U.K. with some 25 percent of all business accounts, estimates that within three years of start up half of business accounts have closed (Barclays Bank 2007).

The 2003 SBS survey (sample 7,502) revealed that just over half of all SMEs (53 percent) have an intention to grow, an intention that increases with firm size. This compares with the two-thirds (67 percent) of SMEs with employees that intend to grow. Similarly with innovation, some 42 percent of SMEs with employees report that they had introduced new products, services or processes in the past year (compared with 35 percent of those without employees). However, only 43 percent of SMEs with employees reported that they did in fact experience growth over the past year of the survey. Indeed, there were only 11 percent of SMEs with employees that fit our broad definition of entrepreneurship, namely, that they achieved growth over the past year and had the intention to grow in the coming year (Wiseman *et al.* 2006).

The owner-manager respondents to the SBS survey, tended to ascribe the reasons for lack of growth and failure to meet business objectives to external sources, such as 'the economy', taxation, regulation, bad debt and so on. The firm-size effects with respect to these external causes were not particularly pronounced. With respect to causes related to the capabilities within the firm, however, there were very strong and significant firm-size effects. For example, the recruiting and retention of staff was a significant issue for firms with employees, as was the shortage of skills generally and, to a lesser extent, the shortage of managerial skills. The importance of these issues increases with both firm size and growth-orientation, and is clearly linked to the resources and capabilities of SMEs with innovation potential (Wiseman *et al.* 2006). Because the barriers of lack of time, lack of resources and lack of information on availability of suitable training are linked to firm size, it is not surprising that there is a strong inverse relationship between firm size and the amount of management training (Bolton 1971; Stanworth and Gray 1991; Storey 1994; NJM 2000; Council for Excellence in Management and Leadership [CEML] 2001, 2002). This is picked up even more strongly by external studies that focus on this area. For instance, since the early 1990s, one of the main barriers to growth and development of SMEs has been their 'low managerial qualifications, poor quality management, limited quality control, poor prospects and a negative attitude to training' (CEDEFOP 1994).

In its 2002 report on work-based learning in SMEs, Britain's Learning Skills Development Agency (Hughes *et al.* 2002), which has identified a number of critical skills shortages among different sectors of SMEs, viewed the policy challenges as 'the ability to adapt and develop new learning and skills is a crucial ingredient in a successful economy. Globalization and the knowledge-driven economy require the UK to develop a more highly-skilled workforce in order to compete within high-value-added sectors of the world economy'.

In spite of the strong pressures to improve competencies and skills, however, the report also acknowledged that SME participation is very poor and that most training is informal. The report concluded that workforce learning is very important in developing knowledge in the firm necessary to its survival and growth. However, the 2004 SBS surveys revealed that while 51 percent of firms provided staff training and 22 percent provided

management training only 15 percent had a human resource development plan, 25 percent had a training plan and just 18 percent a training budget. Again, there were strong firm-size effects with the larger SMEs providing much more and a wider variety of staff and management training. Significantly, some 39 percent of the entrepreneurial growth-oriented firms did provide management development. The propensity to innovate, in the sense of linking growth and business strategy to the development of new products, services and processes, or to entry into new markets, follows very similar patterns. More precisely, Freel (1999) identified the major skills gaps that impede successful innovation in SMEs as:

1. technical skills in the workforce
2. managerial competency
3. poor marketing skills

These impediments to innovation and knowledge creation have not gone away. This lack of competencies and skills, especially those developed through experience over time, adversely affects not only managers and staff, but also the firm’s capacity to communicate, absorb new knowledge and sell its own knowledge effectively. Indeed, supporters of the learning organization approach would hold that competitive advantage between firms derives from the capabilities in encouraging and harnessing the development and use of that tacit knowledge. Across the EU, more than half of SMEs (including two-thirds of medium firms) state that the development of their internal competencies is an important part of their business strategies. The Observatory of SMEs in Europe (sample 7,750) confirmed that only a small minority of SMEs have a written plan for developing their internal management competencies. This is a very similar pattern to the SBS findings. Summarizing the findings of the SME Observatory survey (EC 2003b), Table 8.1 shows that this appears to be linked to size, growth-orientation and the extent to which the lack of skills is seen as a problem.

This SME Observatory confirmed strong firm-size effects with the very small microfirms being significantly less motivated to grow and less capable of

*Table 8.1* Growth and Competency Size Differences in EU SMEs 2002

	<i>Micro</i> ( <i>&lt;10</i> )	<i>Small</i> ( <i>&lt;50</i> )	<i>Medium</i> ( <i>&lt;250</i> )	<i>All</i>
Growth oriented	28	42	52	30
Growth attained	15	25	44	17
Lack competencies & skills	19	25	29	20
Formal competence development plan	16	37	47	18
Sample (n)	4,264	1,821	1,665	7,750

Source: Observatory of European SMEs (2003) Competence Development in SMEs.

achieving growth even when the desire was present. They also appeared to be less capable of identifying and responding to competencies and skills gaps. The study also found that external courses were the most popular formal training activity and that this increased with firm size (indeed, the frequency of all forms of formal and informal management development increases with firm size). The European management development surveys (Gray 2004), and U.K. management development studies (Thomson and Gray 1999) also revealed significant links between growth strategy, the formality and structured approach to management development and the actual amount of development and training in both small and large firms. However, this structured and strategic approach was far less common in SMEs. An international comparative report conducted for the U.K. government also concluded that ‘managers and administrators in small firms are generally less qualified than their counterparts in larger organizations’, which suggests there are intrinsic quality and competence weaknesses linked to levels of educational attainment or to the curriculum and structure of national educational systems (Bosworth 2000).

Indeed, many managers are self-taught and hold no management qualifications and even though many also recognize the value of training, they can have difficulty in identifying their specific needs (Curran *et al.* 1998). A study across seven EU Member States found that there is a ‘lack of specific training for heads of SMEs. The SME training that is provided tends to serve either startups or medium-sized firms. Executive training at business schools is often targeted at larger companies, and demands fairly strict timetables’ (NJM 2000). Thus, many SMEs in Europe are reluctant to take up outside training offers (CEDEFOP 1994) though the use of informal management development is reported to be widespread (Curran *et al.* 1998; CEML 2001). The European management development studies mentioned earlier confirmed that, generally, SMEs engage in fewer management development activities than larger firms. Managers in SMEs are much less likely to have formal appraisals or discussions on their training needs (41 percent of SMEs reported no appraisal system compared with 27 percent of large firms). Table 8.2 summarizes the mean score differences on formal management development activities comparing large firms and SMEs on the

*Table 8.2* Management Development in EU Firms (mean Likert scores)

<i>Activities</i>	<i>SMEs</i>	<i>Large firms</i>	<i>Non-growth</i>	<i>Growth</i>
Link to competency	3.61 <sup>b</sup>	3.83 <sup>b</sup>	3.64 <sup>a</sup>	3.85 <sup>a</sup>
Internal programmes	3.41 <sup>b</sup>	3.85 <sup>b</sup>	3.68	3.55
External courses	3.32 <sup>b</sup>	3.58 <sup>b</sup>	3.34 <sup>b</sup>	3.66 <sup>b</sup>
Mentoring	2.82	2.96	2.79 <sup>b</sup>	3.06 <sup>b</sup>

*Source:* European Management Development Leonardo project. Gray (2004)

n = 701

<sup>a</sup> significance of t-test: p<0.05

<sup>b</sup> significance of t-test: p<0.01

left and growth against non-growth-oriented firms on the right (five-point Likert scales, with five representing a very frequent activity).

It is clear from this Pan-European study that there are significant firm-size effects but that growth-orientation may be an even stronger influence on the use and frequency of formal and strategic management development. It is interesting to note that growth-oriented firms have a stronger tendency to use external courses (which can import new ideas from outside) and to link their management development to the development of core or strategic competencies. This will certainly be due, in part, to their awareness of comparative resource constraints and probably also to the fact that much management development in these firms is focused on the owner-manager (larger SMEs will have more line managers). CEML (2001) confirms that SME owner-managers usually prefer informal learning such as mentoring, shadowing or networking, but that non-owner managers prefer credit-based formal education delivered as short, applied courses offering flexibility as to time and place. The reasons for the different preferences are that non-owner managers, particularly midlevel line managers, have an eye to career development, while the owner-managers have an eye to performance improvement of their firm over the short term. Indeed, informal development activities such as 'on-the-job' and 'learning from others', which are even less structured than the informal alternatives covered in the EC survey, have been found to be the most common ways of acquiring management competences in small firms and microfirms (Hendry *et al.* 1995).

However, size is not the only determinant of SME management and staff training and development. As suggested earlier, there also appear to be strong educational effects. Educational levels of owner-managers have also been found to be positively linked to levels of entrepreneurship, growth and internal development practices (Storey 1994; Gray 1998). The educational and skills levels of employees are also an essential element in the development of absorptive capacity in a firm to adopt and implement successfully innovations from outside the firm (Cohen and Levinthal 1990; Zahra and George 2002; Gray 2006). Lack of supply of key skills in the potential labor pool (whether due to weaknesses in the educational system or successful competition from larger organizations) poses a real constraint to innovation in SMEs. When faced with such constraints, ambitious SMEs have little option but to develop the necessary skills in-house, accepting a risk of poaching or drainage of those skills to other larger and wealthier firms.

With respect to firm-related knowledge, earlier work on organizational learning (Argyris and Schoen 1978) has reemerged in concepts such as the learning organization (Senge 1990) and knowledge management (Amidon and Skyrme 1997). Essentially, the model is one based upon knowledge sharing and, through constant and open communication, the making explicit of often buried or tacit knowledge held by all employees. The drawing together of experiential knowledge of key employees (including the owner-manager) and the making explicit of effective and often unique

routines developed within the firm in order to share, combine knowledge and create new knowledge is the innovative process that lies at the heart of knowledge management and the development of absorptive capacity within firms. Basically, there are three main areas of knowledge management that are crucial to the development and use of innovation in SMEs:

1. maintaining the existing organizational and technical knowledge base (including the owner-manager's entrepreneurial and management competences)
2. acquiring new knowledge (usually through learning, training or technology transfer)
3. creating new knowledge in the form of innovations and operational improvements

The findings from the recent large-scale surveys and other studies outlined earlier suggest that only a small proportion of SMEs are motivated and capable of meeting the challenges in a sustained way. What is not clear from the recent literature is how these entrepreneurial firms make the effort to meet the internal and external challenges of sustained and significant innovation. This chapter seeks to cast light on that important question.

## METHODOLOGY

The background issues have been identified in relation to the findings of the 2003 SBS survey in Britain and the SME Observatory survey in the EU plus a number of specific reports cited in text. The links between entrepreneurship and the development of competencies and organizational capabilities are now examined more closely using the quarterly surveys of the Small Enterprise Research Team (SERTeam). Based at the Open University Business School (OUBS), SERTeam is an independent not-for-profit research body that has been researching small businesses for the past twenty years or more. The *NatWest/SERTeam Quarterly Survey of Small Business in Britain* of the second quarter of 2006, with 638 respondents, focused on entrepreneurship, motivation and innovation. The survey of the fourth quarter of 2006, with 538 respondents, focused on skills gaps, training and education. The respondents represent all regions and broad industry categories in Britain. More than half were common to the two surveys, allowing for a more detailed analysis of the issues. In line with the SBS and SME Observatory surveys, just over half indicated that they intended to grow either moderately (43 percent) or significantly (11 percent), with clear size differences between those without employees (only one quarter were growth oriented) and other SMEs (three-quarters of those with twenty or more employees).

In relation to entrepreneurship, SERTeam respondents have a clear sense of identity. A rather low 5 percent actually describe themselves as 'entrepreneurs',

with the proportion describing themselves as ‘directors’ increasing with firm size and those without employees preferring to call themselves ‘self-employed’ or by their trade. However, respondents self-assess themselves each survey on a tighter and more Schumpeterian definition of entrepreneurship—a composite of competitiveness, growth-orientation and innovation. This provides an opportunity for a closer examination of entrepreneurial behavior with respect to (a) knowledge and skills gaps and (b) their human resource management, which is conducted mainly through cross-tabulations of key variables in the two surveys, analyzed by SPSS-14.

## FINDINGS

From the studies discussed earlier, it is very clear that growth-orientation is a very important concept with respect to innovation, strategy, performance and, by definition, entrepreneurship. However, there was also a suggestion of a firm size-related tendency for the smaller SMEs to be more likely to miss their growth expectations. Table 8.3 examines the relationship between growth-orientation in the SERTeam sample and growth performance as measured by employment shifts over the past year and the propensity to innovate, as measured by a self-reported declaration of non-innovation and a frequency count of innovative activities (relating to new products, services, processes, marketing and so on).

The first point to note is that the expected relationships are strongly confirmed. There is clearly a significant and robust relationship between growth-orientation and performance in SMEs as measured by changes in

*Table 8.3* Growth-orientation, Performance and Innovation (column %)

	<i>Growth-oriented</i>	<i>Exit/Sell</i>	<i>Growth-averse</i>	<i>All</i>
Employment - up	26	8	6	17
same	56	65	78	64
down	18	26	16	19
<i>Significance</i>	<i>Chi<sup>2</sup> = 47.460; df = 4; p &lt; 0.000</i>			
Innovation - multi	36	21	9	25
single	34	27	21	29
non	30	52	70	46
<i>Significance</i>	<i>Chi<sup>2</sup> = 84.304; df = 4; p &lt; 0.000</i>			
Sample (n)	345	107	186	638
%	54	17	29	100

*Source:* NatWest/SERTeam Quarterly Survey of Small Business in Britain. Vol. 22, no. 2.

workforce size. It is worth noting that the same relationship holds true if a sales measure of growth is used. The staff measure was preferred, because the focus of the chapter is on organizational issues and because other SERTeam surveys have indicated that SME owner-managers can be reluctant employers, implying that staff growth is probably a better measure of significant growth. A second point to note is that there were some concerns about a slowing of the U.K. economy during the second quarter of 2006 when this survey was conducted and the overall employment balance between those reporting up and those reporting down was negative. However, the entrepreneurial nature of the growth-oriented firms is very clear with their positive growth balance of 8 percent.

The relationship between growth-orientation and innovation is also significant if not quite so striking. Indeed, the negative aspect is more dramatic with growth-averse firms and those wanting to exit from their firms clearly not interested in innovating.

Also, the expected link between growth-orientation and the propensity to innovate is clear. Furthermore, firms engaged in multiple innovative activities were much more likely to have increased staff size over the year (an employment balance of 14 percent). Indeed, more than half (52 percent) employ more than ten people (compared with 81 percent of non-innovators who employ fewer than ten staff, including those with no employees at all). It is not surprising, therefore, that there were significant differences on the self-rated entrepreneurship scale between those with no employees (41 percent) and those with more than twenty employees (62 percent). This may indicate that these owner-managers who are engaged in a variety of innovative activities in slightly larger firms are better able to manage recruitment and skills issues and are likely to have more developed management skills to coordinate their multiple activities.

The survey conducted in the fourth quarter of 2006 addressed these issues. In both surveys, only 7 percent of respondents indicated that lack of skilled labor was their main problem (and it only ranked seventh as a main problem). When asked how important skills shortages were as a general problem to their firm (as opposed to it being the single main problem), 25 percent reported that skills shortages are a significant problem. Another 26 percent reported that skills shortages were irritating but that they could manage, while 37 percent reported that they had no problems at all in this area. Table 8.4 shows the expected firm-size differences.

That the self-employed without employees and microfirms with little desire to grow are relatively unaffected by skills shortages is not particularly surprising. However, the three quarters of small and medium firms reporting that the problem is either very important or irritating but manageable gives cause for concern. These are the firms that are much more likely to want to innovate and grow. Furthermore, reflecting the findings of other studies in this area, these are also the firms that provide the most formal training for their staff. The most frequently reported activity is to provide

Table 8.4 Importance of Skills Gaps and Firm-size by Employment (Column %)

	No employees	Micro (<10)	Small (10—19)	Medium (20+)	All
Very important	9	23	29	46	25
Irritating but manageable	5	24	53	28	26
Only occasional	8	12	9	8	10
No problem	79	42	8	18	39
n	80	305	75	78	538
%	15	57	14	14	100
Significance	$Chi^2 = 121.240; df = 9; p < 0.000$				

Source: NatWest/SERTeam Quarterly Survey of Small Business in Britain. Vol. 22, no. 4.

or pay for external courses (46 percent of all respondents), followed by giving time off to attend external courses (27 percent) and organizing internal courses (26 percent). In all these areas there is a direct relationship between firm size and the amount of training provided (and a corresponding inverse relationship with respect to firms that provide no formal training at all). However, it is more important to see what the firms suffering from skills gaps do in response. Table 8.5 reveals a much higher rate of development activities among firms that are more concerned about skills gaps.

Although no significance tests were applied to the multiple response data, the higher frequency of different skills development activities is clearly associated with higher importance of skills gaps. Also, the increased significance of

Table 8.5 Training Activities by Importance of Skills Gaps (Column %; Multiple Response)

	Very important	Irritating but manageable	Only occasional	No problem	All
External courses	65	58	51	29	49
Time off	42	32	32	16	29
Internal courses	45	35	21	12	28
Online	11	9	9	7	9
Other	7	9	8	6	7
No formal training	21	23	32	58	36
Total frequency	191	166	153	128	158
Total SMEs (n)	132	139	53	188	512
%	27	27	10	37	100

Source: NatWest/SERTeam Quarterly Survey of Small Business in Britain. Vol. 22, no. 4.

externally organized training courses (and the associated time off to attend external events) for firms facing important skills gaps is very evident. Slightly less obvious but nevertheless important, is the stronger emphasis placed on internally organized courses by firms faced with important skills gaps. Of course, not all of these firms are entrepreneurial and many entrepreneurs will be managing their own needs for core skills very effectively. What is evident, however, is that there is a lot of knowledge acquisition and transfer, as well as knowledge needs identification, taking place in the active SMEs. An examination of the types of skills that are sought makes this clearer. Table 8.6 shows a much tighter focus on the development of internal competencies by active SMEs.

The dominance of firm-specific skills is interesting because it suggests an awareness of the need to develop core competencies on the part of many SMEs. This is reinforced by the higher profile of internally organized courses, which is consistent with trying to maintain a competitive advantage through the development and retention of core competencies. Furthermore, this does appear to be the strategy adopted by more entrepreneurial owner-managers. Those who engage in no formal training activities scored a rather low 48 percent on the entrepreneurship scale compared with 61 percent for those who organize internal training courses (and 58 percent for those that make use of external courses). There was also evidence of an entrepreneurial need to address the issues of management competence in their firms among the active SMEs (those who are drawn to management development scored a rather high 68 percent on the entrepreneurship scale). Table 8.7 presents another perspective for exploring the entrepreneurial approach to the problems of skills gaps through an analysis of the tactics used to overcome skills gaps.

The option of overcoming skills shortages through internal development of those skills may be the only option for some SMEs and a preferred option

*Table 8.6 Skills Gaps by Training Activities (Column %; Multiple Response)*

<i>Skills</i>	<i>External courses</i>	<i>Time off</i>	<i>Internal courses</i>	<i>Online</i>	<i>Other</i>	<i>No formal training</i>	<i>All</i>
Firm specific	67	68	71	78	59	49	61
Numeracy/literacy	29	27	25	19	21	24	27
ICT	13	12	13	9	24	27	12
Management	18	19	17	19	14	6	17
Financial	7	7	4	3	10	9	8
Other	14	14	13	6	31	11	13
n	177	106	114	32	29	70	309
%	57	16	37	10	9	23	100

*Source:* NatWest/SERTeam Quarterly Survey of Small Business in Britain. Vol. 22, no. 4.

Table 8.7 Skills Development by Importance of Skills Gaps (Column %; Multiple Response)

	<i>Very important</i>	<i>Irritating but manageable</i>	<i>Only occasional</i>	<i>No problem</i>	<i>All</i>
Develop internally	73	68	67	52	66
Outsource	18	22	25	22	21
Use consultants	23	16	14	16	18
Poach from other firms	21	14	4	7	13
Offer higher pay	13	16	14	10	13
Recruitment agencies	20	17	12	5	13
Use temporary staff	10	13	4	2	9
<i>Total frequency</i>	<i>178</i>	<i>166</i>	<i>138</i>	<i>114</i>	<i>133</i>
Total firms (n)	126	129	49	83	387
%	33	33	13	27	100

Source: NatWest/SERTeam Quarterly Survey of Small Business in Britain. Vol. 22, no. 4

for others. It is interesting that outsourcing, which is sometimes associated with loss of control of key knowledge or key functions, is less attractive for the active SMEs facing the most pressure from skills shortages. They would clearly prefer to hire consultants to help develop competencies or solutions to particular problems in-house. They also prefer to either recruit new staff with the required skills either using recruitment agencies or poaching them directly from their competitors. On average, the growth-oriented SMEs provided more development activities of all types, particularly external courses. They too aimed at developing skills internally but rather less so (61 percent) than growth-averse SMEs (69 percent) or those following an exit strategy (75 percent). The growth-oriented SMEs were also more inclined to outsource parts of their business activities and to try to attract staff from other firms. There is clearly a lot of entrepreneurial energy going into managing the problems associated with skills shortages and, given the low overall ranking of skill shortages as a main problem, a lot of these activities appear to be successful. Certainly, poaching talent from rivals is a very direct form of competition (and these owner-managers scored a high 64 percent on the entrepreneurial scale).

## DISCUSSION

These findings confirm the evidence from the other sources mentioned earlier that there are strong firm-size effects that influence the growth-orientation, propensity to innovate and performance in SMEs. Due to a combination of factors that certainly include tighter resource constraints

and wider information and power asymmetries with respect to larger organizations, the very smallest SMEs with less than ten employees (particularly those with no employees at all) appear on average to be less entrepreneurial and less innovative than the slightly larger small firms. This matters, not just because these very small firms are so numerous, but also because it raises concerns about the source of successful entrepreneurial firms for the future. Small firms perform a valuable development function in the labor market. They provide skills development for marginal workers (which often benefits large firms) and both training and role models for many of their own former employees who leave to start up their own small firms (Storey 1994; Gray 1998).

The findings presented earlier also confirm the consistent pattern from other studies and surveys, of widespread competency and skills gaps among SMEs, especially among the smallest firms. As the innovation in entrepreneurial SMEs, as called for by the Lisbon Agenda, derives from the capacity for creating, adapting and transferring of knowledge, which in turn depends on the nourishing of a rich base of capabilities and skills, the current state of the self-employed and microfirm sector, and its poor growth potential, is not encouraging. This may be one reason why Europe in general, and Britain in particular, have comparatively low early stage entrepreneurial activity measures in the Global Entrepreneurship Monitor, with respect to Asia, the U.S. and other parts of the world (Manitti *et al.* 2006).

Fortunately, there is equally strong empirical evidence from the same sources, clearly confirmed in the SERTeam studies discussed earlier, that both the EU and the U.K. still have vibrant sectors of active and innovative SMEs. However, these are not the very small firms but SMEs that have sufficient internal capabilities and resources, sufficient absorptive capacity, to create and use innovative knowledge. This appears to derive from the collective skills base and interactivity that comes from having at least ten co-workers in a firm who have developed effective levels of competence in core areas. This clearly implies that having effective systems and policies for supporting the development and use of appropriate capabilities and competences in the staff, supervisors, managers and the firm as a whole. It also implies that SMEs serious about achieving sustainable growth also have to be serious about developing the core and supportive competencies in their firms. However, Schumpeter (1934) believed that most entrepreneurial firms lost their appetite for growth and settled for a less risky life as a manager of their firm, protecting themselves in a reassuring cocoon of systems, routines and familiar relations. The crucial question is whether the owner-managers of SMEs who are developing internal resources and capabilities are still on an external growth trajectory. Britain has more very small microfirms and self-employed than other developed economies and this may be because they stop continuing as entrepreneurs earlier. Perhaps the low entrepreneurial rates and low skills base spring from a deeper low set of expectations.

With respect to constraints in their labor markets, most firms, big and small, have three main broad choices:

1. recruit or hire
2. outsource or subcontract
3. develop the needed capabilities internally

Many small SMEs, however, are financially constrained so are unable to pursue the first two options. Despite time constraints they are often forced to fall back on their own meager resources to overcome the constraints by working very long hours or by using unskilled, part-time workers. At some point it often becomes more attractive to shift to another line of business where those resource gaps are not so crucial, to seek paid employment or to retire. It is not surprising there is such a high churn rate among the very small underresourced small firms. At some point, many larger small firms reach the stage of having sufficient resources and capabilities to consider all three options. This stage seems to be around the ten employee mark but this will vary according to industry, locality and the particular circumstances of the firm. Even where these three options can be considered, recruitment and transactions costs may still make internal development a more attractive option for many SMEs. In some cases, as appears to be the case with the growth-averse SMEs, this will just be a matter of bowing to the inevitable and following the affordable options of selling or closing the business. Taking action to develop skills internally may be a sign of good management and it also seems to be entrepreneurial. The internal development route can be part of a very entrepreneurial strategy of guarding product and process innovations that provide competitive advantage in order to steal a march on rivals.

The data gathered through the SERTeam quarterly surveys does provide a useful level of analysis and has cast light on these issues. However, the data were not specified and focused enough to examine in more detail the factors that influence SME strategy and decision making in this area. Consequently, it is not possible to give anything other than a general inference from the data and, therefore, not possible to state whether an individual owner-manager faced with significant skills gaps and implementing dozens of human resource policies, is being entrepreneurial or just reactive. To research these important issues requires a more qualitative approach.

With respect to the human resource and capabilities issues, however, a number of more detailed points do emerge from the SERTeam survey data. Apart from the clear evidence that there is a base level of resources and capabilities needed to support innovation and growth, which appears to be related to the number of people working in the firm, an entrepreneurial intention to grow and compete is essential to the achievement of actual growth and development. The intention to grow is also linked to the recognition that the internal resources and capabilities need to be maintained

and strengthened through a mix of internal activities and the introduction of new knowledge from outside the firm. Certainly, the SMEs that give time off to their staff to pursue their own development and make use of external consultants and flexible, freelance staff to boost the internal skills base are also inclined to see themselves as entrepreneurial (60 percent and 62 percent, respectively, on the entrepreneurship scale).

This also fits with the knowledge-sharing model of innovation and the development of absorptive capacity in firms (Cohen and Levinthal 1990; Zahra and George 2002; Gray 2006), a conclusion that is further reinforced by finding that SMEs that do make use of external knowledge in this way are also much more likely to engage entrepreneurially in multiple innovative activities. The labor market constraints become, in effect, an opportunity for the further development of SMEs that are growth oriented and capable of assimilating external knowledge. Following the 2000 Lisbon Agenda, and the 2005 review, public policy and funding are now more focused on the creation of 'knowledge-based industries' (EC 2002a).

The overall knowledge base of SMEs and the role of management and staff development, as well as pressures for more business-relevant qualifications, have assumed a greater importance. It is clear that enterprise and innovation policy should be supporting and encouraging existing small firms to further improve their resource and capabilities. However, serious attention has to be paid to improving the quality and overall national skills base with an aim to helping the very large numbers of microfirms that are currently stuck in a nonentrepreneurial vicious spiral (poor management and technical skills plus inadequate resources to improve). The evidence presented in this chapter suggests that SMEs that have useful links with other firms are more open to learning and more able to manage the problems associated with skills shortages. Many of the self-employed without employees are content to manage their own affairs without interference from other people, but many microfirms that do employ other people potentially have a resource and capabilities base that is capable of growth, even if the current size of their firm is suboptimal in the face of current challenges. Much public policy across Europe aims at promoting high-technology clusters. Perhaps the focus could be lowered and the funding broadened to encourage (through support for subcontracting, marketing consortia, various forms of relevant networking, more linkages and so on) low or ordinary technology microfirms and other energetic, entrepreneurial larger SMEs, which are more outgoing and have knowledge to share.

With respect to improving the quality of the microfirm, perhaps existing strategies to increase the number of enterprising graduates in each Member State will eventually bear fruit in the medium term. Whether that occurs in good time to improve Europe's competitive position with respect to the rest of the world remains to be seen. It was noted a decade ago that, for the small firms that wish to engage, the existence of a formal policy concerning management development seems likely to be one indicator of whether

an organization treats such development as central to its business strategy and has the capacity to use management and staff development effectively (Pettigrew 1997; Thomson and Gray 1999).

Formal policies are more in evidence in organizations that give high priority to management and staff development and to the development of the firm as a learning organization. The forces that seem to impel innovative SMEs towards this more formal approach relate to the firm's growth strategy, customer pressure and competition, reflecting clear links between competitive pressures, internal resources and capabilities, the need to manage and generate knowledge effectively, and entrepreneurial behavior in firms of all sizes. Perhaps fiscal incentives could make such formal approaches more attractive. As ever, more research needs to be done to determine whether such policies would be feasible in practice.

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# 9 Human Resource Management in Small Enterprises from Poland

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## ABSTRACT

Research on human resource management (HRM) practices and policies in large enterprises is well developed. However, relatively little has been done to help managers of small enterprises to deal with their employees. Due to the specificity of small businesses, the concepts originally developed for larger enterprises cannot directly be introduced in small and medium enterprises (SMEs) (Kaman *et al.* 2001). As a result, both managers' interest in and researchers awareness of this problem have stimulated increased attention to the issue of the HRM in small enterprises in recent years (Edwards *et al.* 2005). Despite the growing literature on HRM in the small business context (Edwards *et al.* 2005), the implementation of the relevant theoretical patterns seems to be unsatisfactory. In our chapter, we focus on exploring and analyzing the HRM practices in Polish small enterprises through normative theory lenses, thereby following the research carried out by Cardona and Stevens (2004), Kotey and Slade (2005) and Ulrich (1997). Our study combines the elements of HRM theory, entrepreneurship (i.e., small business) theory, management theory and the universalistic approach.

We use a twofold research approach for the empirical part of this chapter. In a first step, we interviewed 193 owners and managers of companies employing less than fifty people (small enterprises) from Poland in a quantitative survey. The study was carried out before Poland's accession to the European Union in 2004. Hence, the results constitute the basis for the discussion on the changes and chances the accession introduced to HRM in Polish small enterprises.

Our research shows that most of the HRM practices (i.e., HR planning or training and development) in Polish enterprises is informal. HRM practices are mostly only formalized if it is required by law (such as, for example, recruitment and selection aspects). Our research results reveal that owners and managers declare positive general opinions concerning HRM practices and seem to be overconfident about the effectiveness of the practices they use. To our surprise, we were not able to identify many differences between our findings and results obtained from the data collected in the market-based economies. Thus, we were not able to specify any effect of socialist imprinting

on Polish managers' behaviors. Obtained results are similar to those of other studies on formalization of HRM practices in small enterprises (Kaman *et al.* 2001; Kotey and Slade 2005), on planning of the processes and the lack of acting in advance (Baker and Aldrich 1994).

## INTRODUCTION

Research on HRM practices and policies is well developed (Hornsby and Kuratko 1990; Huselid *et al.* 1997; Ulrich 1997). Despite the vast number of papers addressing HRM in large enterprises, which has long recognized HRM as an asset, relatively little has been done so far to help managers of small enterprises to deal with their employees (Storey 1992). This is especially astonishing considered the enormous importance of SMEs in the world economy (Heneman *et al.* 2000).

*Human capital* can be regarded as *the* critical success factor in SMEs in particular (Pfeffer 1994; De Kok 2003). Thus, the human element has recently received increasing attention in entrepreneurship research (Rauch *et al.* 2005). In a study by Hornsby and Kuratko (1990), the interviewed SME managers even ranked HRM as the second most important management task. As a result, both managers' interest in and researchers' awareness of HRM in small enterprises have received increased attention in recent years (Purcell 1993; Edwards *et al.* 2005).

Nevertheless, it can be assumed that SMEs are different from large enterprises with regards to their HRM practices, support systems or personnel profiles (Pearson *et al.* 2006). Hornsby and Kuratko (1990) note that standard HRM textbooks often contradict what happens in real-life SME practice. HRM in SMEs may consist primarily of the social skills and leadership styles of the entrepreneur or manager, since an HRM department only seldom exists (De Kok 2003). Due to the specificity of small businesses, the concepts originally developed for larger enterprises do not seem to be directly applicable or, in some cases, even beneficial in SMEs (Wager 1998; Kaman *et al.* 2001).

Research carried out in the HRM field attempts to offer both patterns and solutions for the managers of small enterprises. Several studies reveal that theoretical patterns being transferred into real-life action can result in different outcomes:

1. lower employee turnover (Breaugh 1981)
2. lower attrition during the recruitment process (Phillips 1998)
3. lower absenteeism (Vecchio 1995)
4. higher job satisfaction (Gratton and Truss 2003)
5. higher commitment (Bolino *et al.* 2002)
6. higher job performance (Gannon and Paine 1973)
7. retention (Guthrie 2001)

A number of these outcomes are proven to lead to increased corporate performance and the creation of competitive advantages (Amit and Schoemaker 1993; Barney 1991; Gong 2003). Marlow and Patton (1993) even argue that the effective management of employees can be regarded as a key factor for the survival of SMEs.

Regardless of the increasing attention of HRM issues in the small business context and the consistently growing number of 'ready-to-use patterns', reported implementation of the relevant theories can still be regarded as unsatisfactory in Poland (Heneman *et al.* 2000). Moreover, the daily Polish press underlines both the lack of interest in developing HRM in small enterprises because of the costs and the negative social opinions concerning practices in the field of personnel management.

Transition economies like Poland that faced a dramatic turn in 1989–1990 have their own management and HRM specificities. Almost fifty years of a centrally planned economy have imprinted into managers' and directors' minds concepts different from market-based economy patterns (Kriauciunas and Prashant 2006). It also created specific patterns of 'workforce' management (Marquis 2003). While large state-owned Polish enterprises had well-established HRM practices, small enterprises had virtually no tradition and experience in managing their human resources. Moreover, they were frequently founded by previous employees of large companies, and accordingly often constituted the 'smaller mirror' of their founder's origin companies. These kinds of imprinted patterns could not be easily changed by the dramatic shift in 1990 and the ensuing first years of free market economy. This resulted in the specific nature of HRM in current transition economies. However, the generation of young, well-educated managers now entering the market should follow free market economy patterns and challenge the imprinted behaviors of their older associates.

Accordingly, the goal of this chapter is to extend the knowledge of HRM policies and practices in small enterprises from Poland, one of the major and most advanced transition economies. The scarcity of previous research evidence precludes elaboration of arguments that would lead to research hypotheses, so that our research can be regarded as being widely exploratory. The results of our empirical study are to identify the breadth by which standard HRM practices are currently being utilized by Polish SMEs.

In order to answer the question of the low application of formal HRM practices in Polish small enterprises, we seek to analyze and explore them through normative theory lenses. Further, we propose practical solutions for both managers (how to draw from the extant literature on HRM) as well as for researchers (how to conduct a study in the HRM field). We also suggest a model to improve the quality of HRM practices in small enterprises. Our chapter combines the elements of HRM theory, entrepreneurship (i.e., small business) theory, management theory and the universalistic approach.

**LITERATURE REVIEW AND RESEARCH PROPOSALS**

HRM is defined in many ways (Strauss 2001). We perceive HRM as a process of preparation, implementation and control of personnel decisions (Cole 1987). HRM involves practices that increase the firms' human capital, such as the employees' knowledge, skills and abilities (Huselid *et al.* 1997). Such a point of view creates a good background for the need of searching HRM patterns in the practice of small firms. Patterns help to rationalize decisions. HRM theory brings general hints about tools, techniques and methods that should be used in order to boost the rationality of HRM decisions.

Following existing literature recommendations, it is possible to use different theoretical approaches to study HRM. We can basically distinguish the *universalistic*, the *contingency* and the *configuration* approach (Delery and Doty 1996; Harms *et al.* 2004; Colbert 2004). In our chapter, we follow the *universalistic* approach, which searches for universal factors that ascertain corporate successes.

Following this line of argumentation, we propose that it should be possible to identify well-executed HRM practices for SMEs; regarding those practices and systemic approach characteristics, it is possible to develop HRM systems.

Existing research on HRM practices in SMEs is relatively rare. The assumption often underlying small firm management is that HRM theory does not bring support for managers (Kaman *et al.* 2001). Many authors emphasize a theory shortage problem in the field of HRM in SMEs, although this particular knowledge is supposed to be exceptionally useful for small businesses (Heneman *et al.* 2000). A review of the relevant literature of the past twenty years indicates that at least some scholars realize the importance of the role of HRM in SMEs (Hornsby and Kuratko 1990; Deshpande and Golhar 1994). Therein, HRM researchers and practitioners discuss the range of use of universalistic patterns and prescriptions (Ulrich 1997). The environment in which a firm operates as well as the particular characteristics of a company seem to influence personnel decisions. Besides, many similarities between ways of taking on and employing differences in decisions are observable and have been discovered.

Cardona and Stevens (2004) presented a comprehensive literature review of HRM in small enterprises. The authors identified and analyzed twenty-three articles across several journals in general management, entrepreneurship and HRM, as well as several textbook chapters. They come to the following conclusions:

1. It is difficult to identify the complete landscape of HRM practices.
2. The roots of empirical research and theoretical propositions address the best practices' norms/standards.
3. Formalized, structured and informal, not structured, activities are blended within small enterprises; however, activities and the level of formalization in decisions is lower than in large organizations.

4. The influence of the company owners' experiences on HRM policies and practices is considerable, and a lack of actions exist that aim to improve their decisions by HR professionals.

Summarizing previous research, most empirical studies have demonstrated that SMEs usually do not have formal HRM departments nor do they adopt traditional HRM paradigms or practices (Hornsby and Kuratko 1990; Heneman and Berkley 1999; De Kok and Uhlaner 2001; De Kok 2003).

On the basis of these statements, we are convinced that it is possible to identify and choose particular sets of fundamental HRM practices and to assess the level of their appropriateness to patterns presented in the literature.

Meanwhile, it can be observed that inside small firms, HRM patterns come in two different forms: (a) as written procedures, documents, roles and instructions, and (b) as informal procedures, i.e., ways of doing things. Kotey and Slade (2005) conclude that HRM patterns that are used by small enterprises are not well formalized. In small enterprises, patterns can be established in community members' minds and become routines. This enhances the appearance of common knowledge, which creates the boundaries restricting freedom in decisions.

Different outcomes appear as the result of behaviors consistent or inconsistent with patterns. Considering HRM practices, we can distinguish the following important outcomes of behaviors: the level of trust, turnover, the inequality of chances and treatment, barriers of career development, feelings of inadequacy, unequal work responsibilities and duties sharing. Opinions concerning each of the aforementioned problems are shaped by personal experiences; they are expressions of human experiences and affect people's actions (Gilbert *et al.* 2004). They can also demonstrate the way concrete actions constitute the reaction to the situation. In this sense, it takes the form of general opinion about the reality.

Standard textbooks on HRM emphasize its target to create the managers' abilities for realizing the 'virtuous HRM' dynamics in organizations (Buyens *et al.* 2004). Nevertheless, implementation of these HRM practices is in fact very low, which might lead to negative opinions about their use within the company. Experiences leading to these opinions influence employee behavior (see discussion on job satisfaction in Weiss 2002). The tendency towards introducing standard HRM practices should appear as the effect of unsatisfactory assessments of currently employed practices.

Analyzing the extant HRM literature, one can notice that SMEs do not seem to be one of the major interest areas of HRM researchers and practitioners. Accordingly, we were only able to identify relatively few studies directly tackling small business problems from the HRM point of view. Most research on HRM is carried on in larger companies. Thus, the empirical and theoretical knowledge in this field can still be regarded as developing and underresearched. Especially with regards to the East European transition countries, research on HRM in SMEs is very rare. In our study,

we therefore concentrate on the type and the extent to which the introduction of well-executed HRM practices into Polish small enterprises would be welcomed. We conducted our analysis on the organizational level of HRM. Hence, we believe that our research results will begin filling out the gap in contemporary literature.

Based on previous literature, we formulate the following propositions:

*P1: It is possible to identify well-executed HRM practices in small enterprises from Poland.*

*P2: The state of the HRM in small enterprises from Poland differs from the literature patterns.*

*P3: Forces hiding inside Polish small enterprises neither enhance nor insist on the development of a HRM system and the development of people.*

## METHODOLOGY

Our research was carried out on small enterprises from southern Poland with less than fifty employees (following the official Polish as well as EU definitions, see, e.g., Commission 2003). Solo entrepreneurs were excluded due to missing employees and the correspondingly difficult measurement of HRM policies or practices.

Our study uses a two-step approach. The first was a quantitative survey among small enterprise owners, managers and workers, followed by six qualitative interviews with owners or managers. The first stage of our research was based on a survey of 193 small enterprises from southern Poland. Respondents were working for 55 trading companies and 138 for companies producing goods or services for customers. Sixty-one of the respondents were the owners of the companies, the rest managers and specialists. In total, the firms had 3,899 employees, making the average firm size 20.2. The survey questionnaire contained eighty-eight questions. Following Cardona and Stevens (2004), we used a functional HR framework in order to choose items. The chosen functions are presented in Table 9.1.

For us, these domains are the fields where HR managers are especially forced to make decisions. The interview questions were divided into three categories. The first group of questions aimed at investigating respondents' knowledge of HRM formalized patterns, the second group regarded HR rules and regulations and the third addressed opinions and other measures of synthetic HRM assessment. Both open and closed questions were used. Analysis of the closed questions and interpretation of the open questions allowed us to understand the respondents' declared theory of action. Hence, interpretations of several open questions were also used to assess

Table 9.1 Results of the First Stage of Research (Survey)

	<i>Formal patterns</i>	<i>Existence</i>		<i>Informal patterns hidden in common knowledge</i>	
Planning	Existence of the document describing the HRM strategy	18%	5%	Supplying employees with the information about changes in the HRM strategy	
	Existence of the manpower planning procedures	8%	67%	Knowledge about the rules of planning the level of employment (quantity of employees)	
Recruitment and selection	Formal data bases of candidates willing to work for the company	37%	25%	The possibility of getting back to work when someone decides to leave (assessment of one's qualifications regardless of disappointment)	
	Recruitment advertisements	47%	49%	Conducting of long-lasting (between 40 min.—1 hour) selection interviews with the applicant	
	Existence of written hiring procedures	6%	83%	The interruptions during the selection interview	
	Ample applicant selection methods (other than the interview, i.e. selection tests)		14%	36%	Common knowledge about hidden criteria of applicant assessment
				93%	Conducting of the interview with the job applicant
	Existence of detailed job description	34%	10%	Changes in the job descriptions	
	Co-working with the recruitment and selection agencies	39%			
Training and development	Existence of the internal system of training	28%	43%	Employees participation in the training	
	The obligation to prepare the training report document	35%	61%	Possible access to the professional books or journals	
	Existence of the detailed budget for training and development		7%	11%	Voluntary participation in the training programs (training opportunities for employees)
				42%	Trainings mainly for managers and specialists
				47%	Owners' self education in organized forms

(continued)

Table 9.1 (continued)

	<i>Formal patterns</i>	<i>Existence</i>		<i>Informal patterns hidden in common knowledge</i>	
Compensation, job evaluation, and career opportunities	Job evaluation methods	22%	56%	Pay changes	
	Pay grades	37%	33%	Criteria of bonuses differentiation	
	Pay level	12%	82%	The accuracy of payment time	
	Pay mix	66%	67%	Social fund distribution	
				42%	Methods of increasing rewards
				39%	Convention of the same methods of compensation of new employees
Performance appraisal	5%	46%	Openness of assessment methods to the critical opinions about compensation systems		
Retention			1%	The knowledge about the possibilities of careers in the organization	
			46%	Knowledge of which employees' actions and behaviours are valued by the owner of the employee	
			64%	The length of employment in the firm equal to the firm age	
Lay Offs	Court processes of employees and employer and their results	8%	32%	The knowledge about problems and conflicting issues between the employer and employees	
	The method of displacement concur with the state law	75%			
Industrial Relations	Existence of trade unions in the company	4%	23%	The knowledge about what is valued by the employees	
			37%	The existence of informal channel of communication between owners and employees about workers' opinions	

declarations that were contained in the closed ones. The list of items concerning formal patterns is presented in column 2 of Table 9.1, and the list of informal patterns found within common knowledge is depicted in column 5 of Table 9.1. Table 9.2 presents synthetic assessments of HRM systems (general opinions).

Questions were usually built according to the following pattern: 'Is there a written document or written prescription (pattern) of acting in the firm?' In the compensation field, we tried to assess the formal compensation policy on the basis of salary level. In order to present the formalization, we also asked about different facts, i.e., existence of trade unions and/or history of court cases. Questions addressing values and rules were not the reflection in the mirror of those concerning patterns. In this way, we aimed at enlarging the amount of collected data. Wider information on the essence of given questions will be presented in the results section of the chapter. Along with questions addressing patterns, we also tried to identify the general opinions about HRM processes in the organization among respondents.

After having calculated the results of the first stage of our research, we conducted the second part of the study, where six owners of small enterprises were interviewed qualitatively. This guaranteed the objective and open character of the conversation. Unstructured interviews were used in order to better understand conclusions drawn from the quantitative research from the first stage. The sense of most of the questions during the six conversations was: How may the respondents' answers to questionnaire issues be explained? Why did the respondent answer in that particular way? Such questions were to depict to what extent the results obtained from the first stage represent the elements of theory of action known for six respondents (Argyris 2004).

## RESULTS

In the first stage of the data analysis, we counted the percentage shares of the answers of a given type. Two consecutive tables present the percentages of answers representing existence of the respective (formal and informal) HRM patterns in small enterprises (Table 9.1) and the level of negative experiences (general HRM impressions and assessments) of the respondents (Table 9.2).

The obtained results reveal that HRM patterns are formalized only in a small number of Polish small enterprises. Most frequently, organizations are willing to use methods of displacement that concur with the state laws and rules for rewarding employees (considering its base and bonus parts). The level of formalization of HRM practices in Polish SMEs is rather low. However, informal, implicit knowledge in the form of patterns hidden in the staff's common knowledge seems to be a lot higher. The respondents argued that they do know the planning rules; in most cases undergo the detailed selection process; have access to professional literature; often develop their skills and knowledge; experience changes in the pay level; and know the rules of social fund distribution. In some more detailed items, almost half of the respondents indicated knowledge about existing patterns. The questions addressing informal patterns were open, which gave us the possibility to assess the nature and/or character of the knowledge about

Table 9.2 Level of Negative HRM Experiences: Research Results

No	<i>Experiences dimension (the subject of general opinions)</i>	%
1	Lack of trust or restricted trust in colleges and subordinates.	23
2	Existence of untold layoff which surprised the owner.	33
3	Existence of untold layoff which surprised other employees.	21
4	Negative assessment of employee normative (too big or too small work duty levels.)	24
5	Particular rule for hiring new employee (inequality of selection methods).	11
6	Respondent was not delegated to take a part in training activities outside the company (lack of training activities).	43
7	Opinion that only owner can do a career from within the company workers.	64
8	Actions towards finding the new job by the respondent.	11
9	Work within the company makes finding a new job outside the company difficult.	5
10	Employee numbers decrease in comparison to previous years.	25

the respective HRM aspect. On the basis of our research, we were able to identify very general and superficial characteristics of knowledge about the HRM patterns. A closer look into the more common patterns shows that the described solutions were quite simple and artificial.

However, we did not aim at measuring the influence of the quality of HRM practices on organizational performance in our study. The detailed analysis of every single questionnaire used in the first stage of our research did not allow us to conclude a positive relationship between existing patterns in the field of HRM and organizational performance. Even companies that approached HRM standard textbook literature patterns in some fields do not have better performance results compared to other analyzed companies. Or, in other words, our empirical results report that even well-executed standard HRM practices have virtually little influence on corporate performance. We should also point out that assessment of positive answers considering patterns of practice also fall victim to difficulties and ambiguities. For example, most respondents indicated having access to professional literature. However, this literature mostly covers topics such as technology, law regulations, etc., but only seldom management or HRM issues.

On the basis of our analysis, we can also suggest that the situation in the field of knowledge of informal patterns is relatively good. However, we think that it is far removed from the basic patterns known among professionals. As Table 9.2 reveals, the situation is generally acceptable and respondents do not search for new work opportunities (see row no. 9 in Table 9.2).

The method of confronting three dimensions of HRM (use of formal patterns, informal and general assessment and experiences) has provided interesting results. Formal patterns, especially rather complicated ones, are only rarely observed in practice. The analysis of the answers leads us to the conclusion that the state of informal patterns cannot be perceived as univocally positive. However, effects of such states do not create dramatically negative general experiences of HRM effects. Thus, it seems to be an interesting case of contradiction. The low level of the quality of the HRM systems is not perceived by owners, managers and specialists of Polish small enterprises. Hence, we suppose it does not create the need for employee training and development among managers.

The qualitative part of our research revealed explanations that stress the correctness of the applied practices. Generality and simplicity of used practices, according to managers, consist of justified ways of management. We suppose that this represents an action theory of Polish small enterprise owners. Six interviewed owners reported that this does correspond to the difficult economical situation of small enterprises in Poland, and constituted response to the lack of well-qualified employees being willing to work for the company with payments below the average salary level, and nevertheless being fully devoted to the company and owner. Moreover, all owners of small enterprises raised the issue of fear of employee dismissal, especially of the trained ones, or concern about loss of power and control over well-qualified human resources.

Considering the previous statements as well as the research results, we consider our first research proposal (P1) as being supported: We managed to identify well-executed HRM practices in Polish small enterprises. However, managers are used to thinking about their companies exclusively in superlatives. This certainly affects our results. Our research has also revealed that the state of HRM in small enterprises from Poland clearly differs from existing literature patterns (P2). Research results show that because of the general positive opinions about the state of HRM practices, there are no internal forces enhancing the development of HRM systems or the development of people (P3).

## CONCLUSION AND IMPLICATIONS

Researching HRM practices in small enterprises comprises a difficult task. Our own empirical research shows that HRM in small enterprises is constituted of a blend of both formal and informal patterns. General opinions about these patterns are positive, while they have little in common with the current specialist literature on HRM in small enterprises. Considering the socialist imprinting phenomenon, we expected greater differences between HRM in small enterprises from Poland and those from market-based economies. Surprisingly, our research brought similar results to those carried

on in other European countries. Inside Polish small enterprises, a vicious circle of incapableness regarding the development of HRM systems and the development of people seems to exist. Thus, some external pressure on the development of HRM is clearly needed. Therefore, we proposed a model of developing HRM in small enterprises based on the interventions of external institutions, which should help to improve the quality of personnel management.

The fact that the analyzed companies have only a few employees does not mean that HRM practices can be ignored. Moreover, HR is becoming increasingly important in companies of all sizes, since optimal utilization of skills and knowledge increases small business growth. The language of business decision-makers is money, profits and organizational performance (Chandler and McEvoy 2000). Thus, the probability of success can be increased through the amount of human capital in a firm and by developing and utilizing human resources (Rauch *et al.* 2005). Nevertheless, it should always be kept in mind that due to the strong heterogeneity of SMEs, *the* HRM does not exist (Behrends and Martin 2006).

Unexpectedly, we were not able to identify greater differences between the findings of our empirical study from Poland and results obtained from data previously collected in the market-based economies. Thus, we were not able to specify any effect of *socialist imprinting* on Polish managers' behaviors. Moreover, our obtained results are similar to those of other studies on formalization of HRM practices in small enterprises (Kaman *et al.* 2001; Kotey and Slade 2005), on planning of the processes and the lack of acting in advance (Baker and Aldrich 1994). Compared to other research in HRM, our results also reveal that recruitment strategies are rarely met, and are prepared on an ad hoc basis (Heneman and Berkley 1999). These results do not challenge general knowledge about HRM in small enterprises (Cardona and Stevens 2004). Moreover, the small business owners' opinions obtained from the six detailed qualitative interviews presenting their beliefs in used practices are comparable to previous research. McEvoy (1984), for example, found that small firms seem to be overconfident about the effectiveness of their personnel programs and practices they use.

Our research results indicate that formal patterns and rules are used in practice in at least half of the interviewed companies, but mostly only when required by law (the job descriptions are prepared, the methods and reasons of disengagement are concurrent with the lower amount, social funding is distributed correctly, compensation is paid on time and in the required amount). Formal patterns are also used if they do not conflict with obvious economic phenomena or management rules (for example: changes in compensation, the separation of basic pay from bonuses). Higher levels of implementation of specialist literature HRM patterns could accordingly lead to higher performance.

The empirical results lead us to the conclusion that the vicious circle of incapableness regarding development of HRM systems and development of

people does exist in Polish SMEs. Practices are not developed because general opinions about the situation are positive (both employees and employers do think that they act rationally), and opinions are positive because proper practices are not developed (with the use of confronting practices' patterns). This is a typical problem of routines retaining (Argyris 2004). Hence, there is no chance for the introduction of the first stage of organizational change, i.e., 'unfreezing' (Lewin 1951), which cannot be developed itself. We think that the movement *beyond* the organizational level of analysis is clearly needed. Unfortunately, HRM or the programs developing HRM do not exist at that particular level. An integrated external pressure system on the development of HRM practices would be useful for the reason of breaking routines in small enterprises. Obviously, the development of HRM systems in small enterprises does not imply creating either a new legal regulation or economical pressure. It would be more rational to impact with the higher level of subtleness.

In Poland, there is a huge number of agencies, funds and organizations (including state owned) supporting small businesses. However, the obtained results do not indicate that their acting could promote the development of HRM in small enterprises. The beginning of operations of the national Polish Agency for Enterprise Development (PAED) in November 2000 should also have theoretically changed the situation. When we carried out our research, PAED was just commencing its activity. During the first year, they distributed limited amounts of money. Theoretically, this agency is responsible for the management of funds assigned from the State Budget (from 2000 on) and from the European Union (from 2004 on) for the support of local and national entrepreneurial actions and the development of human resources, with particular consideration given to the needs of SMEs. After the Polish accession to the European Union in May 2004, the situation should consequently have changed, due to the start of national programs enhancing and promoting entrepreneurial actions. Nowadays, PAED coordinates activities carried out by different organizations and funds (Equal Community Initiative, Bank of Technologies and Products, etc.), and plays an active role in the professional development of personnel and the training of human resources and Sectoral Operational Programme Human Resources Development, co-financed by the PHARE Economic and Social Cohesion Programme—Human Resource Development and the European Social Fund (ESF). A huge amount of money goes to SMEs through PAED, and it should accordingly bring positive outcomes.

But surprisingly, our observations of five projects carried on by the universities located in Silesia (southern Poland), which have been co-financed by the EQUAL Community Initiative and the European Social Fund, did not change the situation. The actions are still dispersed and poorly coordinated. It seems that the Polish accession to the European Union did not enhance the pressure on the development of management and HRM in small enterprises. A central coordination of the program for development of HRM in small enterprises does not really exist. Funds should therefore be directed toward

the development of HRM, and clear responsibilities for the assessment and control of money distribution should be introduced. The program obviously needs to be improved. Therefore, we suggest core ideas of the national level program for the development of HRM and development of employees of small enterprises. Its general shape could consist of the following processes:

1. Development of the core ideas of the national, regional and branch programs of well-designed HRM practices implementation into small business. People are the most precious asset to the company. Hence, government and local authorities should also be responsible for their development. If forces responsible for the development of HRM are weak, the responsibility for such a program should be taken by other institutions (not necessarily by the State).
2. Creating a database of stakeholders with a diagnosis of their competencies. Most of the stakeholders, although not all, have well-developed HRM structures and employ HRM professionals. Capitalizing on their competencies, it is possible to overcome small enterprises' weaknesses in the HRM field.
3. Usage of the structure of HRM departments and its position in the stakeholders' organizations to incorporate issues dealing with the responsibility for introduction of HRM ideas and patterns into small enterprises' social responsibility programs. As the research results reveal, it is necessary to disorder and put the brake on positive owners' opinions about HRM systems in their companies.
4. Creation of a monitoring center and virtual platform of information exchange about *best HRM practices* in small enterprises. One of its tasks should be to continue to develop the methods of research of HRM practices in order to omit the possible mistakes.

For researchers, we propose a new approach towards investigating HRM in small enterprises. Researching practices might not bring factual results due to the widely positive managerial self-evaluations. Interviewing employees or workers about HRM practices is not a fruitful idea either because of the generally negative opinion concerning, for example, pay levels (which are usually perceived as being too low) or disengagement methods employed by the company (disengagement is generally perceived negatively). Thus, for small enterprises, a new approach to investigating HRM should be adopted. We therefore suggest starting new investigations on HRM in small enterprises on the basis of the *configuration approach* (Colbert 2004; Harms *et al.* 2004), which might help to overcome mistakes made during the research carried out from the 'best practices' perspective (Delery and Doty 1996). This approach suggests moving toward the configurations (for example: analyzing HRM, strategy, culture and environment) as well as policies (declared or implicit guidelines for decision making; Armstrong and Stephens 2005). This allows a rejection of the idiosyncratic practices perspective. This might also clarify and explain the influence of some HRM

policy on a company's performance under particular conditions (with given strategy, culture and environment configuration).

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# 10 Voluntary Corporate Health Promotion as Strategic Function of HRM

## Comparing SMEs and Large Companies

*Julia Brandl and Matthias Fink*

### INTRODUCTION

During the last years, corporate health promotion has become an important issue not only within the field of work science or medical publications, but also in the field of human resource management (HRM) (see, for example, Badura and Hehlmann 2003; Bedner 2001; von Eckardstein and Lueger 1996; von Eckardstein *et al.* 1995). Here, corporate health promotion—understood as voluntary measures on the corporate level that expand the legally required coverage and protection for employees—are taking on an increasingly strategic function in HRM in light of demographic developments (von Eckardstein 2003, 2004) as well as in connection with the development of human capital. Also, Turck (2003) considers corporate health promotion as a strategic function in HRM, as investments in individual health care play a decisive role concerning the creation of corporate human capital.

In practice, however, there are numerous indications of the heterogeneous recognition concerning the importance of corporate health promotion activities for HRM and company performance. While larger companies have tended to be more sensitive with regard to health care issues in recent years, small and medium enterprises (SMEs) still seem to lag behind this development (see Scharinger 2003; Kriener 2003; Meggeneder 2003).

At the same time, great importance is placed on the need for health care in SMEs. For instance, Rigby and Lawlor (2001) find that employee safety and health care have too little importance within the day-to-day business of SMEs. On the other hand, it is in the best interests of SMEs to employ HRM to develop their human capital as a means to strengthen their competitive position (see European Network for Workplace Health Promotion [ENWHP] 1997). Moreover, Vickers and others (2004) indicate greater physical health risks in SMEs than in larger companies.

Within this context, a comprehensive discussion on the creation of health care activities that are particularly suited for the specific demands of SMEs has evolved (see Breucker and Sochert 2001; Bundesverband der Betriebskrankenkassen 2001; Breucker 2000; Gigout 1999). There is, however, a lack of knowledge on the extent of the actual differences in HRM in SMEs and

even less on health promotion activities according to company size, especially on how the nature of health promotion measures differs with company size. Previous empirical research in HRM has examined how to establish health promotion activities in SMEs (see Eakin and MacEachen 1998). Other work has investigated the obstacles to the implementation of health promotion in SMEs. For instance, Hirtenlehner and Sebinger (2004), conducting an analysis of needs of health promotion in Austrian companies, identify a large number of obstacles to the implementation of health care activities. Rutsohn and others (1981), as well as Arrigioni (1998), show that the amount of health care measures increases with company size. However, more recent investigations indicate that SMEs offer comprehensive health promotion too (see Rigby and Lawlor 2001). Pilkington and others (2002) show that company size determines the intensity with which specific measures are applied. Most recently, Vickers and James (2004) point to the relationship between the existence of health care measures in SMEs and the company's employment situation. Overall, it can be concluded that so far, only few empirical findings exist regarding how company size affects what a company offers its employees in terms of health care. Further, these studies primarily address the amount of health care measures; they do not analyze, however, how company size affects the specific nature of health care measures.

Against this backdrop, this chapter investigates if and to what extent there are differences in the nature of health promotion measures according to company size. More specifically, we analyze the relationship between company size and the preventive or curative nature of health promotion measures, as well as the relationship between company size and the structural or personal approach of measures that are carried out as strategic tools of HRM.

The notion that different company sizes include modified prerequisites for action concerning HRM (see Behrends and Martin 2006; Behrends 2004) serves as a theoretical point of reference for the study at hand. To be sure, the company size itself does not extend or limit the scope of HRM, but instead extends or limits variables that shape the 'action' of a company (Behrends and Martin 2006). For instance, smaller enterprises often dispose of less and different resources and less complex corporate processes, and their HRM is not highly institutionalized.

While the consequences of these particularities for HRM in SMEs have received attention on a theoretical level, there is a lack of empirical investigation. Existing studies are often limited to the diffusion rate of HRM measures relative to company size (for an overview of empirical findings see Behrends and Martin 2006). Corporate health promotion as an activity of HRM in particular has often been neglected (Vickers and James 2004). Within this context, the study presented in this chapter helps to empirically found the influence of company size on HRM and furthermore creates a more differentiated view of the relationship between company size and specific approaches concerning health promotion.

A document analysis of project reports of Austrian organizations on their health promotion activities serves as an empirical basis for the study. Owing to the selection of organizations that document their health care activities, the study does not claim to be representative. Compared to surveys that are based on random samples, the purposeful sampling has the advantage that only those companies are included that are willing or able to provide information on their health promotion activities. Moreover, this procedure enables the researchers to consider any measures that are subjectively regarded as relevant by the enterprises in the context of health care. This is of particular importance with regard to the analysis of specific health care activities in SMEs, as these employ HRM activities other than those that are mentioned in standard personnel literature, focusing mainly on large enterprises (see Holliday 1995; Behrends and Martin 2006).

In the following section, approaches towards corporate health promotion are briefly explained, and then hypotheses for the empirical investigation are formulated. The results only partially support that there are differences based on company size. Thus, the last section discusses possible explanations for the absence of company size-specific differences in health promotion in HRM.

## CONCEPTUAL FRAMEWORK FOR THE ANALYSIS OF CORPORATE HEALTH PROMOTION IN SMES' HRM

In contrast to legally stipulated health and safety standards at work, companies that carry out corporate health promotion engage themselves in a voluntary manner. According to the Luxembourg Declaration passed by the ENWHP, health promotion includes 'the combined efforts of employers, employees and society to improve the health and well-being of people at work' (see ENWHP 1997: 1). As the measures contributing to health and well-being have not yet been clearly determined, various activities may be subsumed under the term 'corporate health promotion'. These may range from classical activities of HRM, such as the organization of work schedules and training, to corporate sports programs and supply of medical services.

There is a multitude of definitions for the term 'health.' The definition of health by the World Health Organization (WHO), on which most discussions on health promotion are based, proposes a holistic view of human beings, understanding them as physical, psychological and social beings that participate in the formation of their work and life conditions. Accordingly, health is defined as 'a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity' (WHO 1946: 100).

In analogy to the argument that company size changes the prerequisites for action for HRM (see Behrends and Martin 2006), differences in company size can also change the operative requirements for health promotion.

In SMEs, work relations are often seen as paternalistic (see Baldock *et al.* 2005; Moule 1998; Ram 1994), resource provision is typically seen as low and the processes—especially in HRM—tend to be less complex (this means that SMEs do not need all the business measures for managing their processes, as there is no need for reduction of complexity).

For the following considerations, we particularly refer to the argument that emphasizes the different resource availability according to company size. Scarcity of resources is a typical attribute of SMEs and is also partially seen as a constitutive characteristic of SMEs (Behrends and Martin 2006).

Resource restrictions limit the company as a social system with regard to the shaping of exchange relationships (Pfeffer and Salancik 1978; Nienhüser 2004). The smaller the company, the smaller the amount of resources companies can fall back on. Smaller companies also have reduced possibilities to shift resources between corporate functions and to acquire additional resources if necessary, due to a more limited access to credit. This has consequences for all corporate fields of action, including HRM and the nature of health promotion (Behrends and Martin 2006).

In this respect, the lack of resources in SMEs is pointed to as a reason for poor safety standards (Nichols 1997). Depending on the industry the SME is in, the smaller the company, the fewer resources there are for HRM and health promotion; in particular, there is no time for discussing health promotion in-depth, for conducting training or for investing in new equipment (see Kriener 2003). Another obstacle to the establishment of health promotion is the fact that managers/owners of smaller companies often do not dispose of the necessary know-how concerning health-related issues that would allow them to actually identify starting points for engaging with health promotion (Cassell *et al.* 2002). For example, Vickers and James (2004) report how the external inspectors they interviewed consider awareness concerning the necessity of health and safety measures in SMEs to typically be extremely low.

As these prerequisites are usually complied with in larger companies, one can assume that health promotion in smaller enterprises is less established compared to large enterprises. Thus, we propose that the number of health care measures decreases as the company size decreases.

*H1: The number of health care measures diminishes with decreasing company size.*

Even though it is constantly stated that corporate health promotion leads to lower expenses at the corporate level, due to, e.g., reduction in sick pay and sick leave (see, for example, Golaszewski 2001; Helmenstein 2004), these effects occur only delayed, whereas the enterprises have to bear the expenditures for promotion measures continuously. Small enterprises tend to be in a more unfavorable situation, as they only dispose of a small financial scope for the establishment of health promotion (Thul *et al.* 2001). In

addition, they often have to bear a larger share of expenditures for health promotion, given their limited access to potential sponsors (e.g., health insurance funds). Hence, as SMEs find themselves in a competitive market situation, expenditures for health promotion are primarily considered a burden, which does not create any direct benefit for business success (Vickers and James 2004).

Within this context it is necessary to differentiate whether health measures aim at correcting the consequences of (already existing) health damages in order to maintain or to recover workability (in the following also referred to as curative measures) or whether measures aim at building up resources (preventive measures) by creating health promoting structures as well as developing potential of employees (Hertel 1992; Bedner 2001). For the enterprises, the expenses incurred for preventive measures often represent additional costs to those arising from the consequences of health claims (Rutsohn *et al.* 1981). Furthermore, SMEs tend to be more resistant to change; alterations are only carried out if the pressure to do so is rather high (Cassell *et al.* 2002). Therefore, we propose that small companies rarely engage themselves in preventive measures, as to them additional expenditures are more difficult to justify.

*H2a: The number of preventive health promotion measures diminishes with decreasing company size.*

Typical problem areas for SMEs such as poorer safety standards and the resulting higher frequency of accidents and safety hazards (Nichols 1997) require corporate HRM policies assuring the protection and, if needed, treatment and recovery of employees. For example, provision of medical treatments and support can alleviate constraints arising from work-related accidents. Similarly, an improvement in work equipment can help to enhance workability of employees. Appropriate modifications in work equipment can help reduce constraints and allow work to continue. It is therefore to be expected that curative health measures will increase the smaller the company is.

*H2b: The number of curative health promotion measures increases with decreasing company size.*

The implementation of health care measures requires a certain (coordination) effort and presupposes an allocation of resources. On the one hand, activities such as the information of employees concerning health care issues and the allocation of health care supply require an adequate infrastructure and qualified experts who have enough time to dedicate themselves to these tasks. If there is a lack of professional HRM with specialized health care promoters (e.g., members of the works committee, specialists for health issues), health care measures are often pursued to a lesser degree (Walters

2001). Vickers and James (2004) find in their survey that in small enterprises the owner-manager is often in charge of health promotion, implying restrictions in capacity and time dedicated to such activities. Against this background we propose that enterprises with a decreasing company size engage themselves less in measures that are targeted at the formalized information of employees.

*H3a: The number of information measures diminishes with decreasing company size.*

Along with this comes the typically strong scarcity of resources in SMEs, implying that SME employees have less access to formal training and qualification. Storey and Westhead (1997) have pointed out that there is a linear relationship between company size and the number of training courses. Formal training implies step costs, against which a smaller amount of users stand in small enterprises, indicating an inefficient use of resources in SMEs. So, if the company, for example, offers a sports program on a voluntary basis, there needs to be enough employees taking part to make this program financially beneficial. It can be expected that large companies have fewer problems finding enough people interested in such programs than smaller companies. From this, we infer that decreasing company size means a diminishing number of these kinds of offers for employees.

*H3b: The number of health care offers diminishes with decreasing company size.*

Independent of the person who holds a certain job, health promotion measures can be applied to the structural factors of the workplace (see Meggeneder 2003). The adjustment of workplace conditions offers the advantage for the company to retain expenditures in corporate health promotion if actual position holders are replaced. The adaptation of the workplace conditions aims at changing the conditions for conducting the job (e.g., workplace design, regulation of working hours) and thereby has an indirect effect on the health of the person holding the position.<sup>1</sup> Due to their structural characteristics, such measures require noticeably less permanent efforts. The possibility for an implementation of structural health promotion measures in a small company is particularly attractive because it does not as a result require the owner-manager to play a large role in maintaining the activities. Smaller enterprises are therefore expected to engage themselves more strongly in structural measures, as these measures are often nonrecurring in their character and relieve the owner-manager of the company of an ongoing attention to and maintenance of health promotion activities. Large companies do not confront problems in maintenance in this form, as they more frequently have specialized departments/people in

place for conducting health promotion. Thus, we propose that a decreasing company size is associated with a higher use of structural measures.

*H3c: The number of structural measures increases with decreasing company size.*

The study presented in the following section serves as a basis for testing the hypotheses formulated in this section.

## METHODOLOGY

The study is based on an analysis of the documents published by organizations in which they present their health promotion programs. These reports were done between 1999 and 2005. The identification of organizations that have carried out projects on corporate health promotion was the starting point for the compilation of the sample. The Austrian Network of Corporate Health Promotion—a nonprofit federal institution—and the regional health insurance companies of each province were contacted and asked to send their published reports on corporate health promotion projects. In addition, the organizations' project reports published online were included in the analysis.

The sample consisted of 101 organizations.<sup>2</sup> Of these, seven (6.9 percent) were microcompanies with up to ten employees, fourteen (13.9 percent) were small companies with up to fifty workers, thirty-two (31.7 percent) were medium-sized companies with up to 250 employees, while forty-eight (47.5 percent) were large enterprises. Of the companies analyzed, forty-six (45.5 percent) were active in the realm of production, fifty-five (54.5 percent) in service. Nineteen (18.8 percent) of the firms had some kind of state involvement in their operation, while in the other eighty-two (81.2 percent), the government did not hold any (direct or indirect) interests in the firms. The companies in the sample are located throughout all of Austria.

For the analysis, the researchers used a qualitative approach—structuring content analysis method (Titscher *et al.* 1998; Mayring 1999)—which aims at filtering certain aspects of the material and at analyzing these aspects according to criteria that were determined *ex ante*. For the study at hand a three-stage procedure was applied: First, the relevant text passages for the analysis were identified; second, the encoded text passages were transferred inductively into categories that were systematized according to the classification presented in the previous section (see Table 10.1). The arrangement of the individual measures into a timeline and the subclassifications of 'preventative' and 'curative' were validated by a quantitative survey in the third step. Here, in a written survey questionnaire, 104 advanced business administration students sorted each measure according to a five-point scale (strongly preventative, somewhat preventative, both, somewhat curative, strongly curative). The measures were then

Table 10.1 Content Analysis (n=101) and Survey Questionnaire (n=104) Results: Classification of Health Care Measures

Measure	Classification			
	Timeline		Content	
	Preventative	Curative	Offer information as a means to mobilize/ change behaviour	Offered as a motivation
Inform about sports and fitness	x		x	
Inform about healthy nutrition	x		x	
Inform about the risks of smoking	x		x	
Inform about the risks of alcohol	x		x	
Inform about stress management	x	o	x	
Inform about work safety	x		x	
Inform about proper workplace design	x		x	
Inform about mental stress	x		x	
Inform about ergonomics	x		x	
Health checkup		x		x
Sports program	x	o		x
Playing sports together	x	o		x
Providing nutritious meals	x			x
Offerings for the improvement of social competence	x			x
Treatments offered		x		x

(continued)

Table 10.1 (continued)

Measure	Classification		
	Timeline	Content	
	Preventative	Curative	Offer information as a means to mobilize/ change behaviour motivation
			Offered as a Changing structures
Health center		x	x
Benefits and discounts	x	o	x
Workplace design		x	x
Work time organization		x	x
Work processes	x		x
Work equipment		x	x
Work conditions		x	x
Institutionalized problem solving	x		x
Institutionalized provision of social contacts	x		x
Increased worker participation in work space design	x		x
Increased worker participation in determining work tasks	x		x
Increased worker participation in determining work processes	x		x
Intensification of internal company communication	x		x
Institutionalized stress reduction	o	x	x

x . . . measure placed in this category

o . . . classification according to the content analysis that have been rejected on the basis of the survey results

allocated according to the average response pattern of those surveyed. Here, a high degree of inductive allocation could be confirmed.

The variables for the analysis were operationalized as follows: The variable of company size was measured according to the standard size classification (Official Journal of the European Union 2003). As control variables, the sectors (consolidated into production, trade and service) as well as their location (the Austrian state was named) were incorporated into the analysis. Existing differences in health promotion according to sectors are explained in the literature by referring to sector-specific differences in accident statistics and health risks (Balduck *et al.* 2005), but are also clarified by alluding to the varying importance of human capital and by the differences in the competitive field (see Nichols 1997). Regional differences in health promotion may stem from the fact that there are province-specific influences on the support of corporate health promotion; this might be caused by the implementation of programs and/or the influence of people at a higher level, e.g., policymakers and initiatives by health insurance companies at the state level (Eakin *et al.* 2001; Rigby and Lawlor 2001).

## RESULTS

The analyzed reports on company health services and programs were published over the course of six years. An analysis of the different kinds of measures implemented according to the year published found no specific patterns.

Table 10.2 shows the composition of the 101 enterprises, differentiated according to company size category. It also includes indications about the frequency of health promotion measures according to company size. On average, the enterprises' HRM includes approximately six health promotion measures. Within this context it is, however, striking that large enterprises with an average of three measures carry out the fewest activities.

Table 10.2 Sample Structure According to Company Size Category

<i>Company Size Category (based on amount of employees)</i>	<i>Amount</i>	<i>Percent</i>	<i>Average: Number of Measures</i>	<i>Standard Deviation: Number of Measures</i>
Large Company (250 and over)	48	47.5	3.00	2.449
Medium-Sized Company (50—249)	32	31.7	5.00	1.797
Small Company (10—49)	14	13.9	6.75	3.785
Very Small Company (< 10 Employees)	7	6.9	5.71	3.294
Total	101	100.0	5.75	3.354

Table 10.3 Averages, Standard Deviations, and Correlations

Variable	$\bar{O}$	St. Dev.	1	2	3	4	5	6	7	8
1. Company Size	-	-								
2. How Many Measures	5.75	0.354	0.151							
3. Information Measures	2.08	0.168	0.277 <sup>b</sup>	0.713 <sup>b</sup>						
4. Health Care Measures	2.01	0.171	0.111	0.713 <sup>b</sup>	0.388 <sup>b</sup>					
5. Structural Measures	1.66	0.173	-0.089	0.513 <sup>b</sup>	0.019	0.008				
6. Preventative Measures	1.85	0.147	-0.095	0.689 <sup>b</sup>	0.170	0.596 <sup>b</sup>	0.576 <sup>b</sup>			
7. Curative Measures	3.90	0.256	0.142	0.910 <sup>b</sup>	0.833 <sup>b</sup>	0.589 <sup>b</sup>	0.363 <sup>b</sup>	0.326 <sup>b</sup>		
8. Sector	-	-	-0.235 <sup>a</sup>	-0.050	-0.170	-0.018	0.087	-0.038	-0.043	
9. Province	-	-	0.028	-0.068	0.015	0.066	-0.211 <sup>a</sup>	-0.073	-0.047	-0.153

n = 101

<sup>a</sup> p<0.05<sup>b</sup> p<0.01

The results depicted in Table 10.2 show that on average a company adopts four curative measures, whereas concerning the other types of health care measures only up to two measures are carried out. Preventive measures are least widespread: They are employed by the companies at an average value of 1.39. The correlations indicate a significant positive relationship between the number of employees and the use of information measures, as well as a significant negative relationship between the number of employees and the use of structural measures. This coincides with the direction that was postulated in the hypotheses.

Table 10.4 sums up the results of the regression analysis with regard to the five dependent variables. Hypothesis 1 implies that with a decreasing

Table 10.4 Regression Analysis: Differences in the Creation of Corporate Health Promotion

Independent Variables	Dependent Variable: Number of Measures	Dependent Variable: Preventative Measures	Dependent Variable: Curative Measures	Dependent Variable: Informative Measures	Dependent Variable: Motivational Measures	Dependent Variable: Structural Measures
Constants	b	b	b	b	b	b
Company Size	4.869	1.771	3.099	1.237	0.998	2.635
Sector	0.530	0.143	0.387	0.457*	0.212	-0.139
Province	-0.182	-0.087	-0.096	-0.379	0.065	0.132
Adjusted r <sup>2</sup>	-0.096	-0.044	-0.052	-0.006	0.042	-0.132
F Value	-0.001	-0.015	-0.007	0.060	-0.014	0.024
	0.955	0.509	0.769	3.139*	0.549	1.806

n = 101

\* p&lt;0.05

company size the number of health promotion measures diminishes. However, contrary to expectations, no significant influence of company size on the number of health promotion measures could be detected. Hypotheses 2a and 2b are not supported by the findings either. The influence of company size on the number of preventive and curative measures seems to coincide with the direction that was postulated in the hypotheses, although the value is not significant. The use of preventive measures shows no correlation to the size of the company, but instead with the sector and the province. A separate analysis shows that preventative measures are implemented in 37 percent of production operations, but in only 22 percent of service operations. The analysis according to provinces makes clear that the Lower Austrian and Carinthian companies, followed by the Upper Austrian, Salzburg, Tyrolean and Styrian companies, are those offering the most preventative measures, while the Burgenland and, most of all, the Vorarlberg firms offer far less.<sup>3</sup> A sector- and location-specific observation of the use of curative measures shows no clear pattern. The results of the location-specific evaluation can only be interpreted in light of the financial assistance provided in the respective province. Hypothesis 3a implies that with decreasing company size, the number of information measures diminishes. In accordance with this hypothesis, the findings show a negative and significant effect of the company size ( $p$  (2-sided)  $< 0.01$ ). None of the control variables shows a significant relationship with the number of information measures. Thus, hypothesis 3b is not supported. Company size shows no relationship to the number of measures for health care measures, nor with the control variables sector and province. Hypothesis 3c is, however, supported: The company size has a significant and positive effect on the use of structural health promotion measures ( $p$  (2-sided)  $< 0.05$ ). However, the control variables sector and province also show a significant relationship with the frequency of structural measures.

In Table 10.5, the results of the hypotheses tests are summarized.

*Table 10.5* Summary of Hypothesis Results

H1:	The number of health care measures diminishes with decreasing company size.	Not supported
H2a:	The number of preventive health promotion measures diminishes with decreasing company size.	Not supported
H2b:	The number of curative health promotion measures increases with decreasing company size.	Not supported
H3a:	The number of information measures diminishes with decreasing company size.	Supported
H3b:	The number of health care offers diminishes with decreasing company size.	Not supported
H3c:	The number of structural measures increases with decreasing company size.	Not supported

## CONCLUSION

The increasing number of publications dealing with corporate health promotion indicates that health promotion measures in small enterprises have not yet been widely established in practice and that the HRM approaches of large enterprises cannot be easily transferred to smaller enterprises. One reason for that might be the tighter resource portfolio of SMEs (see Kriener 2003; Meggeneder, 2003; Scharinger 2003). As up to now there are only a few analyses that empirically document the different organization of health promotion in SMEs, the authors of this study investigated (based on a sample of 101 enterprises) to what extent differences concerning the organization of corporate health promotion based on company size can be detected. The following will link the findings of the analysis with the corresponding HRM literature, and will mention some implications for research and practice.

As expected, in their health care programs larger enterprises focus on measures that draw from the information of their employees. Along with the preliminarily formulated argument of lacking resources, this finding can also be explained by the lower complexity and the specific social character of smaller enterprises. Decreasing company size generates a better overview and therefore requires a lower degree of formalization regarding corporate communication, especially in HRM (see Behrends and Martin 2006). As a consequence, small companies implement activities such as talks about health issues in a less formal manner than large enterprises (Cassell *et al.* 2002). The management in small companies knows its employees better and is therefore well aware of the fact that information measures might be ineffective and might not change the employees' behavior.

Contrary to the current discussion, the results of our study show that company size has no significant influence on the spectrum of health care measures offered to employees. Even if large enterprises implement more measures overall (see Rutsohn *et al.* 1981; Arrigoni 1998), our results indicate that the spectrum of measures does not significantly increase with company size. However, larger firms carry out more of the same kinds of measures, and due to their size can use economies of scale in HRM that are not available to small companies.

Company size also has no influence on whether an enterprise utilizes measures to get its employees back to work or for developing personnel resources, i.e., whether it applies measures towards proactive health improvement on the part of the employees, or takes advantages of structural measures. Due to a lack of differentiation regarding a preventative/curative direction for health care promotion, it cannot be implied that preventative health care is of high value in smaller enterprises as well. Rather, the descriptive findings indicate that preventative measures, when compared to curative measures, are in practice less established overall. Companies particularly apply preventative measures when they already are practicing curative ones.

New HRM approaches for corporate health care promotion (see Bedner 2001; Helmenstein 2004) call for a stronger integration of new and better ways to tackle this issue. They particularly emphasize the necessity of expanding the spectrum of measures, and encourage a greater emphasis on preventative measures to help alleviate the problem of lost work hours due to illness and/or on-the-job accidents.

To establish these concepts in SMEs as well, existing research mentions the necessity of improving the basic structural framework. Eakin and others (2001) argue that the establishment of health care promotion in SMEs can be done by supporting enterprises financially and facilitating opportunities to exchange experiences and information on HRM. Something else that can help SMEs create long-term concepts in health care promotion is their involvement in intercompany networks: 'A high degree of collaboration between intermediaries including enforcement agencies, insurance companies, employers' associations and trade unions was particularly likely to result in effective interventions' (Rigby and Lawlor 2001: 31). This is plausible in light of the lower amount of resources in SMEs, as intercompany networks represent a kind of resource access equivalent, which in large companies is found in the form of on-premises health care specialists. Cassell and others (2002) expand on this notion, stating how financial support coming from a local level can make the implementation of practices more attractive for SMEs.

In interpreting the results presented, some limitations need to be considered that will require further research: The analysis underlies a convenience sample that includes only those enterprises that published a report on their company health care programs. A bias may come from the fact that SMEs report on company measures that large enterprises don't even mention, as the latter simply takes them for granted. In interpreting the results presented, it must be remembered that SMEs in particular often do not have the capacities to write these kinds of reports. With this in mind, the SMEs in our study tended to be those that presumably do have sufficient resources or public assistance. To what degree the SMEs in our sample have additional resources for the establishment of professional HRM and company health care promotion via participation in intercompany networks, or whether they receive financial support, cannot be stated within our study due to a lack of data on this issue. This is, however, to be entirely expected, as creating reports is often a component of health care promotional activities.

This notwithstanding, our study offers insight into corporate health care promotional measures in Austria, and can be a starting point for follow-up research aiming to focus more specifically on certain aspects of HRM. Future research should empirically investigate the availability of additional resources for health care measures in different sizes of enterprises. This would allow conclusions to be drawn regarding to what extent the establishment of health care measures can be improved in SMEs through an optimization of their resource allocation. Here, which kind of support (e.g., financial subsidies,

networks) is most effective in building up strategic HRM and with it health care promotion in SMEs should also be examined. To illuminate the development of various characteristics of corporate health care promotion on the day-to-day business level, studies investigating the decision making of company actors in the area of HRM would also be of value. Here, attention should be paid in particular to owner-manager conduct.

## NOTES

1. The higher investment expenditures of structural measures seem to be a main reason for less engagement in small companies. The examples that were identified in the course of the study (e.g., renovation of office chairs), however, indicate that structural measures do not necessarily have to be more expensive than measures concerning offers or information.
2. As a point of comparison: The study by Rutsohn, Schoolfield and McLeod (1981) on economies of scale regarding the amount of health care promotion measures was based on a sample of seventy-eight companies.
3. All being federal states in the Republic of Austria.

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Part III

# Entrepreneurial Teams



# 11 Defining Entrepreneurial Teams and Modeling Entrepreneurial Team Effectiveness

*Leon Schjoedt*

## INTRODUCTION<sup>1</sup>

Teams start a significant number of new ventures, or a team is created during the venture startup (Birley and Stockley 2000; Cooper *et al.* 1990; Kamm *et al.* 1990; Ruef *et al.* 2003; Watson *et al.* 1995). Scholars have established that there is a strong association between venture success and team-created ventures (Baum and Silverman 2004; Cooper and Bruno 1977; Eisenhardt and Schoonhoven 1990; Kamm *et al.* 1990; Timmons 1994). Also, new ventures created by a team outperform ventures created by a single entrepreneur (Chandler and Hanks 1998; Cooper and Bruno 1977; Roberts 1991). One explanation for the superior performance of ventures started by an entrepreneurial team (ET) may be due to the fact that an ET is better equipped to effectively manage the uncertainties and vicissitudes associated with the creation of a new venture than an individual (Beckman *et al.* 2007; Chowdhury 2005; Harrison *et al.* 2002; West 2007). Furthermore, the literature on top management teams (TMT) shows the executive team has a greater influence on the organizational performance than the individual executive across a number of performance measures (Hambrick and Mason 1984; O'Reilly *et al.* 1993; Roberts 1991). Therefore, the ET, and its effectiveness, is a critical determinant of venture performance (Amason *et al.* 2006; Beckman 2007; Beckman *et al.* 2007; Cooper and Bruno 1977; Cooper and Daily 1997; Ensley *et al.* 1998; Glick *et al.* 1993; Hambrick 1994; Hambrick *et al.* 1996; Jackson 1992; Kamm *et al.* 1990; O'Reilly *et al.* 1993; Watson *et al.* 1995). Or, stated more concisely, a venture is a reflection of its ET (Hambrick and Mason 1984).

Despite the importance of the ET, the extant entrepreneurship literature has focused on the individual entrepreneur, not the ET (e.g., Watson *et al.* 1995). One reason for this may be found in the premise that the ET as a concept has not been adequately defined (Birley and Stockley 2000). Thus, there is a need for a reformulated definition of the ET. Further, the ET has been neglected in the literature, according to Foo and others (2006). Currently, however, a body of literature is developing (e.g., Amason *et al.* 2006; Beckman *et al.* 2007; Chandler *et al.* 2005; Chowdhury 2005; Forbes *et al.* 2006; Hmieleski and Ensley 2007; West 2007). While these researchers

should be commended for advancing our collective understanding of the ET, the research efforts have been somewhat limited in the extent of considering determinants of ET effectiveness. Thus, there is a need for additional research on the ET. In an effort to stimulate additional research on the ET, I begin this chapter by presenting a reformulated literature-driven definition of the ET. I continue this chapter by modeling determinants of ET effectiveness. I use a heuristic framework on team effectiveness—environment, composition and process—provided by Cohen and Bailey (1997) as a guide for modeling determinants of ET effectiveness. In addition to the determinants considered by Cohen and Bailey (1997), I conclude my consideration of determinants by addressing the important and overlooked issue of shared leadership in the ET. It is my sincere hope that this chapter will stimulate additional research on the ET to enhance our understanding of the ET and, in turn, improve new venture performance.

## ENTREPRENEURIAL TEAM DEFINITION

The concept of the ET has not been adequately defined (Birley and Stockley 2000) or discussed in the literature. On the other hand, the TMT has been extensively discussed and defined in the literature (O'Reilly *et al.* 1993), especially as part of the body of research on upper-echelon theory (Hambrick and Mason 1984). Assuming there are similarities between the TMT and ET due to the fact that they both consist of top managers, it may be beneficial to start out by considering what constitutes a TMT. Hambrick (1994) notes how the TMT is not a team per se, but a group of people with management responsibilities. A group in an organizational context is defined as 'two or more individuals, interacting and interdependent, who have come together to achieve particular objectives' (Robbins 1993: 285). Yet, according to Cooper and Daily (1997), an ET is more than a group because it involves a shared commitment to the new venture. This seems to be a better definition of the ET than mere consideration of the ET as a TMT. However, these authors stop short of defining what 'shared commitment' is. One suggestion for what must be shared is provided by Katzenbach (1997), who suggests that it is the accountability that must be shared. Another suggestion is provided by Kamm and others (1990) and Kamm and Nurick (1993). These authors suggest that it is equity, financial interest or ownership in the new venture that must be shared. The literature shows a number of researchers rely on the works by Cooper and Daily (1997) and Kamm and others (1990) when defining the ET.

Other scholars define the ET in terms of participation of the venture startup activities. For example, Forbes and others (2006: 226) define the ET 'as the group of people involved in the creation and management of a new venture'. Whereas, Eisenhardt and Schoonhoven (1990) note that the ET is a group of people holding full-time executive positions at the time of founding. Similar to defining the ET based on 'shared commitment',

defining it based on whether an individual was part of a group of people at the time of startup seems too limited. Considering the extensive literature on teams in the organizational literature, I turn to a review by Cohen and Bailey (1997) to identify a basis for a more appropriate definition of the ET. Cohen and Bailey (1997) define a team as a group of individuals who share interdependent tasks and outcomes for these tasks; and are also seen by themselves and others as a social unit. This definition of teams seems useful in defining the ET as it clarifies what needs to be shared beyond merely financial considerations. Building on the perspectives considered, I propose the following definition of the ET.

*An entrepreneurial team consists of two or more persons who have an interest, both financial and otherwise, in and commitment to the venture's future and success; whose work is interdependent in the pursuit of common goals and venture success; who are accountable to the entrepreneurial team and for the venture; who are considered to be at the executive level with executive responsibility in the early phases of the venture, including founding and pre-startup; and who are seen as a social entity by themselves and by others.*

As this definition suggests, it is not necessary to be in the pre-startup or founding phases of the venture to be a part of the ET. It is possible for a person to be considered a part of the ET if this person is brought into the venture in the early phases to help establish the venture. Thus, this definition goes beyond definitions provided by other scholars (i.e., Cooper and Daily 1997; Eisenhardt and Schoonhoven 1990) as the proposed definition is not limited to the pre-startup phase. The proposed definition also emphasizes interdependent tasks in venture creation and development. This is a key addition to definitions provided in the extant entrepreneurship literature. This, however, does not mean that tasks have to be performed by all team members. It means that tasks may be performed by individual ET members, in subgroups of the ET (and with others outside the ET) or by the entire ET. The key is that the tasks all contribute to the common goals of the ET and the future success of the venture. It is the tasks that are interdependent. Further, the proposed definition stresses that ET members should be seen by themselves and by others as a team. This means the ET is not formed based on titles or otherwise, but is formed based on a shared commitment to each other as members of the ET and to the ET as an entity. The proposed definition also emphasizes that the ET members share a responsibility for the outcomes. Or, stated differently, the ET is responsible for the venture's performance.

## MODELING ENTREPRENEURIAL TEAM EFFECTIVENESS

Cohen and Bailey (1997) present a heuristically derived framework for team effectiveness in their review of the team literature. According to this

framework, team effectiveness refers to performance (e.g., decision quality), attitudinal (e.g., job satisfaction) and behavioral outcomes (e.g., turnover). The framework is based on three groups of determinants of team effectiveness—environment, composition and process. The environment is considered in terms of industry characteristics or environmental dynamism. Composition refers to team composition in terms of demographic and psychological (cognitive) characteristics. Processes considered consist of communication and conflict. As this framework is beneficial in organizing the multitude of determinants that may influence ET effectiveness, I use this framework as a guide for the remainder of this chapter. In addition, I include shared leadership (Pearce *et al.* 2007) as part of the team processes, which is an extension of the work by Cohen and Bailey (1997).

## Environment

The environment is venture's external environment, such as stable or dynamic industry. The environment is a critical determinant of ET effectiveness, especially with respect to the type of environment (stable or dynamic) and its inherent uncertainty. The ET interprets and responds to the environment (Hambrick and Mason 1984). Then, it is how the ET responds to the environment that determines ET effectiveness.

For ventures in stable environments, Murray (1989) notes that an ET with a heterogeneous composition will be less effective due to a greater need for communication and fast responses in the stable environment are essential for ET effectiveness. Whereas for ventures in dynamic environments, Glick and others (1993) found heterogeneous ET composition was positively associated with venture performance as the heterogeneous ET was more effective by making more comprehensive decisions.

The type of leader heading the ET moderates the influence of the environment on ET effectiveness. Hmieleski and Ensley (2007) found that in dynamic environments, a demographically heterogeneous composed ET was more effective with a directive ET leader; whereas a homogeneous ET was more effective with an empowering leader. Further, these scholars found that in stable environments, a heterogeneous ET performs best with an empowering leader and a homogeneous ET performs best when led by a directive leader. These findings are consistent with those of Stewart (2006).

In addition to influencing ET effectiveness, the environment has also been shown to moderate the effects of the demographic composition (Finkelstein and Hambrick 1990; Haleblan and Finkelstein 1993) as well as lead to changes in the ET composition. Hambrick (1994) found that environmental changes led to a reduction in tenure and changes in demographic composition due to replacements in the top management team. Consistent with the findings by Boeker (1997), Chandler and others (2005) found that the effective ET adapts to the environment based on environmental dynamism. As this shows, the environment affects ET effectiveness, both

directly and indirectly. Unlike the environment, which is beyond control of the ET, ET composition is a more controllable issue (Forbes *et al.* 2006).

### **Team Composition**

The second group of determinants of ET effectiveness considered is team composition, both demographic and cognitive composition (Cohen and Bailey 1997). Team composition refers to the configuration of member characteristics of the ET (Bantel and Jackson 1989; Levine and Moreland 1990).

Creation of a new venture entails complex and nonroutine problem solving. Bantel and Jackson (1989: 109) argue, 'when solving complex, non-routine problems, groups are more effective when composed of individuals having a variety of skills, knowledges, abilities, and perspectives.' For TMTs, Hambrick and Mason (1984) point out that the heterogeneous TMT is more effective in making ill-defined decisions, while the homogeneous TMT is more effective in making routine decisions. This is confirmed by findings by Bantel and Jackson (1989) and Murray (1989). Considering the task of an ET 'is largely one of creativity and learning' (Ensley *et al.* 2002: 367) and how to solve novel, complex and nonroutine problems, team composition is an important aspect of ET effectiveness and, in turn, new venture performance (Boeker 1997). Further, Ensley and others (2002: 367) note that research has shown that 'human capital is an important determinant of new venture performance.' Thus, 'who is included in the team matters' (Stewart 2006: 44).

### ***Demographic Composition***

Diversity in the demographic composition of the ET may lead to some negative effects, such as more coordination and increased time consumption to make decisions, which limits ET effectiveness (Smith *et al.* 1994). However, most of the literature has established that heterogeneity in functional and industry experience, as well as educational background, enhances ET effectiveness and, in turn, venture performance (Beckman *et al.* 2007; Eisenhardt and Schoonhoven 1990). Even though ET demographic composition, specifically experience and education, influences ET effectiveness, Haleblan and Finkelstein (1993) found that the environment, specifically the industry type, moderated the effects of ET diversity.

While functional and industry experience and education background have been shown to enhance ET effectiveness, some demographic characteristics have not been positively associated with performance. Race and age have not been established to be significant factors, but related aspects, such as a limited network in an entrepreneurial environment or in an industry, may limit the probability for a successful venture (Chowdhury 2005; Cooper *et al.* 1994). Entrepreneurs having parents who were also entrepreneurs has not been associated with successful ventures, but has

been associated with ventures with marginal survival (Cooper *et al.* 1994). Other demographic characteristics that had nonsignificant relationships with performance include: previous held management level of ET members, whether the ET member had experience in not-for-profit organizations or had not been in the labor force and the ET's use of professional advisors to improve decision making (Cooper *et al.* 1994). As this shows, there are essentially only two demographic characteristics that significantly influence ET effectiveness through diversity in perceptions of problems and approaches to problem solving. These demographic characteristics are educational background and experience, both functional and industrial.

Eisenhardt and Schoonhoven (1990) and Hambrick and D'Aveni (1992) linked team demography and organizational performance together via unmeasured psychological variables. This research was based on an assumption that demographic characteristics are proxies for psychological constructs (Hambrick 1994; Hambrick and Mason 1984). Yet, Glick and others (1993) and Harrison and others (1998, 2002) found the effect of demographic diversity was reduced over time, whereas the cognitive characteristics were sustainable, which means that cognitive characteristics cannot be approximated from demographic characteristics. Researchers (Bantel and Jackson 1989; Hambrick 1994) have suggested that the use of demographic characteristics may have been based on ease of use and data collection. Additionally, Chowdhury (2005) points out that demographic diversity may not necessarily enhance ET effectiveness, and at the same time, advocates that the ET needs to be cognitive comprehensive. While demographic diversity may be important, researchers have suggested that the cognitive composition of the ET may have an even stronger influence on ET effectiveness (Bell 2007; Cohen and Bailey 1997; Harrison *et al.* 2002; Stewart 2006).

### *Cognitive Composition*

Cognitive composition of the ET has been found to be related to team effectiveness (Bell 2007; Stewart 2006). Conducting a meta-analysis, Stewart (2006: 45) found that 'aggregated cognitive abilities had the strongest and most consistent positive relationship with team performance.' Scholars have also found that the cognitive diverse ET was more capable of generating diverse ideas (West and Meyer 1998); whereas the cognitive homogeneous ET was inclined to limit the range of options they considered (West 2007). Hurst and others (1989) outline how and why cognitive diversity can increase team effectiveness. These researchers argue that the literature has been concerned with only two of Jung's four cognitive types: thinking and sensing. They further argue that by limiting research to these two cognitive types only, researchers cannot accurately assess team effectiveness.

The four cognitive styles are present in all human beings, but one style is dominant (Hurst *et al.* 1989). The four types are intuition, feeling, thinking

and sensation. The intuition style is concerned with possibilities, patterns and ideas. The feeling type is focused on people and values. The thinker is interested in cause-and-effect relationships. Lastly, the sensation type is concerned with activities.

Hurst and others (1989) point out that a team without each one of the four types will not function effectively. The reason for this inability of the ET is based on the process of creating a venture. The venture creation goes through a process of imaging the venture; motivation is created to pursue the idea of a new venture, planning of the venture, implementing the venture creation, evaluating the performance and assessing the (personal) satisfaction with the venture experience (Hurst *et al.* 1989). It is the intuition that sparks the idea of creating the venture: the conceptual development. The feeling part involves motivating people and assessing the values needed for the venture. The planning takes over from the intuition and feeling by transforming, through thinking, the concept and values into objectives for the venture and creating a strategy to achieve these objectives. The strategies, through the sensing, create activities, more commonly known as tasks, that call for action and later results in ET effectiveness and venture performance. The results are evaluated in the thinking mode, and the feeling of personal satisfaction and achievement with the venture creation is assessed and cognitively realized in the intuition mode (Hurst *et al.* 1989). This suggests that entrepreneurial cognition styles exist in the intuition and feeling types as it is the prospecting (Miles and Snow 1978) that sets entrepreneurs apart from traditional managers who lack the intuition and feeling aspects due, in part, to their training and education. Thus, the ET needs all four cognitive types to be effective in creating and developing a new venture. Yet, they may not all be needed at the same time.

As the environment moderates the effects of ET diversity (Haleblian and Finkelstein 1993), so does time. Over time, the effects of diversity decrease demographic characteristics as the ET engages in lengthy discussions and solves disagreements and complex problems (Finkelstein and Hambrick 1990; Glick *et al.* 1993; Harrison *et al.* 1998, 2002). This may be beneficial as the venture develops and as tasks become routine, which are more efficiently handled by a homogeneous ET. However, the need for a heterogeneous ET may still be desired as the heterogeneous team can make more effective (comprehensive) decisions and, as the venture develops, a different ET composition is needed in terms of skills, knowledge, abilities and perspectives (Chandler *et al.* 2005; Gartner *et al.* 1992; Forbes *et al.* 2006; Ucbasaran *et al.* 2003). Considering that the cognitive styles are stable over time (Hurst *et al.* 1989) and that entrepreneurial cognition style exists in the intuition and feeling types, it seems that as the venture develops, a different cognitive style is needed in the ET, such as the thinking and sensing types—the cognitive style of non-entrepreneurial managers. As each person has a dominant cognitive style and the effects of demographic diversity are reduced over time, change(s) in ET composition may be desirable, which

indicates a mechanism is needed to make departure from the ET graceful. Or, as Timmons (1994) and Kamm and Nurick (1993) suggest, two of the pitfalls of entrepreneurship are the failure to consider that the ET will change in composition over time and the lack of mechanisms to adjust the ET accordingly. As need for changes in the ET composition results from the reduced effects of ET demographic diversity over time (Finkelstein and Hambrick 1990; Glick *et al.* 1993; Harrison *et al.* 1998, 2002), it seems appropriate to examine the third and last group of team effectiveness determinants, namely, team processes (Cohen and Bailey 1997).

## **Team Process**

The third group of determinants of ET effectiveness is team processes. In terms of process variables, Cohen and Bailey (1997) considered communication and conflict. In addition to these factors, I also consider shared leadership in this chapter as it is a process (Pearce *et al.* 2007) considered an important performance factor for new ventures (Ensley *et al.* 2006) and has recently begun to receive attention in the literature.

### *Communication*

For teams with low task interdependence, team members can operate more independently; thereby, the need for communication is reduced (Stewart 2006). However, this is not the case for the ET. Thus, communication within the ET is an important factor of ET effectiveness. The need for communication to 'iron out' differences in perspectives, interpretations and expectations for the venture and ET depend on the degree of heterogeneity within the ET. Disagreement over strategic performance goals, merits of alternatives, etc., regarding the venture may provide the ET with an opportunity to communicate expectations and decide on common goals all ET members will work for. This way communication can enhance venture performance (Amason and Sapienza 1997; Watson *et al.* 1995). Continued communication rich in nature, such as face-to-face communication, leads to integration of the ET, more comprehensive decisions and facilitates coordination of the interdependent tasks of the ET (Glick *et al.* 1993; Hambrick 1994), which influence ET effectiveness (Amason and Sapienza 1997).

For diversity to influence ET effectiveness and venture performance, there must be a process, such as debate, to facilitate the benefits of diversity into ET effectiveness (Amason and Sapienza 1997; Simons *et al.* 1999). Specifically, 'debate is more likely to be fruitful when it draws on different experiences and perspectives that are relevant to a task rather than on less relevant viewpoint differences' (Simons *et al.* 1999: 670). This suggests task-relevant diversity within the ET enhances ET effectiveness and, in turn, venture performance through the process of debate.

While diversity enhances ET effectiveness through debate, Glick and others (1993) note that heterogeneity decreases over time as the ET engages in the communication process to solve problems and, thereby, it becomes a socially integrated unit. Smith and others (1994) suggest that as the ET becomes a socially integrated unit, it reacts faster and is more flexible, efficient and effective because through enhanced problem-solving skills and communicated aspirations, it can allocate time and energy to where it will have the most impact. Even though social integration of the ET is beneficial as it increases the speed of decision making (and ET efficiency), it comes with a cost—actions of less magnitude as compared to a heterogeneous ET (Hambrick 1994; Hambrick *et al.* 1996). It should be noted that according to the findings by Glick and others (1993) and Harrison and others (1998, 2002), it is the effect of demographic diversity that is reduced over time, whereas the cognitive characteristics are sustainable. Thus, it is cognitive conflict that enhances ET effectiveness through sharing different points of view and debate (Amason and Sapienza 1997; Jehn 1995).

As this shows, for diversity to have an effect on venture performance, cognitive diversity needs to be effectively expressed through discussions and debate of different points of view that are integrated into ET decisions and actions (Hambrick 1994; Simons *et al.* 1999). If not, then the costs associated with diversity (i.e., coordination and time) will limit ET effectiveness (Simons *et al.* 1999). If the ET encounters disagreement over strategic issues *and* lacks communication to settle these issues, it may lead to lowered ET effectiveness and, in turn, venture performance (West and Meyer 1998). Thus, the communication process moderates the relationship between ET diversity and effectiveness (Simons *et al.* 1999).

### ***Conflict***

Conflicts can be grouped into two types: cognitive and affective (Jehn 1995). Cognitive conflict is defined as ‘task oriented and focused on judgmental differences about how best to achieve common objectives’ (Amason 1996: 127). It can be considered a task conflict—disagreement over task content or evaluation of the merits of alternatives (Amason 1996; Jehn 1995). On the other hand, affective conflict is disagreement based on interpersonal issues or emotions (i.e., personal attacks; Amason 1996; Jehn 1995). Affective conflict tends to be dysfunctional (Amason 1996). Similarly, cognitive conflict has been found to be detrimental for groups performing routine tasks; however, for groups engaged in nonroutine tasks, cognitive conflict was beneficial (Amason 1996; Jehn 1995). Considering the context of the ET, then, it is not surprising that Ensley and others (2002) found the more effective ET encourages cognitive conflict while discouraging affective conflict.

Cognitive conflict in the ET can be a means for creativity, more comprehensive decisions based on richer information and perceptions, better

understanding of the problems and development of options for actions (Amason 1996; Amason and Sapienza 1997; Ensley *et al.* 2002; Eisenhardt *et al.* 1997; Jehn 1995). Yet, as the ET engages in cognitive conflict, the ET may inadvertently trigger affective conflict (Amason 1996; Baron 1984). Or, as Baron states, 'often, what starts with as a rational exchange of opposing views deteriorates into an emotion-laden interchange . . . in which strong negative feelings are aroused . . . much more likely to yield negative results' (1984: 272). Research findings show consistently that affective conflict reduces ET effectiveness and venture performance (Amason 1996; Amason and Sapienza 1997; Ensley *et al.* 2002; Jehn 1995). Thus, for the ET to be effective, the ET must embrace cognitive conflict while limiting affective conflict.

As 'there is mounting evidence that effective top management teams engage in cognitive conflict but limit affective conflict' (Amason and Sapienza 1997: 495), it should be noted that cohesiveness increases cognitive conflict, while limiting the dysfunctional affective conflict (Amason and Sapienza 1997; Ensley *et al.* 2002). Consistent with the findings of Cohen and Bailey (1997) and Smith and others (1994), Ensley and others (2002) found that ET cohesion is positively related to new venture performance and negatively related to affective conflict. The influence of ET cohesiveness on venture performance may be explained by cohesive teams 'that work well together, react faster, are more flexible, use superior problem solving techniques, and are more productive and efficient than less integrative teams' (Smith *et al.* 1994: 432). As this shows, the process of engaging in conflict moderates the effects of diversity on ET effectiveness.

### *Shared Leadership*

Shared leadership is 'a dynamic, interactive influential process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both' (Pearce and Conger 2003: 1). This means that when leadership is shared within the ET, the member with the most relevant experience, knowledge, skills or abilities pertaining to the situation facing the ET shares his or her views, which are then debated and acted upon by the ET. Shared leadership is a group-level process, not an individual-level variable as leadership is traditionally considered in the literature. Regardless of leadership type, research consistently shows leadership influences ET effectiveness (Hmieleski and Ensley 2007; Stewart 2006).

For shared leadership to emerge, the ET members must have a shared purpose (e.g., venture success), provide support to one another and opportunity to voice their views, i.e., via debate (Carson *et al.* 2007). Additionally, the ET 'as a whole must be willing to rely on leadership by multiple team members' (Carson *et al.* 2007: 1222). It should be observed that shared leadership can occur in an ET with or without a designated formal leader (Carson *et al.*

2007). Even though Gartner and others (1994) remind us that new venture management is a shared effort, the ET may not be willing to be led by multiple members that would restrict the potential for shared leadership, which, in turn, results in the ET reversion to vertical leadership. It should also be noted that in situations that do not facilitate shared leadership (i.e., due time pressures), vertical leadership may be more appropriate (Pearce *et al.* 2007). Yet as new venture creation is characterized by interdependence (Bygrave and Minniti 2000), creativity (Ward 2004) and complexity (McKelvey 2004) and these factors enhance the effects of shared leadership (Pearce 2004), shared leadership appears to be an important factor in ET effectiveness. This is evident in the findings of Ensley and others (2006). These scholars found that both shared and vertical leadership predicted new venture performance. But more importantly, they found shared leadership had a stronger effect than vertical leadership on venture performance. Thus, shared leadership plays an important (moderating) role in ET effectiveness.

## CONCLUDING COMMENTS

This chapter began by illustrating the importance of the ET. Even though the ET is important for new venture performance, it is an overlooked topic in the entrepreneurship literature (Foo *et al.* 2006). Also, the concept of the ET has not been adequately defined (Birley and Stockley 2000). Thus with this chapter, I set out to remedy these issues, first, by presenting a more comprehensive literature-driven definition of the ET and then by addressing determinants of ET effectiveness. The framework used for consideration of the determinants of ET effectiveness was based on a recognized framework of team effectiveness from the organizational literature presented by Cohen and Bailey (1997). I realize that this chapter is not exhaustive in reviewing all relevant literature and determinants of ET effectiveness, which is why I relied on the framework by Cohen and Bailey (1997) to guide my consideration of the determinants of ET effectiveness. Also, the purpose of this chapter is not an exhaustive review, but to stimulate additional research on the ET. It was with this purpose in mind that I considered shared leadership as one of the process determinants of ET effectiveness in addition to the process factors considered by Cohen and Bailey (1997). Further, in the spirit of stimulating additional research, I did not follow the typical route of considering locus of control, need for achievement, risk propensity and so on in the section on cognitive diversity. Rather, I addressed Jung's four cognitive types in an entrepreneurial context based on the work by Hurst and others (1989). I did this to stimulate research using alternative models and variables of cognitive constructs in the pursuit of better understanding the ET and entrepreneurship as the 'trait approach' has not been considered successful (Gartner 1988). Thus, by using the framework on team effectiveness by Cohen and Bailey (1997) to guide my consideration of determinants of ET effectiveness, by deviating from the

traditional variables used in the entrepreneurship literature and using Jung's four archetypes in an entrepreneurial context (based on the work by Hurst *et al.* 1989), and by including a concept that has recently begun to receive attention in the leadership literature, namely, shared leadership, I hope that this chapter will motivate researchers to pursue potentially fruitful venues for future research on the ET to further our collective understanding of the ET and entrepreneurship.

## NOTES

1. This chapter is based upon a paper, with the same title as this chapter, presented at the 2007 ICSB World Conference, Turku, Finland. An early version of the paper: 'Entrepreneurial teams: Definitions and determinants' was presented at the 2002 Annual USASBE National Conference, Reno, NV. The author is grateful for the constructive comments made by G. Dale Meyer, Julio O. De Castro and David B. Balkin on the early version of the paper. Support for the early version of the paper came from a Price Institute PhD Entrepreneurial Fellowship.

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# 12 Reasons and Situational Factors Behind the Formation of Management Teams and Other Teams in Small Firms

*Sanna Tibula and Jari Huovinen*

## INTRODUCTION

This study focused on management teams and other teams participating in the management of small firms, and on the reasons and situational factors for team formation. The importance of teams has been largely recognized in the recent management and entrepreneurship research. Several studies have suggested that firms founded and managed by teams are on average more successful than firms founded and managed by single persons (Lechler 2001; Rosa and Scott 1999; Vyakarnam *et al.* 1999). Although the impact of these managerial teams has been widely studied in large firm settings, such studies in the field of small business are rare. Only a few empirical studies of management teams in small and medium-sized enterprises (SMEs) have been published (e.g., van Gils 2005; Weinzimmer 1997; Nicholson and Cannon 2000; Reuber and Fischer 1997). However, team management (i.e., management teams and entrepreneurial teams) in small firms is more common than previously believed (van Gils 2005; Lechler 2001; Vyakarnam *et al.* 1997). For example, the few empirical studies about the prevalence of teams reveal that around two-thirds of SMEs have a management team or an entrepreneurial team (Cooper *et al.* 1990; Pasanen 2003). Similarly, nearly 80 percent of all small firms in this study were team managed, i.e., they had a management team or some other team (an internal team such as a board or entrepreneurial team, or a family team such as a husband–wife team, a sibling team or a team of two generations), that participated in firm management but not in the working groups operating at lower levels.

Obviously, management teams are most common in large firms where the size of the firm requires several managers and where the firm's performance demands multiple skills and experiences of its managers. Management teams have, however, also become an important strategic actor in smaller firms, where they are often at the center of the firm's survival, growth and development. In this study the focus is on small firms with twenty to

forty-nine employees; the reason for this is twofold. Firstly, because firms employing less than twenty people may not have management teams due to the small size of the firm and the indirect function of the employees. The size of the firm obviously determines the SME's behavior, the number of employees being the most common indicator of the size. A firm with twenty employees functions in a more indirect manner, but there is still eye-to-eye contact between the management and the employees (Federation of Finnish Enterprises 2005; Boter and Holmquist 1997). Secondly, firms with less than fifty employees may already be large enough for team management and they may have a real need for shared leadership. In firms with more than fifty employees the prevalence of management teams increases as well as the formality of teamwork at the top level of management. Moreover, firms with twenty to forty-nine employees are more likely to be those at the particular stage in the firm's life cycle where management team formation will occur and in which a multiplicity of different teams arise.

The objective of this study was, firstly, to examine the extent of participation of management teams and other teams in small firm management (twenty to forty-nine employees), and how these teams are divided in the firms. And secondly, the interest was to explore the reasons and situational factors behind team formation in small firms. Thus, the main research question is the following: What is the extent of management team and other team participation in firm management of small firms, and what are the reasons and situational factors for team formation in these firms?

The chapter starts by defining the terms 'team' versus 'group' and 'management team'. Then the chapter considers the literature relating to the reasons of management team work. The data collection and empirical data will then be presented. Finally, the results and key findings of our study are discussed as well as the conclusions.

## DEFINITIONS

### **Team vs. Group**

Katzenbach and Smith (1993) define a team as a small number of people with complementary skills who are committed to a common purpose, performance goals and approach for which they hold themselves mutually accountable. Teams can be considered as a specific type of group but they have greater reliance on discussion, debate and decision making, sharing information and best practice performance standards compared with groups. Teams produce discrete work products through the joint contributions of their members and have highly defined tasks and roles. They also demonstrate high group commitment (Katzenbach and Smith 1993; Tosi *et al.* 2000; Levi 2001).

The term 'team' has largely replaced the term 'group' in the literature, but the word 'group' predominates in many studies because they use 'group' as their root word (e.g., group dynamics, intergroup relations and so on) (Guzzo and Dickson 1996). Sometimes teams and groups have been separated by the definition and purpose; sometimes they are used interchangeably in the group dynamics literature out of convenience. However, not all groups can be considered teams. Katzenbach and Smith (1993) believe that the concept of a team should be limited to a fairly small number of people with complementary skills who interact directly. This helps to distinguish teams from work groups, whose members jointly do the same tasks but who do not require integration and coordination to perform the tasks. Perhaps the most critical element in this distinction is interdependence (Levi 2001), which exists when an individual cannot perform a given task or a set of responsibilities alone, without the assistance of other's.

Cohen and Bailey (1997) define a team as a collection of individuals who are interdependent in their tasks, who share the responsibility of the outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger social systems (e.g., the firm) and who manage their relationships across organizational boundaries. They distinguish four types of teams that can be identified in organizations today: (a) work teams, (b) parallel teams, (c) project teams and (d) management teams. In addition, the recent entrepreneurship literature has introduced the term 'entrepreneurial team'.

### **Management Team**

A management team is a small group of managers, including the managing director and managers from different functional areas (such as manufacturing, marketing and finance), and other key persons who give a firm its general direction and who specialize in running the business. In a management team the managers with complementary skills are at the same organizational level, report to the same person, hold a leadership position in the firm and share information that helps them perform their individual jobs more effectively (McIntyre 1998; Longenecker *et al.* 1994; Van Egeren 1994; Keck 1998; Finkelstein 1992; Keck and Tushman 1993). Thus, the team members are not only responsible for their own functions, but also 'wear another hat' in firm leadership (Nadler 1992). The team members meet regularly to make CEO-conducted key decisions that affect the entire organization or department and to help the firm to achieve its goals (McIntyre 1998; Nadler 1997; Nadler and Spencer 1997). Although members of a management team may hold some equity in the firm (i.e., a small ownership position), this is not always the case (Stumpf *et al.* 2002). In this study, a management team was defined as a team with a minimum of three members of which at least one operates as an appointed manager (hired outside the firm) without ownership.

## THE FRAMEWORK OF THE STUDY

This study explores the reasons and situational factors behind team formation, drawing on contingency theory (Lawrence and Lorsch 1967). According to contingency theory there is no best way to organize and lead a firm or make decisions because they may be effective in some situations and not in others. Thus, the optimal organization, leadership or decision-making style depends upon the current situation, i.e., various internal and external factors (Lawrence and Lorsch 1967; Kast and Rosenzweig 1985; Donaldson 2001). The reasons for team formation can be further divided into positive or negative situational factors (or as in entrepreneurial studies: pull and push) (e.g., Gilad and Levine 1986; Storey 1994). Figure 12.1 presents the framework of the study.

The situational factors behind team formation can be divided into four groups as follows:

- environmental factors (e.g., Nadler 1992; Sutcliffe 1994; Wang and Chan 1995; Cohen and Bailey 1997; Timmons 1999; Levi 2001)
- poor performance, crisis and survival (e.g., Mueller and Barker 1997; Pearson and Clair 1998; Spillan and Hough 2003; Boone *et al.* 2004)
- growth (e.g., Weinzimmer 1997; Wiklund 1998; Vyakarnam *et al.* 1999; Weltman 2001)
- profitability and better firm performance (e.g., Eisenstat and Cohen 1990; Hunsaker 2001; Jarzabkowski and Searle 2004; Lester *et al.* 2006)

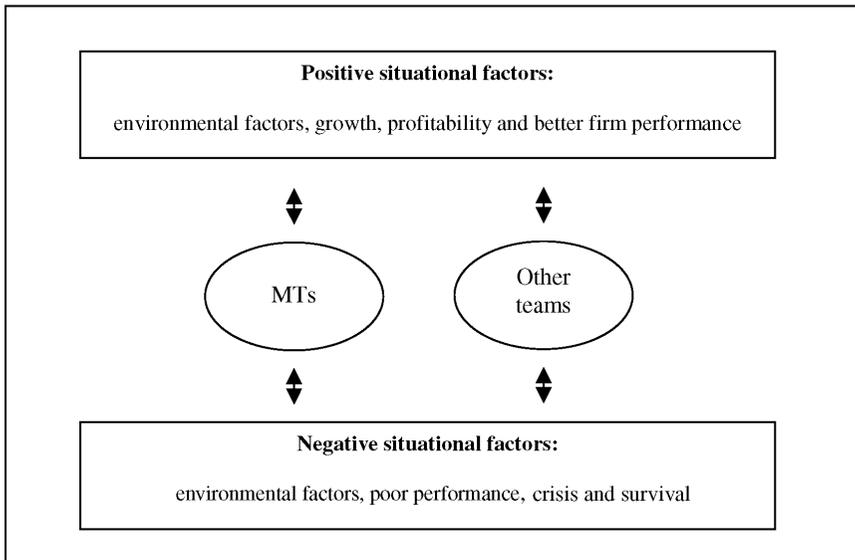


Figure 12.1 Framework of the study.

## REASONS AND SITUATIONAL FACTORS FOR TEAMWORK

Small group researchers have extensively studied the reasons why people form teams and work in groups. In general, the theories can be summarized into two categories: (a) a functional perspective suggesting that people join groups because groups are able to accomplish things that individuals cannot accomplish working alone, and (b) an interpersonal perspective proposing that working in teams fulfills the social needs of people (Stewart *et al.* 1999: 4). Similarly, the reasons for working as a management team can be thought to fall into two categories: factors external to the firm (which demand the use of management teams, such as financiers or environmental changes), and internal factors within the firm (which encourage or force team formation, such as firm growth, better firm performance or even a crisis). This latter grouping is not, however, so unambiguous. For example, the crisis can be a consequence of both internal and external factors. It can arise due to poor management or changing demand or competition, for instance. Similarly, the growth intent of a firm as an internal factor does not itself lead to success. The firm also has to have the external potential (and realistic possibilities) to grow, such as market potential or demand. Whether the reasons for management teamwork are internal or external, there are plenty of them.

### Environmental Factors

The functional theory of the formation posits that groups and teams are the only way to survive the demands of the environment (Stewart *et al.* 1999: 4). External demands such as more complex organizations, a turbulent environment and succession politics have accelerated the shift from a single leader to management teams (e.g., Nadler 1992; Cohen and Bailey 1997; Levi 2001). Also, the changing nature of people's jobs is encouraging teamwork. As jobs become more complex due to technology or other factors, teams become an effective way to handle the complexity (Levi 2001). However, environmental changes are often misperceived because highly complicated, novel, ambiguous or dynamic environmental information cannot be processed adequately (Wang and Chan 1995; Sutcliffe 1994). Moreover, management teams have a strong ability to attract capital beyond the founder's or owner's resources from private and venture capital backers (Timmons 1999). Some financiers even require an active management team in return for their financing, and in some firms the shareholders demand a management team run the business.

One environmental factor that has a major impact on a firm's management is the industrial sector. Naturally, different fields of industries place different challenges on firm management. Overall, it can be assumed that in small firms operating in the service sector the need for professional managers is not as great as in small manufacturing firms, which usually have

a greater variety of functions. At least in Finland, manufacturing firms are usually established based on the production know-how of the entrepreneur or entrepreneurial team and the lack of marketing skills is often a real problem. This weakness can be overcome with the help of professional marketing managers and salespersons. Based on these considerations the first research proposition was formulated as follows:

*P1: There are more management teams in manufacturing firms than in firms operating in the service sector.*

## **Growth**

Firm growth can be seen as one of the most important reasons for management teamwork. When the size of a firm increases, more people are needed for effective management (Weltman 2001). An entrepreneur's ability to build a strong and effective team is found to be one of the key factors for growth, because growth firms require teamwork and professional management (Vyakarnam *et al.* 1999). The importance of a management team in SMEs has been suggested to be crucial, especially in growth firms (e.g., Wiklund 1998; Storey 1994; Brush and Vanderwerf 1992). Storey (1994) claims that firm growth in SMEs is a prerequisite for surviving, and management team building is seen in his study as one of the four most important key elements of growth.

According to Weinzimmer (1997), some large-firm top management team theories are applicable also to small-firm growth, and many of them utilize a management team to manage organizations (Eisenhardt and Schoonhoven 1990). To achieve growth, a small business owner should have a formalized management team because a small business owner may not have sufficient knowledge and skills to ensure significant organizational growth (Weinzimmer 1997). In many studies the relationship between certain top management team variables and organizational growth is also moderated by the size of the firm. It is important to remember that an SME is not a small large firm, which needs to be considered when different strategies are planned (Simon 1996). This implies a second research proposition:

*P2a: Firms with management teams are larger than firms with other teams.*

*P2b: Management teams are formed more often than other teams due to the need for liability distribution.*

## **Profitability and Better Firm Performance**

Manager's perceptions can often be limited and the task of managing a large or complex organization can be too demanding for a single individual to

perform well. In these circumstances, a management team can significantly improve management performance and in this way influence the firm's performance and success (Vyakarnam *et al.* 1999; Eisenstat and Cohen 1990). The benefits of management teamwork are manifold and several reasons why an organization shifts from a single leader to a management team have been identified that relate to both work and firm performance and social processes (e.g., Hunsaker 2001; Eisenstat and Cohen 1990; Mullins 1999).

The first reason concerns the diversity of a management team. The role of the management team is to develop strategies that enhance the profitability of the organization; therefore, an important way to improve the strategic capacity is through a diverse composition (Jarzabkowski and Searle 2004). The variety of experience, knowledge and expertise among team members provides a synergic effect, which can be applied to the increasingly complex problems that firms encounter (Mullins 1999; Eisenstat and Cohen 1990).

The second reason for management teamwork concerns companionship, support and status. Companionship and a 'source of mutual understanding' can help in problem solving and in diminishing demanding working conditions. Support arises among team members and support from colleagues is important (Hunsaker 2001; Mullins 1999), although the work in management teams is at times rather rivalrous. A management team also has a symbolic role. By being a management team member an individual's status and esteem is heightened and the managers are likely to identify with groups or organizations that enhance their self-esteem (high status and desirable image) (Lester *et al.* 2006; Li *et al.* 2002). From an interpersonal perspective people are seen as having a need for affiliation with others and they join groups to provide themselves with the opportunity to fulfill their needs (e.g., exercising power over others) (Stewart *et al.* 1999). People may support joining a team because it gives them the opportunity to receive more than by working alone (i.e., according to the social exchange theory, the rewards are greater than the costs; Stewart *et al.* 1999).

The third reason for shifting to management team work is commitment and satisfaction. Team members are more likely to be committed to the decisions made and their implementation because they are likely to understand and support organizational decisions that they played a part in determining (Mullins 1999; Tosi *et al.* 1999; Eisenstat and Cohen 1990). In all types of organizations, reports indicate that team-working improves staff morale and decreases its turnover. When people are given responsibility they act in a much more responsible way (Haynes 1997). Moreover, a team's decision is more likely to represent the wide range of interests that exists in an organization. In addition, the interpersonal perspective of team formation can be linked to job satisfaction. Employees frequently report higher job satisfaction when they work in teams rather than independently as individuals (Stewart *et al.* 1999).

Finally, learning, communication and coordination are factors for shifting from a single leader to a management team. When many people work on

an organizational problem, more organization members will see the need for change and have a vision of how it could be improved. Team setting naturally develops the skills of team members and promotes both formal and informal learning in the organization due to the diverse knowledge and skills that the members bring with them (Hunsaker 2001). Common activities, communication and coordination among the major parts of the organization should improve with teamwork at the top (Eisenstat and Cohen 1990). In addition, the interpersonal perspective posits that people want to learn from others (Stewart *et al.* 1999). So, teams at all levels of organizations may improve the firm's efficiency and profitability. In particular, in situations where a former employee becomes part of the entrepreneurial team with a share of ownership, the commitment to the firm undoubtedly increases and the firm efficiency objectives may be easier to achieve. Based on these considerations, the third research proposition was formulated as follows:

*P3: Other teams are formed more often due to efficiency objectives than are management teams.*

### **Poor Performance, Crisis and Survival**

The urge to try something new and to change the course of action increases when performance is low (Boone *et al.* 2004). This observation is based on the literature about organizational decline, turnaround strategies and organizational change. Poor performance, troubles and even crises in the firm caused by internal (management errors) or external forces (not under management control, such as recession, changes in government policy and the entry of new competition) encourage management teamwork and promote the formation of crisis management teams (e.g., Kurzbard and Siomkos 1992; Spillan and Hough 2003; Pearson and Clair 1998). These teams are responsible for planning for crises before they actually occur, but sometimes management teams are formed in reaction to the crisis (Spillan and Hough 2003). Management teams play a key role in reversing the fortunes of failing firms. Nonetheless, only a few studies have investigated the importance of management teams in turnaround situations (e.g., Lohrke *et al.* 2004; Mueller and Barker 1997; Barker *et al.* 2001). It is, however, generally recognized that a firm's management team takes on particular importance during periods of declining performance (Lohrke *et al.* 2004). Similarly, Pasanen (2003) regards the lack of an effective management team as one of the main factors related to firm failure, and Ghosh and others (2001) see the presence of an effective management team as one of the few success factors in SMEs. As team diversity is assumed to be associated with willingness and openness to change (Finkelstein and Hambrick 1996), Boone and others (2004) expect that poor performance stimulates hiring more dissimilar managers, or prevents dissimilar managers from leaving a team. Groups and teams are necessary for survival because they allow people to

care for and replace each other when they become ill, as well as to provide social support for individuals in times of stress. Groups increase efficiency and thus help to improve the quality of life and to complete common tasks more quickly (Stewart *et al.* 1999). From these theoretical starting points, the fourth research proposition was formulated as follows:

*P4: Management teams are formed more often due to poor performance than are other teams.*

## METHODOLOGY

The Salesleads register maintained by Blue Book TDC Indexes was utilized in the sampling of the research. This register is national and its information has been gathered from various sources, such as Business Register of Statistics Finland, Suomen Asiakastieto Oy and Finnish Tax Administration, in addition to direct contacts with enterprises. Small firms with twenty to forty-nine employees operating in the regions of Northern Savo, Southern Savo and Northern Karelia were chosen from the population. In the register there were 287 firms of this kind. In addition to the subjective data gathered from the firms, objective information obtained from financial statements was used. Summaries of the financial statements were taken from the Inoa database, which is a public database of Finnish firms.

Additionally, some industries (for example, electricity, gas and water supply firms) owned by municipalities or central-corporation-led retail trades and subsidiaries of large corporations were excluded from the study. This made the sampling more representative and assured that the studied firms would be comparable to each other. After this amendment, the final sample size was 245 firms. The responsible persons in the firms participated in the study either by returning a questionnaire by mail or by filling in the form designed for this purpose on the Internet. After the second questionnaire, the response percentage was over 48, a total of 119 firms took part in the research. The primary analysis method used in this study was logistic regression analysis, which provides a multidimensional picture of the variables explaining the prevalence of teams, their connections and interaction to the examined phenomenon. The dependent variable was management teams versus other teams.

## FINDINGS

The research revealed the prevalence of teams in the management of firms employing twenty to forty-nine persons. Of all the small firms participating in the study ( $n=199$ ), 79.8 percent were team managed, i.e., they had a management team or some other team (internal team) that participated in the firm's management. Of these firms ( $n=95$ ), 45.3 percent had a management

team and 54.7 percent some other team. Management teamwork refers to a regular activity in which at least three people participate in managing the firm, and where at least one operates as an appointed manager (without ownership). On the other hand, other teams refer to a group of people who actively participate in firm management without the appointment of a hired manager (such as entrepreneurial teams and family teams).

Logistic regression analysis was used to answer the research questions. In the analysis the dependent variable divided the firms into two categories. The firms in the first category had a management team (0=management team). The second category was composed of firms where the team could not be considered a management team according to the definition used in this study (1=other teams). The goal was to create a model in which the characteristics of the firms and the reasons behind team formation could be considered as widely as possible. At the same time, specific attention was paid not to select irrelevant independent variables (based on the phenomenon of interest) and not to increase the number of independent variables compared with the number of observations (see, e.g., Metsämuuronen 2001). Table 12.1 shows the independent variables chosen for the logistic regression analysis.

The logistic regression model explained the researched phenomenon reasonably well as 79.5 percent of all observations were classified correctly (management teams 62.5 percent, other teams 90.2 percent). Also the  $\chi^2$ -test quantity showed that the reliability of the model was good. As a result of the analysis, the following variables were found to be statistically significant: sales turnover, liability distribution and efficiency. Table 12.2 presents the results of the logistic regression analysis.

*Table 12.1* Logistic Regression Analysis (Dependent Variable: Management Teams vs. Other Teams)

<i>Independent variables</i>	<i>Description of variables</i>
<i>Background characteristics:</i>	
Vocational education	0=at most college degree/1=at least polytechnic
Industry	0=Services/1=Manufacturing
Family business	0=No/1=Yes
Turnover	0=5 Meur or under/1=over 5 Meur
<i>Reasons for team formation:</i>	
Firm growth	3-level scale: 1=Not at all, 3=Very strongly
Controlling the business	3-level scale: 1=Not at all, 3=Very strongly
Liability distribution	3-level scale: 1=Not at all, 3=Very strongly
Poor performance	3-level scale: 1=Not at all, 3=Very strongly
Efficiency	3-level scale: 1=Not at all, 3=Very strongly
Expectations of financiers	3-level scale: 1=Not at all, 3=Very strongly

**Table 12.2** Logistic Regression Analysis (Dependent Variable: Management Teams vs. Other Teams)

<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Sig.</i>
<i>Background characteristics:</i>			
Vocational education	0.656	0.573	0.253
Industry	0.466	0.532	0.381
Family business	0.721	0.575	0.210
Sales turnover	0.986	0.582	0.091 <sup>a</sup>
<i>Reasons for team formation:</i>			
Firm growth	-0.429	0.458	0.349
Controlling the business	0.286	0.501	0.569
Liability distribution	-1.191	0.525	0.023 <sup>b</sup>
Poor performance	0.754	0.537	0.160
Efficiency	1.148	0.570	0.044 <sup>b</sup>
Expectations of financiers	0.006	0.583	0.992
Constant	-1.671	2.297	0.467

$\chi^2=0,037$ ,  $df=10$ ,  $n=83$

<sup>a</sup>  $p<0.10$

<sup>b</sup>  $p<0.05$

## FIRM SIZE AS AN EXPLAINING FACTOR FOR TEAMS

The objective information from the financial statements gathered in this study suggested that the firms managed by management teams were larger and more profitable than other firms. In addition, the sales turnover of these firms had been growing more quickly than that of others. However, the differences were not statistically significant with any variable and all firms participating in this study can be considered as very profitable (Table 12.3).

**Table 12.3** Means and Frequencies of Surveyed Firms

	<i>Management teams</i>			<i>Other teams</i>		
	<i>N</i>	<i>Mean</i>	<i>S.D</i>	<i>N</i>	<i>Mean</i>	<i>S.D</i>
Sales turnover (1,000 €)	33	6349.03	6038.07	41	5587.83	7462.53
Growth (%)	29	23.29	44.07	39	13.40	21.10
Profit (1,000 €)	34	345.68	511.84	42	201.02	418.93

For the logistic regression analysis a dichotomic variable was made of the sales turnover (based on a mean of the sales turnover of all firms). This was in order to clarify the diversion to management teams and to other teams in firms of different sizes. In the logistic model the sales turnover emerged as a statistically significant variable that distinguished the firms from each other. The logistic regression analysis revealed that there were no differences between industry sectors in firms with management teams and other teams. Hence, the research proposition 1 cannot be supported.

In relation to sales turnover, the results mean that in practice management teams were clearly less common than other teams in smaller sized firms. In the firms reaching a turnover of a maximum of five million euros, less than one-third of all teams were management teams (30.0 percent), whereas in larger firms management teams were nearly as frequent as other teams (45.7 percent). Thus, research proposition 2a is supported. This may be considered rather natural as with the increase in firm size, so the probability of a more formal management system and activities usually also increases (e.g., Lubatkin 2006). In other words, when the firm size increases the owners are likely to hire outside managers to develop the activities and the responsibility for the operations may transfer from the owners to a management team consisting of professional managers. The development of a firm often requires different kinds of skills than the founding of one. For example, substance knowledge of the industry is not sufficient alone; in addition, business skills and visions are required. If the owner does not have these skills, this could be compensated for by hiring knowledge in from outside or by distributing the responsibility to skilled employees.

## **REASONS AND SITUATIONAL FACTORS FOR TEAM FORMATION**

The liability distribution was emphasized significantly more as a reason behind team formation in management teams than in other teams. Whereas efficiency objectives were significantly more often reasons for the formation of other teams (Table 12.2). Hence, as a result, propositions 2b and 3 are supported. The results can be interpreted in several ways. The liability distribution behind the formation of management teams may tell us about the natural growth of the firms and the subsequent need to define various operations more clearly. In practice this means that the responsibility of the operations is more clearly decentralized to different persons responsible for sales, financial administration or production/services. This is supported by the aforementioned observations of the prevalence of management teams in firms with a higher sales turnover. The liability distribution as a reason for team formation may thus mean that the operations are developed towards a more professional direction in which some key operations and managers responsible for them can be clearly recognized. However, statistically significant differences between the growth rate and the profitability of firms could not be observed (Table 12.3).

Efficiency objectives as a reason behind the formation of other teams are more difficult to interpret. In principal, the result may be considered from at least two points of view. On the one hand, it may be a question of the financial problems a firm is facing, the solving of which requires the strengthening of operations and the forming of teams. In addition, contrary to the expectations, the findings show that a poor performance was considered a more significant reason for team formation in firms managed by other teams than in firms managed by a management team (Table 12.2). According to this result, proposition 4 cannot be supported. However, the difference was not statistically significant. The objective data did not suggest that the firms would be financially unprofitable either (Table 12.3). On the other hand, it may also be a question of a much more positive situation, whereby the firm operates in the field of high technology, for example, and where success from the outset requires diverse knowledge and team-like methods. It may also be a question of sharing ownership between several persons, in which case the share of the firm may be a motivating factor and contribute to the achievement of efficiency objectives.

## DISCUSSION

The results support the assertion that management teams are more common in larger firms where the management of operations requires a clear definition of responsibilities and more formalized managing methods. The reasons for the formation of management teams and other teams differed. The main reason for the formation of a management team was the sharing of responsibility, whereas the formation of other teams was influenced by efficiency objectives. According to the results, the formation of management teams is explained more by the natural growth of firms than by poor performance or the requirements of financiers. Other teams seem to be common in situations where the operations require diverse knowledge from the outset. In other words, a poor financial situation did not have a significant role in team formation based on both the subjective and objective data. At the same time, the results support previous observations about the positive influence of teams on the success of firms.

This study suggests that management teams are common in small firms, and that future research about management teams should indeed consider the small firm context. Management team formation may depend on the decisions of the entrepreneur or on the consequences of the entrepreneurship of other team members. So far, the formation of teams and management teams has been seen solely as a decision made by the entrepreneurs themselves (e.g., Nadler and Spencer 1997; Finkelstein and Hambrick 1996; Edmondson *et al.* 2002). However, the formation of management teams may also be observed through entrepreneurship. In such cases, an entrepreneur-like employee in a small firm may, through

his/her actions, create the prerequisites for growth and through that, for his/her promotion.

We have acknowledged the challenges concerning the definitions of management teams and other teams. In interpreting the findings of this study caution must be exercised due to the difficulties in the separation of the teams. However, comparative studies like this are justified because they can increase our knowledge of team formation and of the transformation process from other teams into management teams. We have also acknowledged that the examination of the reasons behind team formation may not be inclusive. Moreover, since the study was restricted to firms in Eastern Finland, the results cannot necessarily be generalized to other areas in Finland.

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# 13 Understanding Fast-Growth Firms Founded by Entrepreneurial Teams through Structure and Strategy

*Thomas M. Cooney*

## INTRODUCTION

Over the past three decades, increasing attention has been paid to the management of small business practice. Such a development was initially stimulated by a number of issues, primarily the questioning of ‘why big is beautiful’ with regard to firm size. This questioning subsequently led to the reappraisal of large corporations and multinational organizations as the cornerstone of a country’s economic development and well-being. The assumption that these large enterprises were the primary solution to economic growth became uncertain and debatable, and the scientific management practices on which they were built became the subject of skeptical inquiries. The world was metamorphosing swiftly, principally due to technology, and many of these large entities were increasingly unable to keep in touch with their markets, since they possessed neither the flexibility nor the fluidity to respond to the marketplace with appropriate speed.

The debate on the value of small firms to the economy was fundamentally ignited by the publication of Birch’s (1979) research on job creation in America between 1969 and 1976. While the study has been criticized for its methodology, the work nevertheless generated a reaction that caused a reevaluation of the belief that supporting big firms was the best way to grow an economy. Birch’s work offered evidence that 66 percent of all jobs generated during the research period were created not by large organizations but by small businesses. The notion of small firms being scaled-down versions of large firms was also challenged, an argument that Storey and others (1987) supported since they highlighted that a number of important distinctions exist between small and large firms, including the finding that there was a much greater variability in the rate of growth and in the profitability of small firms than found in large firms. With the spotlight increasingly turning to small enterprises as a potential stimulant for growth in an economy, questions arose as to how more businesses could be created and what types of people establish them. Such inquiries in turn brought about the blossoming of small business research.

Since the groundbreaking work of Birch, the significance of small firms to the economy of a country and their ability to engender job creation has frequently been accentuated. Although the positive contribution made by small firms to an economy has been widely acknowledged, the value or size of the augmentation remains an issue of debate. However, what has been more substantively recognized is the role played by fast-growth firms within the small enterprise sector itself. Numerous research studies have recognized the significant contribution that fast-growth firms make to an economy by highlighting details such as the number of jobs that they have created, their positive engagement with exporting and their heightened commitment to R&D activity. Within this new business perspective has been the broadening apperception that entrepreneurial teams have been the driving force for many of these firms, with ever-mounting evidence to suggest that a fast-growth firm is more likely to be led by an entrepreneurial team than by an individual entrepreneur. While the concept of the individual entrepreneur remains rooted in the traditional 'lone hero' image, an entrepreneurial team has been defined as 'two or more individuals who have a significant financial interest and participate actively in the development of the enterprise' (Cooney 2005).

Given the increasingly complex and competitive commercial environments within which businesses now operate, and the obvious limitations of dealing with such challenges alone, launching with a team has progressively been viewed as offering new ventures a better possibility of growing quickly. As Eisenhardt and Schoonhoven (1990) attested, large teams offer more skills to build strategic alliances, to raise money and to meet potential customers. The argument that entrepreneurial teams make little difference to a firm's growth potential since all firms utilize team-working in some capacity is increasingly being rejected. This is because not all firms believe in or operate a system of team-working, but firms established by a team are more likely to behave in a team-working manner because that is how the founders should have innately performed since the firm was instituted. If it is true (as evidence suggests), that fast-growth firms are more likely to be led by entrepreneurial teams, then it is important to understand what they do to increase their probability of achieving success. Based upon research undertaken in the U.S. and in Ireland, the focus of this chapter is on the utilization by fast-growth firms founded by entrepreneurial teams of organic/mechanistic structures coupled with emergent/deliberate strategies as sources of accomplishing such success.

## **BUILDING A THEORETICAL FRAMEWORK**

While understanding the nexus between environment, performance, strategy and structure has already been the recipient of some attention in academic business research, it generally has been too limited and fragmented to draw

any firm conclusions. Economists frequently view the composition of the market as being the dominant element influencing firm performance, whereas many business strategists believe that performance is due to the conduct of management (while still others believe it is a combination of market structure and management conduct). Some writers have argued that until recently the neoclassical framework within which many economists worked contained assumptions that implied a deterministic relationship existed between market conditions and organizational responses that effectively made design choices, managerial inputs and strategy issues irrelevant. However, it is now more broadly accepted that the relationship between environment and performance is shaped by other factors (e.g., structure and strategy), and that entrepreneurs can positively influence these variables.

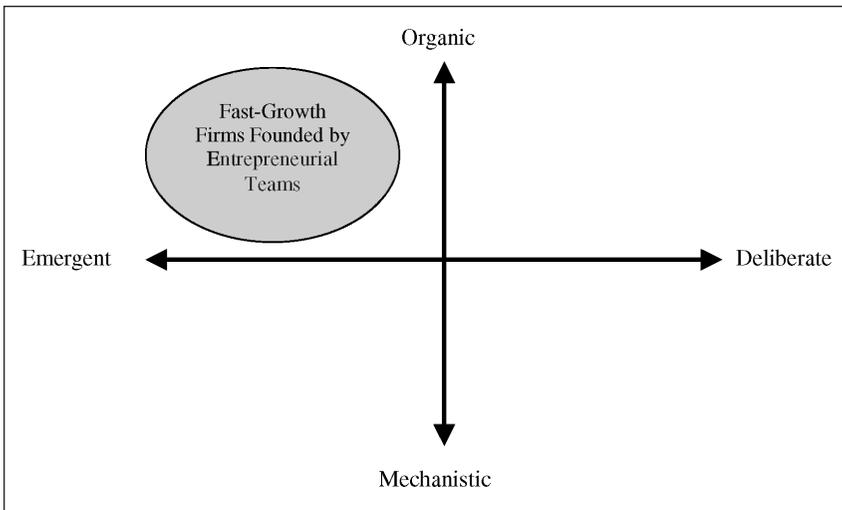
After considerable research and deliberation concerning the theoretical framework to be employed in exploring fast-growth firms founded by entrepreneurial teams through structure, the Burns and Stalker (1961) concept of organic/mechanistic dimensions was considered most apt for this work. Burns and Stalker argued that a firm could move between fixed and flexible structural forms dependent upon the circumstances of the marketplace. While fast-growth firms in quickly changing environments are more likely to be organic, as a firm grows or the environment stabilizes it may move to a more mechanistic format, although it can also move back again if conditions alter. Many fast-growth firms differ from non-fast-growth firms because of their need to adapt quickly, which the organic form allows them to do more easily. The basis for this philosophy pivots on the capacity of the firm to structurally realign itself to the environment, as promoted by the contingency theorists.

A similarly simple concept was required for the analysis of strategies employed by fast-growth firms founded by entrepreneurial teams, with Mintzberg's work (1979) identified as being the most appropriate. Mintzberg saw deliberate and emergent strategies as forming two poles of a continuum, along which one would expect real-world strategies to fall. Mintzberg argued that strategies could form as well as being formulated, that they could appear without clear intentions and converge into patterns. He postulated that a primary difference between these two patterns was the willingness to learn; deliberate strategy prohibits learning once the strategy is devised while emergent strategy nurtures it. For a fast-growth firm to thrive it must be able to respond quickly to environmental changes, particularly if it participates in a rapidly altering marketing. The company needs to blueprint its future, but it must also be capable of responding and reacting to mobile customer needs, be sensitive to market revision and be understanding of evolution and fluidity within its strategic thinking.

Based upon a detailed review of the literature and using the theoretical framework developed earlier, the basic prediction of the research was that fast-growth firms led by entrepreneurial teams would uniquely employ organic structures coupled with emergent strategies. This prediction was

based on the understanding that global industry was changing rapidly, with products having an increasingly shorter life cycle, and so there was an increased need for businesses to move with alacrity. Teams can do this more effectively since from inception they have a more diffuse base of skills with a looser structure, and through group dynamics they can generate a broader range of strategies open to adaptation. Given previous studies on the success of teams, research also indicated that the combination of two or more entrepreneurs offered a greater possibility of fast growth being achieved within such an environment. As can be seen from Figure 13.1, the Organic-Mechanistic paradigm forms the vertical axis of the theoretical framework, while the Emergent-Deliberate paradigm forms the horizontal axis. Together, the hypothesis was that fast-growth firms founded by entrepreneurial teams would hold the position highlighted—that is, a unique coupling of organic structure and emergent strategy. It was additionally hypothesized that other firm classifications (e.g., non-fast-growth firms, firms founded by individuals) would be positioned elsewhere in the diagram, but none within the quadrant accentuated.

The research into this hypothesis was realized through the implementation of two surveys, one of software companies in Massachusetts (U.S.) and the other of software companies in Ireland. The software industry was selected because of the high numbers of firms founded by entrepreneurial teams and also because of the high number of fast-growth companies identified in the industry analysis. The questionnaire was designed to identify both the strategic and structural position of the firm at the time that it was founded and again at the time that the survey was undertaken. A number of parameters were set to target the survey populations more effectively:



*Figure 13.1* Theoretical framework.

1. Companies could be no more than ten years old (because of memory decay in identifying the firm's position at startup).
2. Its Head Office had to be locally based (i.e., it was not a subsidiary or part of a major company whose central office was elsewhere).
3. It was a private firm (in-depth interviews had revealed that public companies were a very different type of entity).

This generated a total valid population of 445 firms in the U.S. and 219 firms in Ireland. A valid response of 22 percent was received in the U.S. and 35 percent in Ireland. The data was inputted into an SPSS software package for detailed analysis. Additionally, six CEOs, two industry experts and three academic experts were selected randomly and in-depth interviews were held with them to ascertain their viewpoints. These interviews enabled a further analysis of the data to be undertaken and a more interpretative approach to be taken to the findings. The results of this work are detailed in the following.

## UNDERSTANDING THE STRUCTURE/STRATEGY COMBINATION

Attempting to understand the combination of structures and strategies employed by fast-growth firms founded by entrepreneurial teams in different countries is an extremely complex task. The research needed to identify differences in characteristics between fast-growth and non-fast-growth firms, between firms founded by teams versus an individual, and between firms in the U.S. and in Ireland, plus all combinations across these classifications. However, the broad array of firms involved also offered an exciting opportunity to highlight the multitude of disparities that exists amongst such firms and to identify the lessons that can be gained from having a more thorough knowledge of how such enterprises operate.

The outstanding finding from the research was that while fast-growth firms founded by entrepreneurial teams displayed a coupling of organic structure and emergent strategy as hypothesized, they were not unique as it was also found that almost all classifications of firms began their existence with an organic/emergent combination. In understanding this overall finding, the fact that the survey was of the software industry might have a greater relevancy than was initially anticipated. The business culture of the software industry was informal, and since the industry was growing quickly, firms needed to be flexible and fluid. Additionally, the software industry was frequently concerned with writing programs requiring inventiveness for tailored products or service offerings. Such innovation necessitated an environment that was loose rather than hierarchical. Production lines were therefore not a common feature of this industry and thus hierarchical structures were less appropriate. It is indeed arguable that no structure/strategy combination other than organic/emergent would be considered effective or

even pertinent for the software industry. The organic/emergent combination could also be a function of the product-market choice, although this possibility was not strongly evident in the findings.

While all firm classifications were similar at their startup phase, differences were located in the way that firms moved over time. As the U.S. firms grew older they moved towards a combination of organic structure and deliberate strategy (see Figure 13.2). However, Irish firms, beginning in the same position, moved towards a combination of mechanistic structure and deliberate strategy that was hierarchical and organized. The latter finding suggested that Irish firms had a greater need to get organized in a structured, formal, hierarchical fashion as the firm matured.

The differences in movement across time may be explained by cultural and economic differences that reveal divergent entrepreneurial goals and ambitions. The in-depth interviews revealed that the founders of the fast-growth U.S. firms had a mind-set that was focused on the firm eventually going public, enabling the founder to make substantial monetary fortunes from such outcomes. To achieve this success, the founders generally offered many of the employees equity in the business and thus made them co-owners of the ambition. The founders of Irish firms were more concerned with building ventures that were successful but over which they retained complete ownership. Irish entrepreneurs were less willing to offer equity to others, including employees and venture capitalists. This meant that as Irish firms grew in terms of employee numbers, the structures would become more hierarchical. This was possibly the result of differing cultures, but it was also a function of the different capital markets. In Massachusetts, the capital markets were very strong and there existed ample opportunity to go public. In Ireland, the capital markets were small and there was limited potential for generating large wealth from going public. Indeed in recent

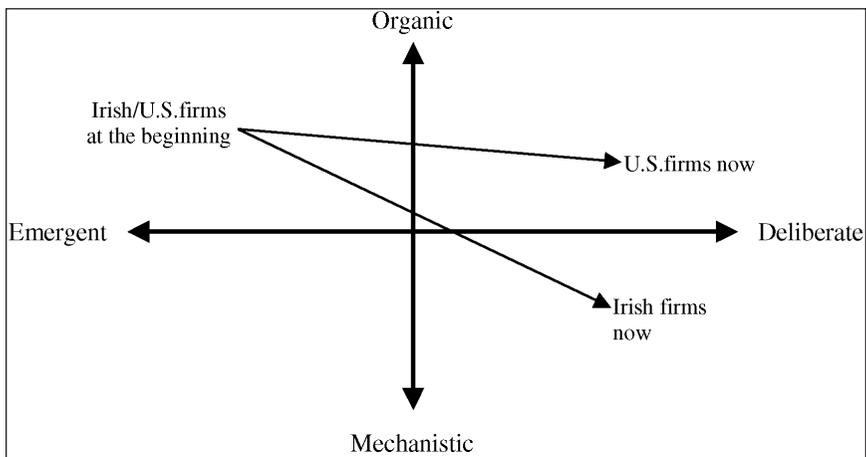


Figure 13.2 Movement of U.S. versus Irish firms.

years the very successful Irish software firms have achieved their success by floating on the NASDAQ in New York, rather than floating their company in Ireland. A significant finding from the surveys was that while Ireland's software industry was thriving and receiving world recognition, it was not a smaller version of the U.S., nor will the combinations of structure and strategy that are effective in the U.S. necessarily work in Ireland.

## UNDERSTANDING FAST-GROWTH FIRMS

While the overall finding from the research offered no definitive approach to combining structures and strategies for fast growth, a number of other lessons were learned from the research study undertaken regarding fast-growth firms. The principal message emanating from the results concerned 'sharing'. Fast-growth firms placed a strong emphasis on sharing information, advice and responsibility. As the CEO of one fast-growth firm noted, 'the network operated not only within the organization but was inclusive of all constituent parties such as customers, suppliers and advisors'. These firms sought contributions from all of their members, internal and external, and there was a positive approach towards partnerships. Indeed, in the book *Inside the Tornado*, Moore (1998) discussed the critical need for alliances and associations to be developed in the modern 'eBusiness' environment. But this may also mean that firms who are networked with other firms will, in future, grow more slowly in terms of employment than non-networked firms. Networked firms can increase their sales through their interaction with other firms, but much of the additional work that they garner might be subcontracted to another firm who specializes in a particular activity. Therefore, it may no longer be appropriate to measure growth in the software industry, and in the environment of 'eBusiness', in terms of employee numbers alone, since these industries are presently operating in a highly interactive fashion, with companies specializing in particular areas of business. Firms may reach a critical employment level beyond which it no longer makes economic sense to expand, unless the firm wishes to become a dominant player in the market.

The idea of sharing additionally related to distributing the rewards achieved by the firm, as ownership of the firm was offered to all of those who participated in the firm's activities. From the interviews with the CEOs, they recognized that if they were to succeed then everyone should be given 'a slice of the action'. While the fast-growth firms demonstrated a greater degree of organic structure and emergent strategy, an example given by one CEO of his firm becoming too organic was a reminder that some control and process always needed to be maintained. Another characteristic of fast-growth firms was that they were active exporters, continually searching for new markets. This was true of the U.S. fast-growth firms as well as of Irish firms, even though the U.S. firms had a very large domestic market. From

interviewing the CEOs of the fast-growth firms, it was identifiable that expansion and fast growth were clear targets for the organization. It was a mind-set that they possessed that was not part of the thinking of any CEO interviewed from a non-fast-growth firm. The desire for fast growth was related to the ambition by some CEOs to become wealthy by placing the firm on the Initial Public Offering (IPO) market and to attain this aspiration the firm needed to achieve 'hockey-stick growth'.

Other lessons that were learned about fast-growth firms concerned the differences between their behavior in the U.S. and in Ireland. In the U.S., fast-growth firms had a strong focus on what was their product or service offering (no more than six products according to CEOs interviewed), they targeted growing market segments (the CEOs interviewed stated that it was opportunity recognition due to industry experience) and believed firmly in the need to employ a good finance person as the firm grew. Irish fast-growth firms had a broad range of activity, stressed attention to customer needs as their principal growth strategy and placed a strong emphasis on the sales function. This difference in product and growth strategies was possibly the result of the different sized markets. The U.S. firms can undertake concentrated niche marketing and still have a large potential market, but Irish firms need to attract a broader base of customers because of the small market size. This would mean that fast-growth firms from smaller markets (e.g., New Zealand, Finland) need to employ a different approach than that utilized by fast-growth firms in larger markets.

## UNDERSTANDING ENTREPRENEURIAL TEAMS

The literature would suggest that in comparison to many other industries, the software industry has a higher than average number of firms being established by multiple founders. This tendency towards founding teams is possibly caused by a demand for creativity in the software industry, or it may be a consequence of the informality of the industry bringing people together in a more relaxed manner. Whatever the cause might be, the research demonstrated that many of the characteristics present in fast-growth firms in the software industry were also identified in firms founded by entrepreneurial teams. Firms founded by teams were fluid and team based, they gave authority to those with the greatest knowledge of a specific activity, and strategies could emerge from anywhere in the organization. These firms also had an innate sense of networking since good communication is a crucial component of successful teams.

Team entrepreneurship appears to be much more prevalent in the U.S. than found in Ireland, and speculatively that could be the result of the need in the Irish psyche to control ownership. For example, Ireland's very high rate of home ownership may be the result of ancient factors, such as being dispossessed of the land by colonial forces or a famine during the nineteenth

century dispersing the population about the globe, but the compulsion still strongly exists in the mind of most Irish people to own (rather than rent) their property. This mind-set of ownership extends into the business environment with most entrepreneurs seeking to maintain 100 percent ownership of their firm. Unfortunately this mind-set adversely affects the prospect of entrepreneurial teams being formed and sharing of rewards. It also encourages singular decision making and hierarchical structures because 'the entrepreneur is the boss'. Additionally, one of the more interesting findings from the research was that firms founded by entrepreneurial teams in the U.S. encouraged the day-to-day decisions to be made by those with the greatest knowledge on the specific area being addressed, and that strategies were encouraged to come from anywhere within the organization. However, firms founded by entrepreneurial teams in Ireland were less organic and less emergent than their U.S. counterparts, demonstrating a greater need for order while taking a more dispersed approach to the market. If entrepreneurial teams do impact positively on performance, then a greater sense of inclusiveness needs to be developed by the Irish business community.

#### **WHAT ARE THE LESSONS FOR ENTREPRENEURS?**

The core finding that derives from the research undertaken concerns the characteristics of the entrepreneurs. An important insight identified was that a key influencing factor of business success was the entrepreneur having prior industry and startup experience. The literature review regarding the characteristics of entrepreneurs of fast-growth firms outside of this study also identified these past experiences as being a very positive influence in the success of enterprises. The attitude and mind-set of the entrepreneur were also identified in the study as critical traits of successful entrepreneurs. Successful entrepreneurs have positive attitudes and view obstacles as challenges to be overcome, not barriers to achievement. Their mind-set is of inclusiveness, and of sharing responsibilities and rewards. They set objectives and focus on attaining goals. These goals were communicated clearly to other stakeholders, so that everyone understood exactly what the firm was aiming to achieve and what the role was of each individual stakeholder. They promoted a clear vision for the organization and believed that all participants must understand it. Without that vision, they believed that strategic drift was a real possibility.

Communication was also highly important in fast-growth firms. The CEOs of the fast-growth firms shared information, ideas and authority. The communication was not given on a need-to-know basis but as a method of getting all stakeholders, particularly employees, to better understand their roles within the potential prosperity of the enterprise. The communication occurred via networks and was not passed down through a multilayered hierarchical structure. Additionally, the CEOs of

fast-growth firms stressed to employees that attention to customer needs, quality products and services, and the success of the firm was everyone's responsibility, not just that of management.

The study found that fast-growth firms were more likely to be organic in nature, which meant that these firms had relatively flat structures, were fluid and authority on projects was given to the person with the greatest knowledge in that area. As firms matured, they retained their organic structure, although they had become a little more mechanistic due to the increased number of employees. Irish firms had greater difficulty with this process, to such a degree that delegation and loosening of control remain a challenge for many Irish entrepreneurs. Therefore, for entrepreneurs to move towards an organic structure, firms should incorporate cross-functional teams, have a flat organizational structure, share information widely, give authority to those with the best knowledge of the area, continually develop the roles and responsibilities of employees, and an individual's commitment should be to the success of the organization and not to the responsibilities of their own position. It is also advisable that management should build a strong board of directors, including people from outside the organization. They should also have advisors who support the work of the firm. These advisors would include accountants, legal representatives and other experts in business areas relative to the needs of the firm. The research found that starting a software firm with co-founders offered a broader range of expertise and experience, greater access to capital and the immediate sharing of information, risk and reward. The inclusiveness of working with others to achieve a common goal sets the right tone for what is generally required of fast-growth firms. A firm being founded by an entrepreneurial team does not ensure success, but the literature review would suggest that it greatly enhances the possibility of achieving such an ambition.

The strategy for fast-growth firms was emergent at startup but moved to being deliberate as the firm matured. This meant that their strategies were continuously emerging at the beginning, but were more planned later. To use Mintzberg's (1979) analogy, firms would begin with strategies that were like clay on a potter's wheel, where one had a broad idea of what was to be molded, but it only took definite shape as the process evolved. However, with time and experience the potter would know exactly what they were going to produce over the coming weeks and months, although new forms might continue to be molded so as to introduce new product lines. With an emergent strategy these new forms can be suggested by anyone in the organization, as frequently those closest to the product or customer will have the clearest ideas of where improvements can be made. Strategies are deliberate when they are planned, and disseminated throughout the organization in a managed process so that everyone understands them. Even though the software industry is a rapidly changing environment, it was demonstrated in the survey findings that firms who remained emergent suffered from a loss of focus and strategic drift. Strategies should not be written in stone, but a

clear sense of where the company wanted to be in three years was critical to achieving success. Fast-growth firms identified growth markets to begin with, and once they had secured a base in those markets, they then moved towards the quality end of the market. Fast-growth firms also differentiated themselves by offering products or services that gave potential customers a distinct reason for doing business with them. Therefore, the lesson for entrepreneurs regarding strategy is to begin by molding a strategy, and then as time progresses to develop that mold.

The lessons presented here for entrepreneurs are not prescriptive solutions for the guaranteed success of any organization. They are the predominantly successful methods of achieving fast growth as found in this work, but examples of firms who have not employed these lessons and are still very successful probably exist in abundance. However, the findings do offer signposts towards what works successfully within the software industry at present. But without the entrepreneur possessing the right attitude, little of the findings is probable.

## **WHAT ARE THE LESSONS FOR POLICYMAKERS?**

There are a number of lessons for policymakers from the findings of this research study. The first is that according to the literature, firms founded by entrepreneurial teams are more likely to be fast growth than firms founded by an individual. Therefore, enterprise support agencies should encourage firms founded by teams. However, these teams should not be unnaturally generated. One example known to the author of an organization that found products through licensing from the U.S., and then matched these products with artificially created teams within incubator units, has proved less than successful. The reasons for the poor record of success of this operation was due to the entrepreneurs either not believing in the product that they are matched with or because the team dynamics had broken down. Entrepreneurs can be encouraged to build teams and find co-founders without forcing them into that situation. Engendering team entrepreneurship is about nurturing rather than coercion.

The second point is concerned with the concept of 'picking winners'. The practice of 'picking winners' has had a great deal of support over recent years amongst policymakers and support agencies. However, the evidence suggests that there are a number of problems with this concept. The first is the question of what measures are used to pick 'winners'. If a set criterion is employed then there is the definite possibility of losing potential successes because the relevant agency has already labeled those outside the criterion as 'no-hopers'. But the true measure of success is frequently found in the second generation of firms, as demonstrated in the research analysis through the predominance of fast-growth firms whose founders had prior industry and startup experience. Therefore, it may be

more fruitful for support agencies to encourage a broader range of entrepreneurs to start an enterprise, knowing that some (or many) will fail, but that the real winners will most likely come from those that have failed and then tried again. Entrepreneurs who have been separated from their initial teams should be encouraged to start again. However, enterprise agencies are assessed on their short-term records and therefore a radical change in policy is required if the potential winners are to be given the freedom to fail and then to start again. It also requires a change in attitude that failure is acceptable, and that it is a learning process towards long-term achievement. Both of these requirements necessitate significant alteration in existing mind-sets, and unfortunately, are therefore unlikely to occur in the short term.

It was suggested by Cooper (1986) that six environmental influences are critical to the development of entrepreneurial activity and these are economic conditions, access to venture capital, examples of entrepreneurial action, opportunities for interim consulting, availability of support personnel and services, and access to customers. However, taking those conditions that exist in Massachusetts and replicating them in Ireland is not the route to engendering a positive environment for the development of fast-growth firms. Replication is unlikely to occur because Massachusetts is unique and even previous attempts to replicate this model within the U.S. have failed. If the model did not work within the U.S. culture, then the prospects of it being successfully implemented in Ireland must be quite slim. The Massachusetts model is a very useful starting point that should be studied carefully by policymakers, and then a model crafted for the local culture could be developed and implemented. Irish policymakers should have the courage to design their own models, ones that are appropriate to the economic background, culture and experiences of the Irish people. It is arguable that this has already been achieved with the success of the 'Celtic Tiger' and that policymakers should now have the confidence to broaden their ambitions to address the most effective methods of engendering successful indigenous entrepreneurial activity.

## CONCLUSION

As in any other aspect of life, success in the business world can be a choice and not simply a consequence of fate. While nonachievers complain of the environmental challenges that they face, such as economic conditions or government regulations, achievers overcome these same challenges through a determination to succeed. Research in this chapter from the U.S. and Ireland has clearly demonstrated that fast-growth firms display a number of characteristics that are significantly different to those found in non-fast-growth firms. These variances were the result of decisions made by management, not because of events forced upon a manager by external influences.

The research highlighted that fast-growth firms exhibit a more organic structure than other firms, one that is fluid and able to mold its shape to the current environmental requirements. They have few structural layers and the leader of a project team is customarily the person with most knowledge in that area, rather than the person who is most senior in authority. Fast-growth firms share information, advice, responsibilities and rewards. Owner-managers of fast-growth firms in the U.S. are significantly more likely to give their employees an equity stake in the organization as they believe that sharing the rewards engenders a stronger work ethic and greater loyalty throughout the organization. However, the fervor of Irish owner-managers to maintain ownership and control echoes an assertion by some historians that traditionally Irish entrepreneurs have been more concerned with possession rather than performance, a trait embedded in the Irish psyche. Whatever the causality, the reality is that fast-growth firms are more team orientated and that the management of such organizations demonstrates a greater willingness to share. That is their choice!

Fast-growth firms also demonstrated a greater willingness to learn, to continually generate new strategies, while incessantly searching for fresh opportunities. Fast-growth firms will target growing markets, or growth market segments in a stable or mature market, and their export activity will be greater than that undertaken by other firms. However, the most significant finding of the research was that the founders of fast-growth firms have a clear vision of how they define success and that they were quite certain in their own mind that they were going to achieve that ambition. Success was not necessarily measured in monetary terms, although the mind-set of the founders of fast-growth firms was dominated by growth. That was their choice!

When the personal ambitions of the owner-manager conflict with the ambitions for the organization, the organization is repeatedly the loser. Nonachieving owner-managers are frequently less willing than their achieving counterparts to sacrifice their time to attain their organizational ambitions over their personal life objectives. Yet one does not have to be a workaholic to achieve success as delegating responsibility to colleagues/employees can lighten the workload of the owner-manager while also realizing organizational goals. However, nonachieving owner-managers are generally not prepared to give greater responsibility and control to those about them despite the fact that such actions may increase their potential of attaining greater personal and organizational success. Arguably they do not trust the people whom they employ. Meanwhile, successful firms are managed by owner-managers who are willing to trust their people and who are also willing to make difficult decisions. To quote the poet Robert Frost: 'two roads diverged in a yellow wood, and I, I chose the road less traveled by, and that has made all the difference'. That is their choice!

The research undertaken in the U.S. and in Ireland clearly suggested that the mind-set of the owner-manager has a significant bearing on the ability

of an enterprise to achieve success, and that generally, Irish owner-managers do not possess the same positive mental attitude that their U.S. counterparts employ. This trait in Irish owner-managers negatively influences the ability of Irish firms to be successful. As previously stated, achievers operate in the same markets and face the same challenges as nonachievers, except that achievers have a stronger and more positive mental attitude. Therefore, success is a choice—your choice!

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# 14 Effects of Founder Team Interaction on Customer and Competitor Orientation

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## INTRODUCTION<sup>1</sup>

Managers and researchers have claimed during the past decade the importance of market and customer orientation for sustainable competitive advantage and superior company performance. The empirical research on market orientation is based mainly on the studies of Narver and Slater (1990) and Jaworski and Kohli (1993). Although a great deal of marketing research has investigated market orientation (e.g., Greenley 1995; Appiah-Adu 1997; Kumar *et al.* 1998), and especially customer and competitor orientation (e.g., Pelham and Wilson 1996; Balakrishnan 1996), the role of these aspects for new venture management is still unclear, particularly in the context of dynamic markets such as the software industry.

Although the development of information and communication technology industries has slowed down compared to the strong growth at the beginning of the twenty-first century, software products are still expected to achieve high annual growth rates. Due to this dynamic development business opportunities are generated continuously for new software ventures, which often operate with higher flexibility than their established larger competitors.

In many cases these ventures have multiple founders who are mainly computer scientists and programmers. For this reason, product development and technological issues receive major attention in the early stages of software venture development on the one hand. On the other hand, a lack of business management and marketing skills may result in an underestimation of market knowledge for venture success. Researchers in various studies on young technology companies have claimed marketing and market knowledge to be the pivotal factors influencing failure or success of these ventures (e.g., Keh *et al.* 2007; Hills and Star 1985; Slevin and Covin 1987). Therefore, we want to shed some light on the effects of customer and competitor knowledge on software venture performance. As software ventures are usually founded by two or more persons we will examine especially the role of founder interaction.

The chapter is organized as follows: First, we will discuss the theoretical foundations of our research framework, i.e., the constructs

interaction quality, customer and competitor orientation. Second, we will develop and explain the central hypotheses of the investigation. The third section is dedicated to details of data collection, the method and the outcomes of our empirical study. At the end of this chapter we discuss limitations of our study as well as theoretical and managerial implications in this field.

## THEORETICAL FOUNDATIONS

While the different frameworks for the examination of market orientation include customer orientation implicitly (Jaworski and Kohli 1993) or explicitly (Narver and Slater 1990; Ruekert 1992), a stream of research that focuses on customer orientation and competitor orientation separately has shown mixed results for their effect on company performance (Appiah-Adu and Singh 1998; Li and Calantone 1998). Further, Greenley (1995) has used Narver and Slater's framework in a study of market orientation in British industrial companies, which led to a partial rejection of performance hypotheses. As industry and country characteristics may influence the understanding and the effect of market orientation, there is a necessity to conduct a study that is industry specific in order to get results that can be interpreted clearly and without ambiguity, although this design limits the possibility of general statements.

In the following paragraphs we want to discuss the theoretical aspects and the results of empirical studies on the three main constructs of our analysis: Interaction quality of the founders, customer orientation and competitor orientation founders. The objective is to develop a definition for each construct considering the focus on new software ventures in this study.

### Interaction Quality of the Founders

A growing body of research emphasizes the role of founder team interaction in new business development (Kamm *et al.* 1990; Ensley and Amason 1999; Mellewigt and Späth 2001; Taulicar *et al.* 2005). Watson and others (1995) describe the venture team interpersonal process with the four dimensions leadership, interpersonal flexibility, team commitment and helpfulness. The results of their empirical study indicate especially the importance of team leadership and commitment for perceived venture success. Lechler and Gemünden (1999) found six dimensions of social interaction within entrepreneurial teams to be good predictors of technology venture success: communication, cohesion, work norms, mutual support, coordination and conflict resolution. Communication is a basic part of teamwork as it serves for information exchange (Pinto and Pinto 1990). Intensity and the degree to which team members communicate frankly with each other describe the quality of communication (Helfert and Gemünden 2001; Gladstein 1984). 'Software development, in

particular, is characterized by a need to coordinate the work of individuals on a day-to-day basis' (Sheremata 2002: 146). Coordination is especially important for task fulfillment in software venture teams. Tjosvold (1995) emphasizes the role of mutual support among team members for successful teamwork. Based on cooperation rather than competition, team members achieve a higher level for integration of their individual interests, and therefore accomplish jointly the goals of the venture team.

Hence, we define interaction quality of the founder team in new software ventures as follows:

The interaction quality of the founder team is defined as the level to which founders communicate intensively and frankly, and the level of mutual support, cooperation and coordination.

### **Customer Orientation**

Researchers mention the 'call for customer orientation [ . . . ] as the focus for all business planning and strategy' (Deshpandé *et al.* 1993: 23). Despite the differences in conceptualization, gathering information on customers, meeting their needs and creating value for them (Lafferty and Hult 2001) are essential ingredients for a customer-oriented business. Customer orientation refers to a company's understanding of its buyers to be able to continuously create value for them (Narver and Slater 1990). Value from a customer's point of view can be understood as the trade-off between benefits and sacrifices in a buyer-supplier relationship (Zeithaml 1988). 'Customer orientation requires that a seller understands a buyer's entire value chain, not only as it is today but also as it will evolve over time subject to internal and market dynamics' (Narver and Slater 1990: 21). The concept of customer orientation includes understanding customers' needs and satisfying them, as well as perceiving and reducing his/her perceived sacrifices. In their study on small business' customer orientation and performance, Appiah-Adu and Singh (1998: 386) define customer orientation as 'the organization-wide emphasis on evaluating and addressing customer needs'. Consequently, a customer-oriented company has to establish continuous communication with its actual and potential customers and create a customer-focused environment within a company. Besides the two aspects concerning information on customer needs and requirements, and on customer satisfaction, the integration of customers in product development has to be considered as a third facet of customer orientation in software ventures.

Along with the previous considerations, we define customer orientation of new software ventures as a business process comprehending the management of information on customers' needs, wishes and requirements, information on customer satisfaction and the management of customer integration in product development.

## **Competitor Orientation**

Marketing researchers regard competitor orientation as an important part of market orientation (e.g., Han *et al.* 1998; Gray *et al.* 1998). Competitor orientation comes along with an organization's broader understanding of what characteristics the market it is operating in has. An exclusive customer focus may result in incomplete business strategy and action (Han *et al.* 1998). Hence, Day and Wensley (1988) suggest a balance of an organization's customer and competitor focus. We believe competitor orientation to entail sourcing information on competitors, competitors' activities and offerings, and market potentials. Along with Narver and Slater's (1990) definition, competitor orientation can be understood as a company's understanding of strengths, weaknesses, capabilities and strategies of key and key potential competitors.

According to this, competitor orientation of new software ventures is defined as a business process comprehending the management of information on actual and potential competitors' companies, activities and products.

## **HYPOTHESES AND THEORETICAL FRAMEWORK**

### **Interaction Quality of the Founders and Customer and Competitor Orientation**

We have defined customer orientation and competitor orientation as business processes concerning the management of information on customers and competitors and customer integration. Along with Jaworski and Kohli (1993), the management of information on markets refers to the generation and especially the dissemination of information within a company. Day (1994: 45) argues that 'suppliers must be prepared to develop team-based mechanisms for continuously exchanging information about needs, problems and emerging requirements and then taking action'. The capacity of information processing in the company depends on the interaction quality of the founder management team.

Hence, we suppose the following:

*Hypothesis 1: The better the founders in a software venture interact with each other, the higher is customer orientation of this software venture.*

*Hypothesis 2: The better the founders in a software venture interact with each other, the higher is competitor orientation of this software venture.*

### **Customer Orientation and Performance**

Customer orientation is one of the pivotal aspects of business management for delivering superior value to customers (Narver and Slater 1990: 21).

Efficient product development and innovation (Salomo 2003), effective marketing activities, and especially an increased willingness of customers to accept higher process for products (Homburg and Werner 1998) with high customer value, are the outcomes of consequently implemented customer orientation.

Further on, a sound knowledge about customers' needs and requirements allows software ventures to approach the group of customers for which their technological solution and products are best suited (Walsh and Kirchhoff 2001). Customer orientation provides a basis for precise customer acquisition and market action. Additionally, customer integration and information on customer satisfaction will enhance customer relationship development and improve customer retention.

In software development, meeting time and/or quality goals constitute the major problems (Sheremata 2002). Especially in young and small companies achieving customer and market orientation is being considered as a challenge (Golann 2006). As product life cycles are very short, software companies struggle to provide new high-quality products with increasing frequency. Continuous and prompt feedback of customers will allow software ventures to consider technological requirements on time and improve technological quality and development of software products.

Hence, we argue as follows:

*Hypothesis 3: The higher customer orientation of young software ventures, the greater (a) economic, (b) market and (c) technological success.*

### **Competitor Orientation and Performance**

Balakrishnan (1996) has found companies with a high competitor orientation to have a better understanding for the value of products and services on the market. Based on information on competitors' products, software ventures are able to develop successful strategies for product positioning in their markets, which leads to better sales and a positive economical development. The knowledge about strengths and weaknesses of competitors enable companies to identify and occupy profitable market positions and market niches (Day and Wensley 1988). New ventures are often founded as a result of a gap in the market the founders have discovered as a business opportunity. In order to preserve competitive advantages after the foundation, and to reach a favorable market and technological position, it is essential to watch carefully competitors' moves and products. 'A firm with more competitive information is able to use its knowledge in several ways, including its strengths against a competitor's weakness, internalizing a competitor's strength by imitation, or nullifying a competitor's strength by product differentiation' (Li and Calantone 1998: 17). Thus, we hypothesize:

*Hypothesis 4: The higher competitor orientation of young software ventures, the greater (a) economic, (b) market and (c) technological success.*

### **Curvilinear Effects of Customer Orientation and Competitor Orientation**

By now, we have theorized about linear relationships between customer orientation, competitor orientation and performance. As these two aspects of marketing management do not only have positive effects on performance but also a negative effect that emerges from financial, personnel and technological resources that have to be deployed, we argue that linear relationships in the sense of ‘the higher . . . the more’ might be too simple. These thoughts are supported by the results of previous studies that found a U-shaped, curvilinear relationship of market orientation and profitability of strategic business units (Narver and Slater 1990: 30–31). Young technology ventures have to consider carefully in which activities they invest their scarce resources. We assume that the negative effects caused by resource consumption exceed the positive effects of low- to medium-level customer and competitor orientation. Not until customer and competitor orientation become fully and consequently implemented in new venture management will positive effects outmatch the negative aspects. Therefore, we presume the following hypotheses on a U-shaped relationship, which are competing with the previously stated hypotheses 3 and 4 on a linear relationship:

*Hypothesis 5: There is a curvilinear, U-shaped relationship between customer orientation and a) economic success, b) market success and c) technological success. The relationship is negative at low levels of customer orientation and becomes positive at higher levels.*

*Hypothesis 6: There is a curvilinear, U-shaped relationship between competitor orientation and a) economic success, b) market success and c) technological success. The relationship is negative at low levels of competitor orientation and becomes positive at higher levels.*

Furthermore, we will test for the moderating effects of the market environment, i.e., competitive intensity and market dynamism, on the hypothesized relationships.

## **METHOD AND RESULTS**

### **Data Collection**

The level of analysis of this study is limited to new software ventures, which should have a maximum age of seven years. We take a look at the

customer orientation and competitor orientation performance link from the software producer's perspective. The sample we use for data analysis consists of 101 software ventures that were created by two or more founders. We developed a five-page standardized questionnaire reflecting the research questions that was to be completed by two founder-managers of each company.

A random sample of six hundred companies was drawn from a database of the Centre for European Economic Research (ZEW) and the Consortium of German Technology and Business Formation Centres (ADT). Initially, the informants were contacted and motivated by telephone. Therewith we could ensure that the companies operated in software business, had an age of one to seven years and that informants were founder-managers. In a second step, an appointment for a personal interview was scheduled. One hundred and fifty software ventures agreed to take part in the study. Finally, we obtained 202 usable questionnaires from 101 software ventures, which corresponds to an effective response rate of 16.8 percent. This response rate is moderate, but satisfying, due to the difficulty in getting the approval for an interview with two founder-managers of the same company.

The companies came from various segments of the IT software market: 37.6 percent were Internet-related businesses (e.g., Web sites, security, intranet, eCommerce—solutions), 24.8 percent developed software for industrial customers (e.g., automation, measurement engineering), 10.9 percent developed software for databases and networks and 26.7 percent developed individual company software solutions. The average age of the software ventures was 3.4 years, so we were able to generate a sample of rather young companies compared to similar studies. The average number of full-time employees including the founders was 9.5 and the estimated revenue in the year of the survey (2000–2001) was €1.66 million.

We obtained data from the senior and the junior founder in each company, in order to provide extended possibilities for the examination of reliability and validity (i.e., MTMM-analysis). The junior founders had an average age of twenty-nine years while the senior founders were on average thirty-four years old. We considered software ventures in the entire territory of the Federal Republic of Germany.

## Measures

In order to assure validity and reliability of the measures and the statistical model, which is based on a theoretical framework, we have chosen an empirical research design with multiple and qualified informants, as the evaluations of separate and equally qualified informants can be used to compare and validate the measures. We conducted independent interviews with two founders in each company.

All constructs were measured using seven-point multiple-item scales. The final model includes twenty-seven measures and six constructs. We used traditional and advanced psychometric approaches to evaluate scale properties. Assessing their reliability and unidimensionality purified the proposed reflective measures. Measurement development followed procedures recommended in marketing research literature (Anderson and Gerbing 1988; Homburg and Baumgartner 1995). First, item-to-total correlation was examined in each of the proposed scales and items with low correlation were deleted if they tapped no additional domain of interest. To help ensure unidimensionality, items in each multi-item scale were factor analyzed separately. In all cases a single factor emerged.

As a first step towards the measurement of the *interaction quality of the founders* we reviewed previous studies on entrepreneurial and top management teams (e.g., Hackman 1987; Högl and Gemünden 2001; Watson *et al.* 1995; Ensley and Amason 1999; Lechler and Gemünden 1999). Finally, interaction quality founders were measured with a six-item scale. Employing a principal components factor analysis one factor emerged for the junior (Expl.Var. 69.4 percent,  $\alpha=0.90$ ) and senior founder (Expl.Var. 71.6 percent,  $\alpha=0.91$ ).

*Customer orientation* was measured by three items. The items reflect the facets of software ventures' customer orientation discussed earlier: information on customer requirements, information on customer satisfaction and customer integration. The items are adapted from the scales used by Li and Calantone (1998), Pelham (1997) and Narver and Slater (1990). Principal components factor analysis resulted in a single factor (Junior: Expl.Var. 61.5 percent,  $\alpha=0.67$ ; Senior: Expl.Var. 63.2 percent,  $\alpha=0.71$ ).

*Competitor orientation* was measured using a three-item scale. The items were adapted from Narver and Slater (1990), Pelham (1997) and Jaworski and Kohli (1993). Once again, principal components factor analysis resulted in a single factor (Junior: Expl.Var. 65.1 percent,  $\alpha=0.73$ ; Senior: Expl.Var. 69.6 percent,  $\alpha=0.78$ ).

*Competitive Intensity* and *Market Dynamism* were measured by three items and five items respectively. The choice of indicators is based on previous empirical research (Lusch and Laczniak 1987; Jaworski and Kohli 1993; Pelham and Wilson 1996). Factor analysis for competitive intensity (Junior: Expl.Var. 67.1 percent,  $\alpha=0.75$ ; Senior: Expl.Var. 71.9 percent,  $\alpha=0.80$ ) and market dynamism (Junior: Expl.Var. 53.4 percent,  $\alpha=0.78$ ; Senior: Expl.Var. 48.9 percent,  $\alpha=0.73$ ) resulted in a single factor for each construct.

For performance measurement in management and marketing research, objective and subjective measures can be used. Objective measures refer to quantitative data on revenue, profit and growth as well as relative measures such as ROI and ROA. Subjective measures refer to informants' individual

evaluations of performance aspects, such as satisfaction with financial, market and technological success. In our study of very young software ventures we found it difficult to obtain objective performance measures. A similar limitation occurs in Pelham's market orientation study (Pelham 1997: 283): 'Since most firms sampled were privately held, subjective measures of performance were used due to reluctance of private firm managers to divulge information considered confidential.' As subjective and objective performance measures used correlate highly (Dawes 1999), we chose subjective measures for our research design.

*Economic success* of software ventures was measured by five items. These are based on the studies of Pelham (1997) and Narver and Slater (1990), and reflect the five aspects liquidity, speed to first realized profit, profit contribution of products, cost and time efficiency and general financial success. Employing a principal components factor analysis, one factor emerged for the junior (Expl.Var. 52.11 percent,  $\alpha=0.74$ ) and the senior founder (Expl.Var. 57.86 percent,  $\alpha=0.81$ ).

*Market success* was measured by three items describing the dimensions competitive position, market recognition and overall market success. Factor analysis showed one factor with satisfying parameters for reliability and validity (Junior: Expl.Var. 69.10 percent,  $\alpha=0.77$ , Senior: Expl.Var. 74.19 percent,  $\alpha=0.82$ ).

Three items were used for the measurement of *technological success* of young software ventures. The items reflect the aspects product development, degree of innovativeness and technologically competitive position. The results of factor analysis are satisfying (Junior: Expl.Var. 71.51 percent,  $\alpha=0.79$ , Senior: Expl.Var. 73.10 percent,  $\alpha=0.81$ ).

As a more rigorous test, confirmatory factor analysis was then conducted using LISREL 8 (Jöreskog and Sörbom 1996) with covariance matrix as the input. Table 14.1 contains standardized ML parameter estimates for the measurement model, proportions of variance extracted, factor reliability values and Cronbach's Alphas. All items exhibit reasonably high reliabilities. All but one Cronbach's Alpha exceed the threshold value of 0.7. The average variance extracted except one and all of the construct reliabilities exceed the threshold values of 0.4 and 0.7 respectively (Fornell and Larcker 1981). Support for discriminant validity was provided by a series of model estimations in which the individual factor correlation was constrained to unity one at a time (Bagozzi *et al.* 1991). The conducted chi-square difference tests were all significant ( $p < 0.01$ ).

Finally construct validity for the model of eight constructs was tested with the CFA-approach to develop a Multitrait-Multimethod-Matrix (Bagozzi and Yi 1991; Bagozzi 1994). The results of the MTMM-analysis ( $\chi^2(60)=111$ , RMSEA=0.065, GFI=0.935, AGFI=0.853, CFI=0.947) allowed a choice of the constructs that were measured with highest validity.

The results of the hierarchical multiple regression for customer orientation and competitor orientation (Table 14.2 and Table 14.3) reveal a strong

Table 14.1 Confirmatory Factor Analysis Results

Factor/Item	Indicator reliability <sup>a</sup>		Average variance extracted		Factor reliability		Cronbach's Alpha	
	Junior	Senior	Junior	Senior	Junior	Senior	Junior	Senior
Interaction Quality								
Intqual1	0.55***	0.76***	0.64	0.66	0.91	0.92	0.90	0.91
Intqual2	0.71***	0.59***						
Intqual3	0.45***	0.53***						
Intqual4	0.46***	0.58***						
Intqual5	0.83***	0.71***						
Intqual6	0.83***	0.81***						
Customer Orientation								
Custor1	0.59***	0.28***	0.44	0.48	0.69	0.72	0.67	0.71
Custor2	0.49***	0.77***						
Custor3	0.23***	0.38***						
Competitor Orientation								
Compor1	0.53***	0.55***	0.52	0.57	0.75	0.79	0.73	0.78
Compor2	0.82***	0.85***						
Compor3	0.21***	0.31***						
Competitive Intensity								
Compint1	0.49***	0.58***	0.51	0.59	0.75	0.81	0.75	0.80
Compint2	0.61***	0.76***						
Compint3	0.44***	0.42***						
Market Dynamism								
Madyn1	0.34***	0.32***	0.37	0.48	0.78	0.74	0.78	0.73
Madyn2	0.55***	0.21***						
Madyn3	0.41***	0.36***						
Madyn4	0.31***	0.53***						
Madyn5	0.52***	0.40***						
Economic Success								
SEco1	0.27***	0.36***	0.42	0.48	0.78	0.82	0.74	0.81
SEco2	0.79***	0.77***						
SEco3	0.32***	0.42***						
SEco4	0.37***	0.44***						

(continued)

Table 14.1(continued)

Factor/Item	Indicator reliability <sup>a</sup>		Average variance extracted		Factor reliability		Cronbach's Alpha	
	Junior	Senior	Junior	Senior	Junior	Senior	Junior	Senior
SEco5	0.33***	0.41***						
Market Success								
SMark1	0.89***	0.64***	0.55	0.61	0.78	0.83	0.77	0.82
SMark2	0.59***	0.66***						
SMark3	0.36***	0.53***						
Technological Success								
STech1	0.35***	0.37***	0.59	0.61	0.81	0.82	0.79	0.81
STech2	0.67***	0.76***						
STech3	0.76***	0.71***						

a \*\*\*: Parameter estimates are significant at the 0.001 level

Table 14.2 Regression Analysis, Customer Orientation

Independent Variables	Model 1	Model 2	Model 3
<i>Main Effects:</i>			
Interaction Quality of the founders (IQ)		0.46 <sup>c</sup>	0.50 <sup>c</sup>
<i>Interaction Effects:</i>			
IQ * Competitive Intensity			-0.06
IQ * Market Dynamism			0.11
<i>Control Variables:</i>			
Competitive Intensity	-0.08	-0.05	-0.02
Market Dynamism	-0.12	-0.21 <sup>b</sup>	-0.22 <sup>b</sup>
Venture Age	-0.04	-0.01	-0.03
Venture Size	0.15 <sup>a</sup>	0.23 <sup>b</sup>	0.23 <sup>c</sup>
R <sup>2</sup>	5.1%	25%	26.2%
Δ R <sup>2</sup>	Δ 5.1%	Δ 19.9% <sup>c</sup>	Δ 1.2%
F	1.29	6.33 <sup>c</sup>	4.72 <sup>c</sup>
N	101	101	101

<sup>a</sup> significant at 0.1

<sup>b</sup> significant at 0.05

<sup>c</sup> significant at 0.01 (onesided)

Table 14.3 Regression Analysis, Competitor Orientation

<i>Independent Variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
<i>Main Effects:</i>			
Interaction Quality of the founders (IQ)		0.27 <sup>c</sup>	0.24 <sup>b</sup>
<i>Interaction Effects:</i>			
IQ * Competitive Intensity			-0.16 <sup>a</sup>
IQ * Market Dynamism			-0.16 <sup>a</sup>
<i>Control Variables:</i>			
Competitive Intensity	-0.13	-0.11	-0.07
Market Dynamism	-0.19 <sup>b</sup>	0.14	0.13 <sup>a</sup>
Venture Age	0.04	0.06	0.07
Venture Size	-0.09	-0.05	0.03
R <sup>2</sup>	5.1%	11.7%	16.4%
Δ R <sup>2</sup>	Δ 5.1	Δ 6.7% <sup>c</sup>	Δ 4.6% <sup>a</sup>
F	1.29	2.53 <sup>b</sup>	2.60 <sup>b</sup>
N	101	101	101

<sup>a</sup> significant at 0.1

<sup>b</sup> significant at 0.05

<sup>c</sup> significant at 0.01 (onesided)

and highly significant influence of interaction quality of the founders on both constructs. Even though the effect on competitor orientation ( $\beta=0.24$ ,  $p<0.05$ ) is lower than it is on customer orientation ( $\beta=0.50$ ,  $p<0.01$ ), hypotheses 1 and 2 are supported.

The moderated hierarchical multiple regression analysis (Cortina 1993) for economic success reveals three interesting results (Table 14.4). First, there is no linear relationship between customer and competitor orientation and economic success.

Hypotheses 3 and 4 have to be rejected. Second, there is a curvilinear U-shaped relationship between customer orientation and economic success ( $\beta=0.21$ ,  $p<0.05$ ). Figure 14.1 shows the quadratic curve fitting of customer orientation and success measures this conclusion is based on. Hypothesis 5 is supported, whereas 6 has to be rejected. Third, there is a strong moderating effect of market dynamism on the customer orientation—economic success—relationship. A graphical analysis shows that the relevance of customer orientation for economic success is greater with increasing market dynamism. This effect comes along with a significant change in R<sup>2</sup> ( $\Delta R^2=8.7$  percent,  $p<0.1$ ).

Table 14.4 Regression Analysis, Economic Success

<i>Independent Variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<i>Main Effects:</i>				
Customer Orientation (CS)		0.02	-0.10	-0.02
Competitor Orientation (CM)		-0.09	-0.03	0.00
<i>Interaction Effects:</i>				
CS * Competitive Intensity			-0.110	-0.09
CS * Market Dynamism			0.34 <sup>c</sup>	0.39 <sup>c</sup>
CM * Competitive Intensity			-0.10	-0.09
CM * Market Dynamism			0.00	0.01
<i>Curvilinear Effects:</i>				
CS * CS				0.21 <sup>b</sup>
CM * CM				0.00
<i>Control Variables:</i>				
Competitive Intensity	-0.14 <sup>a</sup>	-0.14 <sup>a</sup>	-0.02	-0.01
Market Dynamism	0.01	0.03	-0.12	-0.13
Venture Age	0.13	0.12	0.16 <sup>a</sup>	0.17 <sup>a</sup>
Venture Size	0.16 <sup>a</sup>	0.17 <sup>a</sup>	0.14 <sup>a</sup>	0.11
Interaction Quality of the founders	0.16 <sup>a</sup>	0.18 <sup>a</sup>	0.23 <sup>b</sup>	0.20 <sup>b</sup>
R <sup>2</sup>	8.5%	9.2%	17.9%	21%
Δ R <sup>2</sup>	Δ 8.5%	Δ 0.7%	Δ 8.7% <sup>a</sup>	Δ 3.1%
F	1.78	1.35	1.77 <sup>a</sup>	1.78 <sup>a</sup>
N	101	101	101	101

<sup>a</sup> significant at 0.1<sup>b</sup> significant at 0.05<sup>c</sup> significant at 0.01 (onesided)

## Results of Regression Analysis

The results of regression analysis on market success (Table 14.5) show similarities to the already discussed results for economic success. Once again hypotheses 3 and 4 about linear effects of customer orientation and competitor orientation have to be rejected, but there is a significant curvilinear, U-shaped effect of customer orientation on market success ( $\beta=0.27$ ,  $p<0.05$ ), which is associated with a significant change in R<sup>2</sup> ( $\Delta R^2=4.3$  percent,  $p<0.1$ ). We can support hypothesis 5 (hypothesis 6 rejected).

Finally, regression analysis (Table 14.6) reveals a significant linear relationship between competitor orientation and technological success ( $\beta=0.29$ ,  $p<0.01$ , hypothesis 4c supported), whereas there is again a U-shaped effect

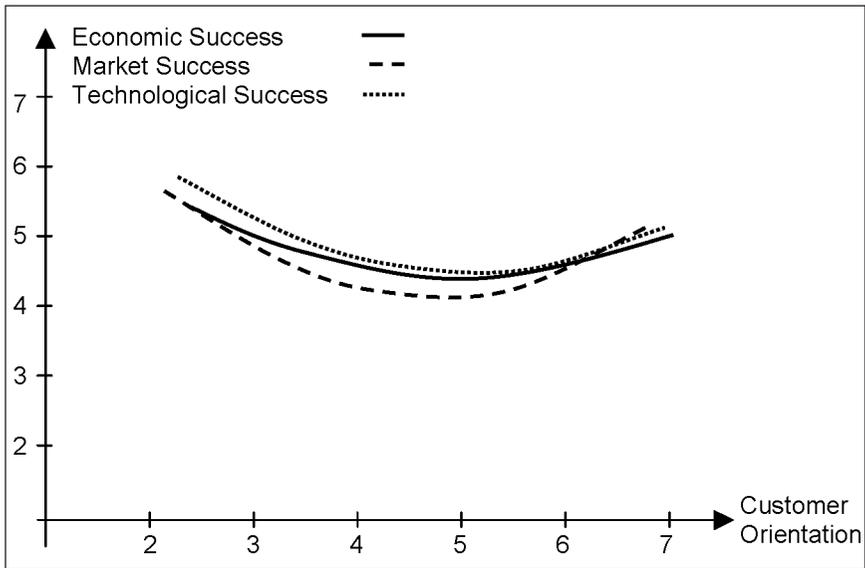


Figure 14.1 Curve fitting (quadratic) for customer orientation.

of customer orientation ( $\beta=0.21$ ,  $p<0.05$ , hypothesis 5 supported). Additionally we found a direct effect of interaction quality on technological success ( $\beta=0.21$ ,  $p<0.05$ ). Technological success seems to increase with the size ( $\beta=0.17$ ,  $p<0.05$ ) and the age ( $\beta=0.26$ ,  $p<0.01$ ) of software ventures.

## DISCUSSION AND IMPLICATIONS

There are three major findings in our study: First, the interaction quality of the founders in new software ventures has considerable and highly significant effects on customer orientation and competitor orientation. Founders should have in mind the importance of good communication, task coordination, mutual support and sharing the right information among each other in order to fulfill successfully the tasks of marketing management. Although this study had a defined focus on customer and competitor orientation, we assume interaction quality to be an important antecedent for the fulfillment of other tasks in new software venture management, such as product development, procurement and distribution. Further research will have to take a look at these issues in order to provide a comprehensive framework for the role of interaction quality in new venture management.

The second major finding of our study is the existence of a U-shaped relationship between customer orientation and venture performance. Merely competitor orientation has a linear, positive and significant effect on technological success. The support for our hypothesis on a curvilinear relationship

Table 14.5 Regression Analysis, Market Success

<i>Independent Variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<i>Main Effects:</i>				
Customer Orientation (CS)		0.08	0.05	0.15
Competitor Orientation (CM)		0.04	0.06	0.09
<i>Interaction Effects:</i>				
CS * Competitive Intensity			-0.09	-0.07
CS * Market Dynamism			0.04	0.10
CM * Competitive Intensity			-0.07	-0.07
CM * Market Dynamism			0.08	0.11
<i>Curvilinear Effects:</i>				
CS * CS				0.27 <sup>b</sup>
CM * CM				-0.06
<i>Control Variables:</i>				
Competitive Intensity	-0.21 <sup>b</sup>	-0.20 <sup>b</sup>	-0.15 <sup>a</sup>	-0.13
Market Dynamism	0.09	0.10	0.05	0.03
Venture Age	0.21 <sup>b</sup>	0.19 <sup>b</sup>	0.21 <sup>b</sup>	0.22 <sup>b</sup>
Venture Size	0.35 <sup>c</sup>	0.35 <sup>c</sup>	0.33 <sup>c</sup>	0.29 <sup>c</sup>
Interaction Quality of the founders	0.16 <sup>b</sup>	0.11	0.13	0.10
R <sup>2</sup>	26.1%	26.9%	28.4%	32.8%
Δ R <sup>2</sup>	Δ 26.1% <sup>c</sup>	Δ 0.7%	Δ 1.6%	Δ 4.3% <sup>a</sup>
F	6.72 <sup>c</sup>	4.88 <sup>c</sup>	3.21 <sup>c</sup>	3.26 <sup>c</sup>
N	101	101	101	101

<sup>a</sup> significant at 0.1<sup>b</sup> significant at 0.05<sup>c</sup> significant at 0.01 (onesided)

underlines the ambiguous effects of customer orientation especially and marketing action in general. Software venture founders should consider to which degree they want to implement customer orientation in their company. Our results indicate to maximize customer orientation—or leave it out. In either case a ‘stuck in the middle’ situation should be avoided, as it leads to low levels of venture performance. Future research should deal with the question of if there is really no optimal level for customer orientation. In our study we have taken a look at very young software ventures. As companies become older and larger, resource restrictions might lose their importance and the marginal utility of customer orientation diminishes, which could cause a change from the U-shaped to an inverted U-shaped relationship.

Table 14.6 Regression Analysis, Technological Success

<i>Independent Variables</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<i>Main Effects:</i>				
Customer Orientation (CS)		-0.09	-0.11	-0.03
Competitor Orientation (CM)		0.25 <sup>c</sup>	0.26 <sup>c</sup>	0.29 <sup>c</sup>
<i>Interaction Effects:</i>				
CS * Competitive Intensity			-0.15 <sup>a</sup>	-0.13
CS * Market Dynamism			0.02	0.06
CM * Competitive Intensity			-0.08	-0.07
CM * Market Dynamism			0.08	0.08
<i>Curvilinear Effects:</i>				
CS * CS				0.21 <sup>b</sup>
CM * CM				0.01
<i>Control Variables:</i>				
Competitive Intensity	-0.06	-0.04	0.02	0.03
Market Dynamism	0.08	0.03	-0.02	-0.03
Venture Age	0.20 <sup>b</sup>	0.23 <sup>c</sup>	0.25 <sup>c</sup>	0.26 <sup>c</sup>
Venture Size	0.24 <sup>c</sup>	0.23 <sup>c</sup>	0.20 <sup>b</sup>	0.17 <sup>b</sup>
Interaction Quality of the founders	0.25 <sup>c</sup>	0.22 <sup>b</sup>	0.24 <sup>b</sup>	0.21 <sup>b</sup>
R <sup>2</sup>	17.2%	22.6%	25.5%	28.6%
$\Delta R^2$	$\Delta 17.2\%^c$	$\Delta 5.4\%^b$	$\Delta 2.9\%$	$\Delta 3.1\%$
F	3.96 <sup>c</sup>	3.87 <sup>c</sup>	2.77 <sup>c</sup>	2.69 <sup>c</sup>
N	101	101	101	101

<sup>a</sup> significant at 0.1

<sup>b</sup> significant at 0.05

<sup>c</sup> significant at 0.01 (onesided)

Third, we found moderating influences of the market environment, i.e., competitive intensity and market dynamism, to be weak. The only strong effect was found for the moderating effect of market dynamism on customer orientation and economic performance. The limited role of market environment and its moderating effects is surprising, although previous studies (e.g., Jaworski and Kohli 1993) have come to similar results. We presume that specific industry characteristics determine whether market environment affects the customer/competitor performance relationship or not. Future research may take a closer look into the relationships of customer and competitor orientation on small venture success in other industrial environments as well as service businesses.

## NOTES

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Part IV

# Experience, Learning and Innovation Management



# 15 'Don't Rest On Your Laurels'

## An Inquiry into the Barriers to Radical Follow-Up Innovations in New Technology-Based Ventures

*Rainer Harms and Thomas Meierkord*

### INTRODUCTION<sup>1</sup>

New Technology-Based Ventures (NTBVs) play a significant role in today's economy. They foster innovation and structural change and provide a range of employment opportunities (Gottschalk *et al.* 2007). Most NTBVs start by bringing a promising, innovative technology to market (Shane 2004). Critical to sustained success and growth of these firms is the ability to come up with follow-up products that are, again, innovative instead of mere modifications of the initial product. Even though the first product may already generate profits, these profits may decrease as a result of increasing market saturation, competition and changing technologies and customer requirements (Abernathy and Utterback 1978; Christensen 1997). If the venture fails to deliver radical innovations on a continuous basis, chances of failure may increase. As a consequence, NTBVs need to lay the foundations for future profits by creating radical innovations early in their life cycle.

In the literature, some aspects of innovation management in the context of these ventures are discussed. For example, Shane (2004) analyzed the development and the innovation strategies of NTBVs in the university sector. Heydebreck and others (2000) investigated the perceived support needs of NTBVs. While assistance in marketing and finance would appear to be top priorities for their managers, there is still a high need for technology-related assistance, such as technological consulting and advice for research and development project management. Similarly, Kirwan and others (2006) identified the new product development processes as a critical functional area where NTBVs might need support.

While the functional area of research and development in general has been shown to be a potential barrier to innovation performance in NTBVs (Heydebreck *et al.* 2000; Kirwan *et al.* 2006), little attention has been paid to the factors that relate to the creation of radical follow-up innovations in particular (for established firms see Lichtenthaler *et al.* 2004; Trauffer *et al.* 2005). By recognizing the factors that may inhibit or catalyze the development of follow-up innovations, advice can be given to managers seeking to sustain their venture beyond the life cycle of their initial innovation.

The aim of this section is to create a better understanding of the barriers of radical follow-up innovations in NTBVs. The remainder of this section unfolds as follows. After this introduction, we discuss fundamental terms and concepts. Then, we describe the research design and methods. Next, the results of our in-depth interviews will be reported. We conclude this section with a discussion of the results and an outlook to future research.

## **BARRIERS TO THE CREATION OF RADICAL FOLLOW-UP INNOVATIONS IN NEW TECHNOLOGY-BASED VENTURES (NTBVS)**

Innovations may be systematized according to their degree of novelty. Following Chandy and Tellis (1998), a *radical* innovation is characterized by a high degree of technological novelty and a high degree of additional customer benefit compared to existing solutions. As a consequence, radical innovations offer great opportunities at the expense of high risks for the ventures that pursue them.

Radical innovations can have a positive impact on the profitability and the market value of firms, not only in absolute terms, but also compared to incremental innovations (Sorescu *et al.* 2003). For example, Lilien and others (2002) established at 3M that products based on higher novelty ideas achieved twice the market share and more than eight times the sales volume than less innovative products. Also, radically innovative products are better suited to open up new windows of opportunity that contribute to the long-term survival of the firm as markets and technologies mature (Kleinschmidt and Cooper 1991).

However, radical innovations are also subject to high risks. Radical innovations entail a high degree of technological uncertainty. These uncertainties refer to the question of validity of the scientific and technological basis as well as questions about whether technological processes can be scaled up to mass production (Leifer *et al.* 2001). Radical innovations also entail a high market risk that refers to the uncertainty of demand that will be encountered, the choice of the distribution channels and the speed of the product's diffusion (Leifer *et al.* 2001).

Although the unique combination of high opportunity with high risk may appear unfavorable, it may still be required for NTBVs to engage in radical follow-up innovation projects. Even though NTBVs are typically founded in order to exploit the technological knowledge of its founders (Klofsten 1997), that particular technology might mature. Previous work on technology management suggests that the benefits of a particular technology follow an S-shape curve over time (Abernathy and Utterback 1978; for an elaboration see Sood and Tellis 2005). At the end of the technology life cycle, the marginal productivity of the research and development effort decreases and new technologies emerge that may offer a higher marginal

productivity of research and development. Ultimately, the new technology may surpass the old technology in absolute productivity and replace it on the market. The emergence of new technologies may be quicker in industries with a high clockspeed, i.e., industries that have a low time interval between new product generations (Carrillo 2005). In conclusion, in these markets the pressure to introduce new products may be high.

Also, innovation projects may take a long time from the initial idea to the production of the final product. Shane (2004) points out university-based research takes on average more than four years from idea to product launch. Together with fast industry clockspeeds in technology-based markets, the long time span from idea to product requires NTBVs to not solely focus on selling their initial technology but also to develop a balanced portfolio containing radical follow-up innovations *on time* (Kirwan *et al.* 2006).

The question is whether NTBVs are suited to tackle radical innovation and what the barriers to such innovations would be. On the one hand, NTBVs may have a high degree of technological competence, be close to the market and have unbureaucratic, rather flat hierarchies, which allow for fast decision making (Hausman 2005). On the other hand, when it comes to follow-up innovations, NTBVs may already be incumbents, and may be subject to the ‘incumbent’s curse’ (Chandy and Tellis 2000). By entrenched ways of thinking, selective perception and systematic underestimation of the potential contributions of radical innovations, established firms tend to neglect initiatives towards radical innovations. As Chandy and Tellis point out, not even young firms are immune to the incumbent’s curse:

Ironically, when the new firm becomes entrenched in the market, it suffers from the same curse that afflicted incumbents in the previous product generation. (2000: 1)

While the incumbent’s curse focuses on the limited awareness for the need of radical follow-up innovations, NTBVs may also have few resources that they can devote to (radical) innovation (liability of smallness; Aldrich and Auster 1986). Also, they may not yet have established systematic routines in general (liability of newness; Aldrich and Auster 1986) and in innovation management, in particular, which may hinder the development of radical follow-up innovations.

To conclude, NTBVs may be able to engage in radical innovation, yet there may be systematic barriers that may stand in their way. In the following two sections, we discuss the innovation strategy of those firms, which may be inflicted by the incumbent’s curse. An innovation strategy can give the impetus for starting innovation projects (first section). Following a decision to pursue innovations, the new product development process needs to be executed. The ability to do so can also impact on the creation of radical innovations (second section).

## Innovation Strategy and its Relation to the Creation of Radical Innovations

Strategy can be defined as a long-term plan that sketches future actions of a firm (Mintzberg 1987). Thus, an innovation strategy lays out intended actions pertaining to new product and process development. Since strategies can drive actions, it should thus be necessary to highlight the valence of radical follow-up innovations in the innovation strategy of NTBVs.

In entrepreneurship literature, characteristics of the founder are found to have a strong impact on new venture strategy (Baum *et al.* 2001; Gartner 1985). For example, the risk-taking propensity (Stewart *et al.* 1998), the tolerance for ambiguity (Cromie 2000) and the degree of proactivity (Baum *et al.* 2001) of the founder can influence risk-adversity and proactivity of the firm's strategy in general (McCarthy 2003) and on innovations in particular (Åmo and Kolvereid 2005). As a consequence, the characteristics of the founder are also likely to foster or inhibit proactive innovation strategies in NTBVs.

Based on literature of the organizational life cycle (Churchill and Lewis 1983), Barrett and Sexton (2006) argue that new ventures tend to focus on survival rather than growth in the early years after new venture creation. Only later, new ventures start to focus on growth. The general corporate goals ('survival mode' versus 'growth mode') impact on the innovation strategy. In 'survival mode', firms tend to limit their exposure to the risks of innovation (Barrett and Sexton 2006). Thus, they might want to pursue incremental innovations rather than radical innovations.

Berry (1996) argues that NTBVs typically evolve from a technology-driven to a market-driven management philosophy. Following a technology-driven approach, those firms start by trying to market their initial innovation breakthrough, while at the same time, they tend to neglect the requirements of their potential customers. In contrast, a market-driven approach is one that combines technological and marketing considerations (Roberts 1991). There might be two types of market orientation. In one type, a firm follows closely the demands of current customers. However, Christensen (1997) points out that a close adherence to current customers can be risky for firms and Suzuki (2006) mentions that a customer-centered approach can stifle innovation. The second type of market orientation explicitly takes long-term considerations into account. Thereby, a possible dependence on a technology that may become outdated can be avoided.

As a consequence for innovation strategy, NTBVs that follow a technology-driven approach will eventually try to adapt their initial innovation to the customer needs that they encounter in the market. This may lead to a predominance of incremental innovations over radical innovations. In the same vein, firms that closely stick to the demands of the current customers may also prefer incremental innovations. These two approaches towards incremental innovation can be labeled as *reactive innovation strategies*. Only firms that realize the need to take the potential demands of future

customers into account will also pursue radical innovation projects. This approach to innovation can be labeled as a *proactive innovation strategy*. The literature reveals that reactive innovation strategies are more common. Kalantaridis and Pheby (1999) state that only one-fifth of all innovators pursue proactive innovation strategies, whereas the majority responds to the needs of current customers.

## **New Product Development Process and the Creation of Radical Innovations**

Some radical innovations are found serendipitously. Well-known examples are Kekulé's discovery of the structure of benzene (strictly speaking in the realm of basic research; Roberts 1989), or the development of the Post-it note by 3M (Fry 1987). However, for firms that seek long-term growth and survival, putting trust in chance innovations might not suffice. Instead, a formal approach to the management of new product development is needed. Such a formal approach to new product development must not compromise but rather enhance the creative capabilities that are needed particularly for the creation of radical innovations (Herstatt 1999).

A key element of innovation management is the new product development process. In its most basic form, this process is a sequence of research, development, production and marketing of the product (for an overview over various stage models of innovation management see Hauschildt 1997). Each of the steps can be supported by tools. A formal approach to innovation management can have numerous benefits compared to an informal approach. First, in the idea generation phase, the number and the quality of new product and process ideas may be increased. Tools that can be used in this phase include creativity techniques (for example, the tools derived from the Theory of Inventive Problem Solving; Moehrle 2005), employee suggestion schemes (Fairbank and Williams 2001) and idea management systems (Boeddrich 2004). Second, in the idea acceptance phase, predefined idea selection routines may speed up the decision process. By staging the idea selection process, some inopportune ideas can be canceled out at an early stage, thereby saving resources that would have gone into the pursuit of these ideas (Balachandra 1984). In this respect, techniques such as the stage-gate process (Cooper 1988) can be helpful tools. In idea selection, attention can be paid to a congruence of new project ideas to overall company strategy. Third, in the idea realization phase, project management techniques can coordinate the research and development process, speeding it up and saving resources by avoiding costly overtime or underutilization of scarce resources (Coombs *et al.* 1998).

A formal approach to innovation management may also assist a firm to develop and to deploy potential and realized absorptive capacity (Zahra and George 2002). These capacities refer to the abilities of the firm to identify and use public scientific and technological knowledge (Lane and Klavans

2005). External scientific and technological knowledge must be identified and evaluated, assimilated, and finally exploited in order to derive at valuable technological innovations (for empirical evidence on the positive relationship between absorptive capacity and the number of patents, see Lane and Klavans 2005). These tasks refer to the three generic stages of the new product development process. However, the emphasis is on the use of external information, i.e., scientific and technological intelligence, which is particularly suited to the creation of radical innovations.

While a formal new product development process could support the creation of radical follow-up innovations, many small and medium-sized enterprises appear to follow rather informal approaches. Herstatt and others (2001) show that smaller ventures tend not to follow predefined routines and do not have clear-cut responsibilities in any of the phases of the new product development process. Meyer (2001) points out that young and small firms tend to use only simple brainstorming and checklists for new product development, while more sophisticated tools, for instance, in the area of technological intelligence, are rather unknown. Instead, in most small firms, new product development remains informal (Kleinknecht 1987; Santarelli and Sterlacchini 1990), and is often based on the creative talents of a few individuals such as the owner-manager himself (Kao 1983). This may constitute a barrier to the successful development of radical innovations in NTBVs (Heydebreck *et al.* 2000; Kirwan *et al.* 2006).

## RESEARCH DESIGN AND METHODS

### Qualitative Problem-Centric Interviews

To study the factors that may foster or inhibit the creation of radical innovations, four in-depth interviews were performed to obtain a more comprehensive and detailed picture of the particular situation in NTBVs. While the interviews were conducted with an explorative mind-set, particular attention was paid to statements that indicated the impact of the person of the founder and the new product development processes that foster or inhibit proactive innovation projects.

The qualitative approach chosen in the in-depth interviews is a means to explore the research domain. Qualitative methods in general are used to reconstruct a general sense of a phenomenon under observation. They are a first step to derive at testable hypotheses that could then be validated using quantitative methods (Eisenhardt 1989).

We chose semi-structured interviews since previous knowledge on our research questions is not well developed. In particular, we applied problem-centric interviews, which are a subset of semi-structured interviews, to approach our research question (Lamnek 2005; Witzel 1985). In problem-centric interviews, key questions are preformulated that guide the interviewer and enable him/her to remain focused on the problem at hand. Follow-up questions and

adaptations of question content and formulations during the interviews are possible and even recommended to further explore the settings in which the problem or issue at hand is, or not, encountered by the interviewees.

Based on the key informant approach (Huber and Power 1985), we interviewed the founder of the venture and/or leading managers from units such as product management and new product development. In that respect, our interviewees can be regarded as experts, which increases the reliability of their answers (for the technique of 'expert interviews' see Mieg and Brunner 2001).

## Sample Selection

In this research, we focus on NTBVs, namely, firms that are founded to exploit the technological knowledge and the engineering know-how of its founders (Klofsten 1997). We focused on firms that operate in the industries of information and communication technology, since these industries are characterized by a high clockspeed (Fine 1998). Moreover, for all firms, competition in their initial market has intensified. Thus, for all firms it might be necessary to come up with radical innovations at some point in time.

For the purpose of our investigation, we selected firms that have already finished the development process of at least one product (its initial innovation). All firms were first movers or early followers in their markets, reached a dominant market position and are currently either profitable or well financed. As a consequence, the lack of ability or the lack of resources as potential barriers for the creation of radical innovations can be ruled out.

To investigate if barriers towards the creation of radical innovations depend on the size of the firm, we contacted firms of different sizes. The rationale is that organizational size may add complexity to the administration of the firm (Pisano 1990), which may be dealt with by increasing formalization (Roberts 1999). Firm size was measured in terms of the number of employees, which may better reflect administrative complexity than other measures such as turnover or assets. Based on the categorizations of firm sizes by the European Commission (2003), we contacted a microenterprise (less than ten employees), a small venture (between ten and fifty employees) and a medium-sized venture (between fifty and 250 employees). In addition to that, we also contacted a slightly larger medium-sized enterprise (between ten and 499 employees, according to the definition of the Institute for Small Business Research Bonn; Wolter and Hauser 2001).

The following firms have been selected (only brief descriptions will be given to ensure anonymity):

- Firm A is a *microenterprise* that operates in the tourism industry, offering vacation rentals in the north of Germany. It was founded in 2000 and has five full-time employees. The founder is also chief executive officer of the firm. The basic innovation is a sophisticated online direct booking system.

- Firm B is a *small venture* offering payment services via mobile phones and other related services in Germany. With thirty-one full-time employees, it has offered business-to-business services for the German market since 2004. The founder is managing director. The basic innovation is a payment system based on the Short Message Service technology.
- Firm C is a *medium-sized* venture that also works in the field of telecommunication with an emphasis on Short Message Services. C was founded in 2003 and provides call-center services assisted by Short Message Services for the business-to-business market. The firm has 103 employees in different labor relations. Its basic innovation was the combination of Short Message Service with other telecommunication services.
- Firm D is a *larger medium-sized* online payment provider offering payment solutions for the public. The firm was founded in 1999, and the founder is still one of the managers. The firm has more than 250 employees. Its basic innovation was a technology to provide online-based payment services.

## RESULTS

### The Role of the Founder in Influencing Innovation Strategy

In the firms in our sample, the goals for innovation management are formulated by the founder, who in all cases exhibited an overarching influence on the firm. The founders do recognize the need to be innovative. In fact, they have succeeded in remaining established players in their market by continuously introducing incremental innovations and by satisfying the needs of current customers. However, we did not uncover statements that would indicate that they have already considered exploring different technologies that might lead to radical innovations even though these might be needed to survive when the life cycle of their initial technology draws to an end.

Even though the founders consider growth through new products and new customers as their main goal, the founders of our sample seem to stick to incremental innovations. Founder A states: ‘Compared to the big ones [internet firms, the authors], it is much riskier for us to innovate’. Founder B reports that ‘Of course we want to protect what we have established. We will not jump on the latest technology, but focus on improvements that can be realized quickly.’ An analysis of the innovations performed in these firms revealed that all of them could be labeled as incremental innovations, i.e., refinements of the initial underlying technology. For example, recent incremental innovations in firm A were the inclusion of Google Maps and the implementation of an e-mail-based Customer Relationship Management system that uses interfaces to other booking systems and Web sites.

In firm D, the reason for focusing on incremental innovations is their explicit growth strategy. They pursue growth by rapidly introducing their payment system in different country markets in order to gain as many customers as possible in a short amount of time. This logic is based on the network characteristic of that particular market: The more customers a payment system has, the higher is the utility each customer derives from being a member of that system, and hence, the more attractive that system will be to current noncustomers. This can lead to ‘winner takes it all’ situations, where the firm with the largest network wins (Katz and Shapiro 1985). Innovation *can* be a strategy in those markets; however, technical superiority may be less important than having a large network.

An explanation for the emphasis on incremental innovations may be the focus on current customers. For example, founder C highlights that: ‘When a customer wants something, we can quickly knock something together . . . in a few days . . . nobody is faster.’ Along similar lines, founder B states that: ‘As a rule, we can do everything. Everything that the customer demands can be delivered.’ These quotes hint at the ‘survival mode’ of business, in which firms focus on the generation of funds to survive rather than to grow (Barrett and Sexton 2006). In the ‘survival mode’, a high degree of flexibility is realized, following the demands of the marketplace (Shane 2004). However this purely customer-centric approach to new product development may, in the long term, endanger the firm (Christensen 1997).

Another explanation for the preference of incremental innovations over radical innovations, particularly in larger NTBVs, is given by manager D. He states that: ‘The owner does have reservations to take risks in the same magnitude now as he had at the time of venture creation.’ The owner of D does not want to put his realized wealth at risk (any more). He devaluates the upside potential of radical innovations, so that an incremental innovation strategy seems to be more advantageous. The theoretical background of such a decision rationale is given by prospect theory (Kahneman and Tversky 1979; Tversky and Kahneman 1992). The founder regards his current wealth as a reference point from which potential gains weigh less than potential losses. Hence, a low-risk strategy has more net utility than a high-risk strategy, i.e., incremental innovations are favored over radical innovations due to the higher risk adversity.

### **The Formalization of the NPD Process**

Our findings suggest that smaller ventures are reluctant to formalize their new product development process. Formal tools such as creativity techniques or other instruments such as stage-gate processes were rejected on terms such as high perceived costs and a lack of application knowledge. Also, planning and deployment of new products on the basis of profitability analyses and systematic technological intelligence was not found in any of the three smaller firms. Again, high perceived costs of these

analyses were mentioned as a reason. However, in firms A, B and C, embryonic project organizations were implemented to coordinate innovation projects. In the largest of the firms interviewed, a permanent organization unit was recently established that deals explicitly with new product development processes. This unit, 'New Business Development', supports new product development processes in collaboration with top management and product management. It develops operational goals pertaining to innovation management and communicates them on a regular basis throughout the organization.

With an increase in firm size, the degree of formalization was also found to increase. For instance, in venture D, software release requirements used to be established in direct contact between the sales department and the development department. By now, this process has become more formalized. As reasons for this change, prior negative experiences with informal communication and increasing complexity of the software were mentioned. Because in larger firms, the composition of project teams can vary, new team members must be provided with adequate information. In case information pertains to complex new product development processes, informal communication does not suffice any more. Next to formal communication processes, the largest venture in our sample also evaluates the market, their competitors, technologies and their internal strengths and weaknesses on a regular basis.

### **The Role of the Founder in Influencing the NPD Process**

Our findings further indicate that the dominant position of the founder may also impact on the new product development process itself. More specifically, the owner dominance can be a barrier to the implementation of a formal approach to innovation management. For example, in firm C, an employee states that:

*'It does not make sense to invest x man-years in a technical or economic analysis, if in the end, it is the founder who decides. That way [by a formal approach to innovation management], we would waste our forces and slow us down.'*

Founder B is self-critical:

*'Sometimes, I stand in my own way. Structures [for innovation management] are created, but not used, since I tend to decide by myself most of the time anyways.'*

These quotes remind one of the 'leadership crisis', a typical situation experienced in the growth process of new ventures (Greiner 1972). The leadership crisis results from an unwillingness of the founder-manager to

delegate tasks when faced with the increasing complexity of his growing firm. In this situation, it might be advisable for the founder to reflect upon his leadership style, since intuitive decision making is not always effective (for the critical assessment of the dominant role of the founder see also Willard *et al.* 1992).

It must be noted that in operational decisions, we found that employees do play a role. Especially, the founders of the small ventures highlight the dynamics and flexibility of their firms, which they accredit to informal teamwork, short decision-making and communication processes and flat hierarchies. Founder A states that: 'Innovation process culture is important in many ways. For example, it helps to put the team together.' While in most firms, culture is 'lived' in the form of personal perceptions and attitudes, only in the largest firm are formal methods such as employee proposal schemes implemented.

## DISCUSSION AND LIMITATIONS

The goal of this study was to create a better understanding of the barriers to radical follow-up innovations in NTBVs. We chose firms that did not have a lack of resources, a lack of capabilities or a lack of growth willingness that could count as barriers to radical innovation, so that we were able to focus on other reasons. Our results indicate that the person of the founder and a lack of formal new product development processes can be regarded as key barriers to radical new product innovation in those firms. Table 15.1 provides a synopsis of the results.

We observed that a proactive development of radical innovations is missing in the ventures that have been interviewed. All of the ventures focus their research and development activities on incremental innovations. Even though the firms in our sample had the financial potential to engage in radi-

*Table 15.1* Synopsis of Results

	<i>Innovation strategy</i>	<i>Reasons given for lack of radical innovation</i>	<i>Formalization of new product development process</i>
Firm 'A', micro	Incremental	Risk	Project management in general, no dedicated new product development processes
Firm 'B', small	Incremental	Risk, speed	Project management in general, no dedicated new product development processes
Firm 'C', medium	Incremental	Speed	Project management in general, no dedicated new product development processes
Firm 'D', large	Incremental	Market requirements, risk	Dedicated business unit, formal communication, technological and market intelligence

cal innovation and were committed to growth, there was a lack of effort to engage in radical innovation. Hence, it would be valuable to investigate potential barriers.

It appeared that the founder-manager had a dominant influence on the firm, in general, and in setting the direction for innovation, in particular. This key role of the top management for the initiative towards radical innovation in smaller ventures is also pointed out by Lichtenthaler and others (2004). Particularly for radical innovation, which may come up against structural barriers in the firm, a strong promoter would be needed (Veryzer 1998). Also, the owner-manager can be considered as a gatekeeper for innovation-related information that exists outside the firm (Frishammar and Chroneer 2006; Macdonald 2006) and that may be particularly useful for radical innovation.

The founders use their dominant influence to foster incremental rather than radical innovation. It appeared that a strong focus on existing customers, a strong emphasis on the risks of radical innovation and the fact that incremental innovation can be realized quicker than radical innovations were the key reasons for abstaining from radical innovations. Even if organization structures and tools would have been available (as in D and, to a smaller extend in B) the founder can easily overrule any attempts to radical innovation. The question arises of how those barriers could be overcome. Particularly difficult would be to deal with the risk aversion of founders, since this factor is deeply rooted in their personality. A possible way to circumvent this barrier would be to identify strategies for risk sharing. In this regard, a promising solution could be the network approaches that will be discussed in the next section.

Equally difficult would be to deal with the fact that incremental innovation might lead to quicker returns than radical innovation. What's important from a rational decision-maker's point of view is the discounted cash flow of an innovation project. Risky returns that might only accrue in the distant future (radical innovation) only have a larger net present value than rather sure and timely returns (incremental innovation) when the former are sufficiently large. To foster radical innovation, startup investments could be substituted by political decision-makers, and founders could be sensitized to the high upside potential of radical innovation.

Pertaining to the new product development processes, it seemed that the firms we investigated exhibit a low degree of formalization that could be a barrier to the creation of radical innovation. As reasons for the low degree of formalization, the founders argued that they do not require formal new product development processes due to their firm's open structures and flexibility. Alternative explanations for the lack of formal innovation management in smaller NTBVs might be the unwillingness of the founder to sacrifice his discretion, and the high costs that are associated with formal innovation management techniques. For example, the fixed cost of a formal innovation management system would be allocated to a rather small volume of innovation activities compared with larger firms.

However, it seems that a differentiated perspective on a formal approach to radical innovation seems merited. Lichtenthaler and others (2004) identified three approaches towards radical innovation: process oriented, culture oriented and need oriented. Both process-oriented approaches, which are rather formal, and culture-oriented approaches, which rely on informal self-organization of the people involved in radical innovation, can be effective. In addition, their analysis revealed that particularly smaller firms apply the culture-oriented approach. Much in line with the arguments of our interviewees, NTBVs could capitalize on their open structures and flexibility. However, self-organization for radical innovation must not be left to chance. By shaping general conditions, e.g., the vision of the firm, introducing structures and reward schemes geared toward (radical) innovation, management can increase the chances for radical innovation, also by introducing formal tools.

Of course, the results of this study have to be interpreted with caution. An explorative analysis of four NTBVs can hardly be used to make general claims. Moreover, owing to interview effects, the respondents may have been unwilling to provide information that is socially unacceptable. However, the issues of the role of the founder in setting the overall strategy and in shaping the new product development process, and the type of new product development process itself, seem to relevant aspects in terms of the generation of radical innovations by NTBVs.

## FUTURE RESEARCH AND CONCLUSION

While our research focused on the barriers to radical follow-up innovations in NTBVs, it would be interesting to compare our findings to the context of larger, established firms. The analysis of the challenges of managing radical innovation in the context of larger firms reveals similar issues to our study (Trauffer *et al.* 2005). Trauffer and others (2005) reveal that issues related to the new product development process, to the tools used for innovation management and to the fit of radical innovation activities to 'daily' business were major challenges in large firms. For example, even larger firms do not seem to employ formal tools (see the section of this chapter on the formal new product development process) that could assist project evaluation and technological intelligence. While Trauffer and others (2005) develop an idealized process model for innovation that incorporates both radical and incremental innovation in the context of larger firms, we are not aware of such a model for NTBVs. Future research could, by examining best practices in addition to barriers, develop such a model for this particular application context.

That particular context ought to take the resource scarcity when compared with large firms into account. We would like to point out that to deal with this resource scarcity, new and small ventures could make use

of cooperation strategies. Gerybadze (1991) mentions the sharing of costs, risk reduction, increasing speed and the utilization of core competences as benefits of a cooperation strategy in the innovation context. Especially, the last point has recently received increased attention in the literature on Open Innovation (Chesbrough 2003).

Open Innovation refers to the conscious and proactive utilization of knowledge and solutions outside the firm (Chesbrough 2003). Even though not a 'silver bullet' for generating radical innovations (Enkel *et al.* 2005), Open Innovation has been shown to enhance the capacity for radical innovation for larger firms (Huston and Sakkab 2007) and may also be applied in the context of NTBVs (Harms and Schwarz 2007). In respect to the capability to use external scientific and technological knowledge, the development of their science intelligence capability and their technological intelligence capability (Lane and Klavans 2005) might be crucial for NTBVs. Since the particular situation of larger firms in Open Innovation networks has been given much attention (e.g., Chesbrough and Crowther 2006 for large firms in multiple industries; Huston and Sakkab 2007 for P&G; Lilien *et al.* 2002 for 3M), future research might uncover the role of NTBVs with regard to radical innovation in the context of Open Innovation. It is imaginable that future research could revolve not so much around the question of whether NTBVs themselves generate radical innovations, but how they collaborate in the context of innovation networks.

In the future, longitudinal case studies or historic studies will be employed to shed more light on the processes by which an effective and efficient approach to radical innovation management is implemented. The barriers that have been identified, the unwillingness and the unawareness of the founder and informal new product development processes, will be substantial building blocks in this endeavor. Based on the assumption that a formal approach to innovation management will be beneficial for NTBVs, we hope that our results will contribute to research and practice.

## NOTES

1. This chapter was first published in the *International Journal of Technology Intelligence and Planning* 4:39–54 and is reprinted with permission of Inderscience Enterprises Limited, who hold the copyright of the chapter ([http://www.inderscience.com/search/index.php?action=record&rec\\_id=17401&prevQuery=&cps=10&m=or](http://www.inderscience.com/search/index.php?action=record&rec_id=17401&prevQuery=&cps=10&m=or)).

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# 16 Learning Processes of Internationalizing SMEs

## Assimilating New Knowledge

*Margaret Fletcher*

### INTRODUCTION

This chapter investigates how small and medium-sized enterprises (SMEs) assimilate new knowledge acquired as they grow their businesses through internationalization. The accumulation of knowledge and learning by firms has been identified as critical to their internationalization (Johanson and Vahlne 1977, 2003, 2006) however there have been few empirical studies, and they have been mainly quantitative (Eriksson *et al.* 2000; Sapienza *et al.* 2004; Zahra 2004). Extant literature on entrepreneurial learning and growth has focused on the individual learning of entrepreneurs, neglecting the organizational learning processes of SMEs (Deakins and Freel 1998; Cope and Watts 2000; Minniti and Bygrave 2001).

This research uses a framework based on the concepts of absorptive capacity and the knowledge-based view of the firm to gain rich insights into the knowledge assimilation and sharing processes internationalizing SMEs. Absorptive capacity emphasizes the importance of a firm's ability to assimilate new external information and knowledge within a firm's existing knowledge base in order to increase learning (Cohen and Levinthal 1990). The knowledge-based view of the firm distinguishes between tacit and explicit knowledge complexities of the internal assimilation and transmission of knowledge by firms (Nonaka 1994; Kogut and Zander 1993).

This research uses an in-depth qualitative approach to investigate the knowledge assimilation processes of both international new ventures (firms that internationalize from inception (Oviatt and McDougall 1994) and incrementally internationalizing firms (Johanson and Vahlne 1977). A longitudinal multiple case study approach is adopted, based on twelve firms that were participating in an internationalization program.

### LITERATURE AND RESEARCH FRAMEWORK

#### Learning and the Internationalization Process

Theoretical perspectives to explain the internationalization of smaller firms have evolved; these include internationalization process theory (the

establishment chain, the Uppsala model or stage models), international new venture theory and the network approach (Johanson and Vahlne 1977; Oviatt and McDougall 1994; Johanson and Mattsson 1988; Coviello and McAuley 1999). These theories identify knowledge accumulation and learning by firms as one of the key influences on their internationalization. All of these theories focus on knowledge and learning in different ways.

The international business literature identifies three types of knowledge that are important in the internationalization process of firms: market, internationalization and product/technological knowledge. Internationalization process theory (IPT) identifies market and internationalization knowledge (Johanson and Vahlne 1977; Eriksson *et al.* 1997). International new venture theory (INV) highlights the importance of product/technology knowledge (Oviatt and McDougall 1994; Yli-Renko *et al.* 2002).

Internationalization process theory focuses on the experiential learning and gradual acquisition, integration and use of knowledge about foreign markets and operations, which suggests firms incrementally increase commitment to foreign markets (Johanson and Vahlne 1977). The establishment of operations in a new country is explained by the psychic distance between the home and host country. Lack of knowledge due to differences between countries with regard to, for example, language and culture, prevents firms acquiring market knowledge, i.e., 'information about markets and operations' (Johanson and Vahlne 1977: 26) in international markets. It is suggested that these differences constitute the main characteristic of international, as distinct from domestic, operations. The model assumes firms will reduce uncertainty by initially targeting neighboring countries. Psychic distance was defined initially as 'factors preventing or disturbing the flows of information between firms and market' (Johanson and Wiedersheim-Paul 1975: 18). This original definition was updated to 'factors preventing or disturbing firms learning about and understanding a foreign environment' (Nordstrom and Vahlne 1992: 3). This redefinition emphasizes the view of internationalization as a dynamic, learning process, whereby managers must not simply accumulate information, but must learn to interpret it correctly in order to generate an understanding of the market and adapt to it (O'Grady and Lane 1996). An inability to learn about important differences hinders adaptation and affects performance outcomes (Nordstrom and Vahlne 1992).

Johanson and Vahlne (1977) emphasize the importance of experiential market knowledge. Although the model acknowledges that market knowledge can be experiential or objective, market or general, following the rationale of Penrose (1959), it is assumed that experiential knowledge is critical and objective knowledge is of minor importance (Johanson and Vahlne 1977). Experiential knowledge is implicit and tacit and is acquired through operating in the market place (Penrose 1959). It cannot be as easily acquired as objective knowledge. Objective knowledge is explicit knowledge and is acquired through standard methods of collecting and transmitting information such as market research, whereas experiential knowledge is more costly to accumulate and cannot be transferred between firms (Eriksson *et al.* 1997). Johanson

and Vahlne (1977) acknowledge that market knowledge exists within the firm in tacit and explicit forms but pay little attention to issues of how tacit/experiential knowledge is assimilated within the firms. For example, they comment 'by market knowledge we mean information about markets, and operations in those markets, which is somehow stored and reasonably retrievable—in the mind of individuals, in computer memories, and in written reports' (1977: 26). Furthermore, by focusing on experiential market knowledge IPT ignores the role of objective and explicit knowledge.

Research over the last two decades has shown that firms can acquire market knowledge in ways other than experientially, highlighting a weakness of internationalization process theory. Firms can learn through imitative learning by observing other firms, by acquiring or hiring people with the necessary knowledge, company acquisitions, licensing, strategic alliances and by conducting focused research for new information rather than through experiences from their own activities (Welch and Welch 1996; Forsgren 2002). Recent research on smaller firms confirms that knowledge-based resources critical for foreign market entry do not have to reside within firm. They can be acquired from specialist organizations, such as export intermediaries or 'traders' (Peng and Ilinitich 1998), or relevant alliances and networks (McDougall *et al.* 1994), which can help facilitate internationalization amongst smaller firms.

Firms can acquire experiential market knowledge by 'grafting-on' the new knowledge (Huber 1991). This can be from acquiring new employees or larger units. Although Johanson and Vahlne (1977) suggest this knowledge may not be available or exist, Oviatt and McDougall (1994, 1995) argue that international managerial experience has become more widely available, enabling firms to quickly acquire such knowledge through initial resources endowment and recruitment. Foreign direct investment (FDI) by acquisition, as opposed to greenfield investment, may broaden a firm's knowledge base and decrease inertia, possibly leading to better performance in the long run (Vermeulen and Barkema 2001).

Learning and network development are important drivers and outcomes of foreign market expansion (Welch and Welch 1996). Through existing business relationships and networks, firms can gain access to another firm's knowledge without going through the same experiences (Johanson and Mattsson 1988; Johanson and Vahlne 2003; Eriksson *et al.* 1997), enabling them to enter new markets and expose themselves to new opportunities (Chetty and Holm 2000). Johanson and Vahlne (2003) developed the Uppsala model to include business relationship learning whereby firms can imitate behavior and take action, without having to wait until its own market-specific knowledge has reached a certain level (Forsgren 2002).

Learning from partners in strategic alliances facilitates local knowledge acquisition and strengthens firm performance in host countries (Luo and Peng 1999). Peng (2001) discusses how knowledge-based resources are acquired by firms that use export intermediaries. The firm, for example, will be concerned with whether the intermediary performs as promised. The intermediary, on

the other hand, needs to use the information asymmetries between the firm and the foreign markets and assure the firm its knowledge based resources will be used to the firm's advantage. Learning can occur in different types of strategic alliances, from formal joint ventures to agreements to cooperatives. Not all partners are adept at learning, the process more than the structure is important in determining learning outcomes (Hamel 1991). Thus, this discussion highlights that knowledge is not only acquired by a firm's own experience but can also be acquired through interaction with other firms, i.e., from the experiential learning of others' commitment, firms learn in business relationships and networks, which enable them to enter new markets, develop new relationships and, in turn, enter other country markets.

Eriksson and others (1997, 2000) identify general *internationalization knowledge* that concerns accumulated experience gained from operating in the international environment. It is neither specific to country nor mode of entry. It is firm specific, for example, it may include a particular firm's 'way of going international' (Eriksson *et al.* 1997: 345). It concerns a firm's knowledge of its capabilities in engaging in international operations and of its resources for doing so. These are embedded in a firm's routines, procedures and structure (Eriksson *et al.* 2000). Eriksson and others (1997) argue that accumulated experiential knowledge exerts an influence on the future internationalization of the firm through its influence on information search processes. Such knowledge is generalizable from market to market and impacts on the firm's ability to gain experiential knowledge about foreign markets and institutions as well as the cost of internationalization. By focusing on market-specific knowledge in individual markets, the Uppsala model neglects the impact of general knowledge that could influence strategic behavior, for example, it can increase a firm's alternatives and function as a driving force to take steps in new directions (Forsgren 2002). Indeed, the case of international new ventures discussed by Oviatt and McDougall (1995) highlights the existence of cross-border international experience of founders and top managers, and development of general international experience obtained from the global operations of firms.

International new venture theory as developed by Oviatt and McDougall (1994) challenges the incremental approach to internationalization found in the process models. International new ventures were technology-based firms in knowledge-intensive sectors, often operating in volatile markets. Rapid internationalization is facilitated by the knowledge intensity of a firm's core resources and essential to its growth. Knowledge is a key resource driving the international growth of technology-based firms (Yli-Renko *et al.* 2002). INV theory suggests that the inherent mobility of knowledge allows for an earlier and more rapid internationalization for INVs and born globals (Oviatt and McDougall 1997). The accumulation of product and technological knowledge allows firms to recognize and exploit new productive opportunities. Technological knowledge is inherent in an INV's activities and outputs (McDougall *et al.* 1994). Oviatt and McDougall (1995) identify unique products or service knowledge as one of the success factors

for INVs. Thus INV theory highlights the importance of knowledge intensity of the firm's resources, and views it as an important facilitating condition for INVs (Oviatt and McDougall 1994; Autio 2005).

### **Tacit and Explicit Knowledge**

The knowledge-based view (KBV) of the firm emphasizes the role of knowledge and learning as a vital resource (Grant 1996, 2002). An important aspect of the KBV is the nature of knowledge. Knowledge resources can be viewed as a system of codifying information that enables it to be made useful (Kogut and Zander 1995; Autio *et al.* 2000). Knowledge can be implicit, i.e., tacit, or explicit (Polanyi 1966). Tacit knowledge is embedded in individuals and cannot be expressed explicitly or codified in written form (Nonaka 1994). It is subjective, experiential and hard to formalize; it is in the form of beliefs, perspectives, mental models and ideals (Nonaka *et al.* 2000). Due to its unconscious nature and embeddedness in the specific context, tacit knowledge is difficult to articulate in a meaningful and complete way from one individual to another (Kogut and Zander 1995). It relates strongly to the argument that individuals know more than they can say and manifest that knowledge through their actions (Polanyi 1966; Spender 1994; Simonin 1999). It is acquired mainly through experiential learning by doing. It is this tacit knowledge acquired experientially from current activities that Johanson and Vahlne (1977) argue generates business opportunities and drives internationalization. Explicit knowledge, on the other hand, is objective information and is diffused through the organization. It can be scientific knowledge or more localized in, for instance, company rules or operating guidelines (Spender 1994). It can be in the form of quantifiable data, coded procedures, universally accepted principles, scientific formulas, specific actions and manuals. Explicit knowledge is codifiable and thus transferable (Nonaka 1991; Nonaka *et al.* 2000). Thus, the transfer of knowledge is low for tacit knowledge and high for explicit knowledge (Grant 2002). By assuming knowledge is stored and is reasonably retrievable, Johanson and Vahlne (1977) ignore the complexities of the internal assimilation and transmission of knowledge by firms.

### **Tacit Knowledge and the Multinational Firm**

Kogut and Zander's (1993) evolutionary perspective of the multinational firm posits that the extent and manner by which a firm expands internationally depends on the tacitness of its knowledge-based assets. However, the replication of knowledge in foreign locations cannot be taken for granted. Tacit knowledge has advantages and disadvantages for international investment. The buildup of tacit knowledge is inherent in the accumulation of organizational know-how that underpins technology and other knowledge-based assets (Nelson and Winter 1982; Dosi 1988). It protects against imitation by other firms in various locations (Dierickx and Cool

1989). Due to its novelty and difficult imitation, knowledge that is tacit can be expected to embody the advantages of the firm to grow and expand in the future (Kogut and Zander 1993). By recombining knowledge a firm exploits its current knowledge for expansion into new markets (Kogut and Zander 1992). Through its 'combinative capabilities' a firm synthesizes and applies current and acquired knowledge by a process of internal and external learning (Kogut and Zander 1992). However, tacit knowledge when not embodied in well-defined physical artifacts can be difficult to replicate accurately (Nelson and Winter 1982). Thus, tacitness will affect the desirability of transferring a production technology to a foreign location. The more tacit the technology, the greater the additional cost incurred in a transferring the technology to a foreign location (Teece 1977, 1981).

### **Absorptive Capacity and Learning**

Absorptive capacity highlights the importance of external knowledge acquisition and the assimilation of new knowledge to increase firm learning. Cohen and Levinthal (1990: 128) define absorptive capacity as the 'ability to recognise the value of new external information, assimilate it, and apply it to commercial ends'. It is a function of a firm's prior related knowledge and encompasses a firm's ability to combine both internal and external knowledge (Cohen and Levinthal 1990). Assimilation refers to the firms' routines and processes that allow it to analyze, process, interpret and understand the information obtained from external sources (Kim 1998). Absorptive capacity does not simply depend on the firm's direct interface with the external environment, it depends on the transfer of knowledge across and within units. Thus, a firm's absorptive capacity is not resident on any single individual but depends on the links across a mosaic of individual capabilities (Cohen and Levinthal 1990). Furthermore, Cohen and Levinthal (1990) highlight the importance of the assimilation and the internal development of absorptive capacity and question the extent to which a firm may buy absorptive capacity, for example, by hiring new personnel, using a consultancy service or through corporate acquisitions.

Organizational learning involves the process of assimilation of new knowledge into the organization's knowledge base (Cohen and Levinthal 1990). Learning is most efficient in areas close to an existing knowledge base, when new knowledge is related to prior knowledge and when firms devote intense effort to processing new external knowledge (Autio *et al.* 2000; Cohen and Levinthal 1990; Zahra and George 2002). However, new knowledge is best developed when there are little or no existing organizational routines to unlearn knowledge (Autio *et al.* 2000; Cohen and Levinthal 1990). The adoption of new knowledge involves not merely the learning of new but the unlearning of old (Nonaka 1994). Existing routines can be costly to change and can constrain a firm's future behavior (Utterback and Abernathy 1975; Teece and Pisando 1994). Thus, prior embodied

knowledge can act as an inhibitor of new ideas and the acquisition of new knowledge (Attewell 1992).

Recent organizational learning theory presumes a necessary relationship between the learning and the employee’s active involvement in the organizational learning process, rather than managed top-down by the entrepreneur or senior management team (Spender 1996). Lower level employees have an important role. Organizational learning is constrained by the flow of information between individuals. Organization size and structure influence a firm’s ability to learn (Lewin and Massini 2003; Van den Bosch *et al.* 1999). Bureaucracy hinders innovation in larger older firms, whereas smaller and younger firms are more flexible and less bureaucratic, which can encourage innovation (Lewin and Massini 2003). In comparison with larger firms, it can be argued that SMEs are unrestrained by bureaucracy, hierarchical thinking and expensive existing information systems (Liao *et al.* 2003). They are often more innovative and customer oriented and have quick response time when implementing changes (Liao *et al.* 2003). Additionally, they are able to adapt, internalize and crystallize information more efficiently across the entire firm (Pelham 2000). Zahra (2004) suggests that INVs are often unfettered with the inertia that would limit established companies’ ability to learn and develop their operations.

### Research Framework

Drawing on the absorptive capacity concept and the KBV of the firm, this research takes an integrative approach to investigate the knowledge assimilation processes of internationalizing SMEs. The chapter presents a framework shown in Figure 16.1, where, based on a firm’s absorptive capacity, learning results from the assimilation of internal and external new knowledge.

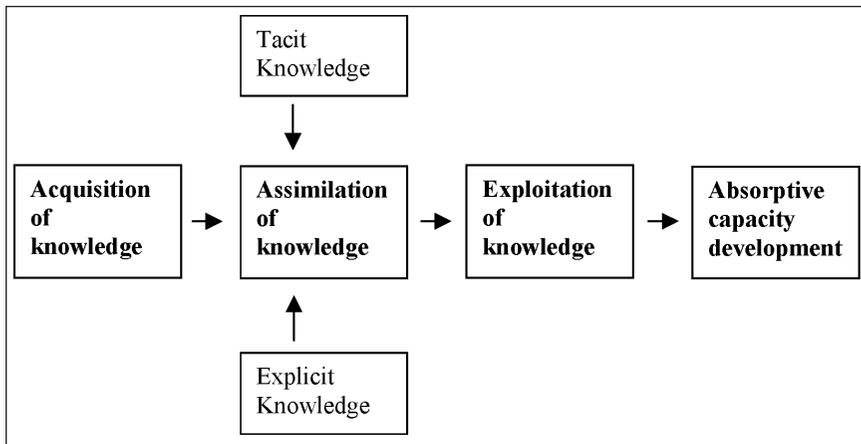


Figure 16.1 Knowledge assimilation by internationalizing SMEs.

In this context the specific objectives of the research are to investigate:

1. The tacit and explicit nature of knowledge acquired by internationalizing SMEs.
2. How firms assimilate new knowledge and the knowledge transfer process.
3. Barriers to knowledge assimilation.

## METHODOLOGY

### Research Design

The research approach adopted in this study is inductive, aims to understand deep meanings of the phenomena (Miles and Huberman 1994) and is concerned with the context in which events take place (Saunders *et al.* 2003). An interpretivist stance is taken that recognizes the complexity and uniqueness of individual business situations (Saunders *et al.* 2003). A longitudinal, case study design based on twelve firms that participate in the Global Companies Development Programme (GCDP) run by Scottish Enterprise, the regional development agency, enables the study of the change and development of firms over time (Saunders *et al.* 2003). This approach suits this study, which aims to provide deep insights into the learning processes of internationalizing firms. A qualitative methodology based on multiple case studies is adopted, where each firm is a unit of analysis (Yin 2003). The use of multiple comparative case studies enables within and cross-case comparisons, search for patterns and general explanations to be developed (Eisenhardt 1989; Yin 2003; Pettigrew 1992).

### Selection of Case Studies

Ghuri and others (2002) suggest that cases in a multiple case study investigation should be selected to serve a particular purpose in the study. Thus the selection of cases is 'purposeful', not random sampling (Patton 2002). The firms selected were different types of Scottish firms participating in the Scottish Enterprise GCDP and wishing to expand internationally. This ensured the selection of firms that were in the process of internationalization and engaging in learning and thus fitted the aims of the research (Ghuri *et al.* 2002). The firms were from a mixture of manufacturing/service industries, high/low technology intensive firms and international new ventures/incrementally internationalizing SMEs (categorized following Oviatt and McDougall 1997, 2005). The criteria used for selection of the cases were richness of data and replication logic. Literal replication where similar results are found for predictable reasons or theoretical replication where contrary results are found for predictable reasons (Perry 1998).

## Data Collection

Following Yin (2003) separate case studies on each firm were developed from interviews, database information and archival records. The research involved three in-depth, semi-structured interviews with the CEOs of the case study firms carried out over three years (2003, 2004 and 2005). Other key informants were interviewed in several firms. Each interview lasted approximately one hour. The interviews were taped and transcribed. The CEOs were the prime focus of attention as the key informants, as they are the key decision-makers in the firms.

Reliability was established through the development of a case study protocol for each case and a case study database to ensure that the same information was collected for all the cases (Yin 2003). The case study protocol in this research included an overview of the case study project, its aims, objectives, case study issues and interview schedule. A case study interview schedule was prepared containing background details of the case, questions prepared in advance of each interview phase and summary details of financial information. A case record for each firm was prepared to record data. This ensured the data collection was focused on the aim of the research. The case record verified that all of the relevant information was collected for each firm and aided the data analysis. Corroboration of the interviews through the use of Scottish Enterprise archival records and other secondary data was used to validate the interview data (Yin 2003). These included consultants' reports on the firms, expertise within Scottish Enterprise, the GCDP executives and Scottish Enterprise account managers and public sources of information gathered from newspapers, other publications and company Web sites. This enhanced the validity of the research through corroboration, cross-checking and provided a more complete and holistic portrait of the phenomena (Ghauri *et al.* 2002).

It is recognized that the role of the researcher is vital to the interview process. To ensure validity the researcher is required to understand the received information, be a good listener and understand what is meant by what is said (Ghauri *et al.* 2002). To assist with this process, background reports on the companies were consulted before the interview. The semi-structured interview schedule helped the researcher to control the situation, ask the right questions, adapt to new or unexpected situations and develop trust (Ghauri *et al.* 2002). The interview schedule used open questions and the process questioning language of 'what, who, where, why, when and how' recommended by Pettigrew and others (2001). This supported the exploratory and inductive nature of the research.

A key aspect of enhancing the reliability of the research was to secure 'vivid and accurate inclusive accounts that are based on personal experience' of the CEOs (Burgess 1982: 107). The following procedures were taken to ensure this. The relevance of the research to the interviewee is a factor that can affect the quality of the data provided (Easterby-Smith *et al.* 1991).

This research was part of a wider evaluation study and it was emphasized to the firms that their independent views were important. The CEOs were assured that the researcher was independent from Scottish Enterprise and that their responses were confidential and individual comments would not be attributed to firms unless they wished this to be the case. The longitudinal nature of the study enabled the researcher to develop trust and relationships with the interviewees. Using appropriate language helps develop trust and care was taken to use language that the firms would be familiar with (Easterby-Smith *et al.* 1991). The use of open-ended questions helped avoid bias and the use of leading questions. Supporting probes to clarify points were used where it was necessary (Easterby-Smith *et al.* 1991).

## Analysis

The case study analysis used both within-case and cross-case methods as recommended by Miles and Huberman (1994) and Yin (2003). The twelve firms were from a variety of different industry contents shown in Table 16.1. The firms were categorized into four groups and were given names to maintain anonymity as follows: three startup firms (SU1, SU2, SU3), four manufacturing firms (MAN1, MAN2, MAN3, MAN4), three technology-based firms (TECH1, TECH2, TECH3) and two firms that did not actively internationalize (IN1, IN2). The division of firms into groups was largely to simplify the case study analysis, rather than to provide a basis for comparison. The categories chosen were deemed as the most appropriate groups as they reflected similarities in terms of the organizational changes in firms that are associated with growth and industry differences (Storey

*Table 16.1* Types of Firms and Sector

<i>Firms</i>	<i>Business Type</i>	<i>Sector</i>
SU1	Education provider	Service
SU2	Aviation software development	Technology
SU3	Clothing manufacturer	Technology/Manufacture
MAN1	Alloy processing manufacturer	Manufacture
MAN2	Hi Fi manufacturer	Manufacture
MAN3	Oil and gas product manufacturer	Manufacture
MAN4	Clothing manufacturer	Manufacture
TECH1	Optical eye testing technology/manufacture	Technology/Manufacture
TECH2	Digital media technology	Technology
TECH3	Biotechnology—diagnostic testing products	Technology/Manufacture
IN1	Mobile telephone repairer	Service/repair
IN2	Advertising agency	Service

1994; Kazanjian 1988). Word tables and matrices were prepared to perform cross-case analysis. This analysis condenses the data to develop the process from describing to explaining. Themes and patterns are identified and presented across groups and all firms.

## FINDINGS

### Knowledge Assimilation and the Transfer Process

The CEOs and top management teams were very important to the assimilation of the new knowledge within the firms. The transfer process involved sharing new knowledge internally amongst functional, technical and commercial managers, project teams, overseas managers and overseas sales employees. Sharing knowledge and communicating with middle managers and all employees was important as firms grew and became medium-sized for both internationalizing and inactive internationalizing firms. For example, one firm (SU2) is run collectively so that all information is shared and teams are informed, ensuring that one person does not have all the knowledge in a particular area. Thus it was important that firms made tacit knowledge explicit through knowledge sharing. The assimilation processes of tacit and explicit knowledge is presented in Table 16.2.

*Table 16.2* Assimilation of Tacit and Explicit Knowledge

<i>Tacit/explicit knowledge</i>	<i>Market knowledge</i>	<i>Internationalisation knowledge</i>	<i>Product/technological knowledge</i>
Tacit knowledge	<ul style="list-style-type: none"> <li>• Country visits.</li> <li>• Working closely with agents and distributors.</li> <li>• Location of staff in customers' offices.</li> <li>• Sales employees support agents.</li> </ul>	<ul style="list-style-type: none"> <li>• Visits overseas to subsidiaries.</li> <li>• Mentoring.</li> <li>• Cross-team working.</li> <li>• Combining internal and external project teams.</li> <li>• Management boards.</li> </ul>	<ul style="list-style-type: none"> <li>• Create project teams.</li> <li>• Cross team working and transfer of project team leaders.</li> <li>• Combining internal and external project teams.</li> <li>• Visit and work with customers.</li> <li>• Weekly staff conference.</li> </ul>
Explicit knowledge	<ul style="list-style-type: none"> <li>• Seminars for staff and customer.</li> <li>• Production of marketing materials by CEO for sales employees.</li> <li>• Train agents and partners.</li> <li>• Market information system.</li> </ul>	<ul style="list-style-type: none"> <li>• Train staff in management and delegation.</li> <li>• Business analysis systems.</li> <li>• Create management boards/ formal management structure.</li> <li>• Employee seminars and presentations.</li> </ul>	<ul style="list-style-type: none"> <li>• Retrain technology staff.</li> <li>• Creation of product development function.</li> <li>• Management shares information with product development team.</li> <li>• Computerised Project Management system</li> </ul>

## Assimilating Different Types of Knowledge

Sharing market knowledge involved a two-way process of firms assimilating market knowledge from and transferring knowledge to overseas sales employees to support their activities. The CEO of SU1 developed marketing materials for the new overseas sales team from his experience. Internal marketing information systems and formal structures were developed to transfer overseas market information to management and project teams, for example, manufacturing firm MAN3 set up a company-wide computer information system.

Firms worked closely with overseas agents, distributors and partners to share knowledge to support overseas activities. SU1, MAN4 and TECH 3 recruited and trained sales employees to support overseas agents and distributors. Firms brought partners to the U.K. for meetings and conferences and visited overseas markets regularly. Inactive internationalizing firms shared market expertise through improved communication and regular management and team meetings.

*Internationalization knowledge* sharing was similar within the different groups of firms and there were some cases of issues being important across the groups. The startup firms were concerned with learning how to manage overseas partners and transferring knowledge to these firms. This involved presentations to partners, regular visits and providing high levels of support for the partners. One startup firm, SU2 provided sales training for its U.S. partner and another startup, SU3 provided hands-on consultancy to help an importer market to U.K. retailers. The manufacturing firms set up formal management systems and increased delegation to U.K. and overseas operations to share knowledge. Firms shared U.K. head office expertise and knowledge with overseas employees. This was supported by firms making frequent visits to their overseas markets. The managers worked closely with the management teams in the overseas sales subsidiaries. Knowledge was shared in the U.K. through cross-team working and project groups were created. The technology-based firms were concerned with increasing *internationalization knowledge* to manage sales operations abroad, improving monitoring of sales and marketing processes. For example, this involved TECH1 communicating regularly with staff in the U.K. and abroad by weekly conferences to share reasons for changes in procedures and strategy. Inactive internationalizing firms shared knowledge by improving communication with all staff, increasing delegation and participation in decision making. IN1 used a consultant as a business mentor, which he shared with other senior managers, to help them implement changes in order to turn around the firm. Managers had access to consultants and were trained in communication skills to support the knowledge sharing.

*Product/technological knowledge* was shared by firms to integrate new external and internal product and technological with market knowledge. New knowledge from customers and suppliers was absorbed to support new

product development. Firms often made regular overseas visits to customers and suppliers to develop new products. The formal assimilation of new *product knowledge* involved the creation of internal project teams, combining internal staff and external consultants, retraining of staff, changing product development function structure to facilitate the assimilation of existing expertise within the firm.

### **Barriers to the Assimilation of New Knowledge—Inertia**

Two firms experienced problems assimilating the knowledge. This resulted in the firms engaging in processes to communicate this knowledge throughout the firm to overcome inertia. Resistance to change resulted in staff leaving the firms. For example, TECH1 had problems implementing a new strategy and technological changes in its U.S. subsidiary. It held weekly conferences for all staff video-linked to its U.S. subsidiary to improve communication. Technical directors and project leaders were appointed, and staff were trained in new technologies; others were encouraged to leave the firm. IN1 changed its international acquisition strategy to develop the domestic market; this resulted in one of the founding directors leaving. The CEO improved communication throughout the company and implemented changes in management style and culture to support the company's turnaround and growth plan.

## **CONCLUSIONS**

### **Knowledge Assimilation**

Absorptive capacity highlights the importance of assimilation of new external knowledge within the firm for organizational learning to occur (Cohen and Levinthal 1990; Kim 1998). However, IPT does not address the difficulties of knowledge assimilation. For example, Johanson and Vahlne (1977) assume that market knowledge is reasonably retrievable, whether it is held in tacit or explicit form (Polanyi 1966). Tacit knowledge has advantages and disadvantages for international investment (Kogut and Zander 1993). Although tacit knowledge may be a source of competitive advantage because it is less copyable by rivals, it may impede learning in firms where it is difficult to transfer. A lack of transparency may prevent change in firms (Grant 1991; Hendry 1996). Recent developments in the KBV of the firm have highlighted the dynamic nature of tacit and explicit knowledge in the knowledge creation process as firms interact with their members and the environment (Nonaka and Toyama 2003).

This research has shown that assimilating new knowledge and converting tacit to explicit knowledge is very important to internationalizing SMEs. This involves firms developing processes to share market and product knowledge internally, amongst different units within the firm, in the

U.K. and overseas. Thus, a key aspect of developing absorptive capacity is internationalization knowledge acquisition by firms. New management processes were set up by firms to transfer new knowledge to and from external partners, customers, suppliers, distributors and agents. It was important for firms to develop systems to assimilate this new external knowledge as recognized in the absorptive capacity concept (Cohen and Levinthal 1990); but also to transfer internal knowledge and expertise to different departments, for example, transferring marketing expertise into new product development. The findings of this research show how tacit and explicit knowledge is assimilated by internationalizing firms. This involved SMEs using and developing formal systems to acquire and assimilate this new knowledge, for example, creating cross-functional project teams and management boards, rather than relying on informal management structures as suggested by the literature (Storey 1994). This research thus highlights the importance of the acquisition and assimilation of objective knowledge from internal and external sources by firms, a process that also involved converting tacit to explicit knowledge.

## **Implications of the Research**

### *Implications for the Literature*

To increase absorptive capacity it is important for SMEs to acquire generic internationalization knowledge to develop systems and procedures to assimilate new knowledge within the firm to convert tacit and individual knowledge to explicit and shared knowledge. IPT ignores problems associated with assimilating experiential and tacit knowledge within firms (Johanson and Vahlne 1977). The KBV of the firm has highlighted the importance of tacit knowledge and the internal transfer of technological knowledge for internationalizing firms (Kogut and Zander 1993). The acquisition of external knowledge and its assimilation within the firm has been emphasized in the organizational learning literature for firms to develop absorptive capacity (Cohen and Levinthal 1990). This research highlights the need for SMEs to acquire general *international knowledge* to establish assimilation processes to convert experiential (tacit) knowledge to objective (explicit) knowledge.

### *Lessons for Management*

This study found that both incremental internationalizers and INVs can suffer from inertia that can hinder change. The steps that CEOs and management teams take to overcome this inertia are important. External advice and consultancy is valuable to help firms implement the changes on order to develop systems and procedures to assimilate new knowledge.

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# 17 Are Opportunities Recognized or Constructed?

## An Information Perspective on Entrepreneurial Opportunity Identification

*Ivan P. Vaghely and Pierre-André Julien*

### INTRODUCTION

Information processing by entrepreneurs has been investigated by economists since Adam Smith's 'invisible hand'. In modern times it has been associated with problem solving and decision making (Simon 1967a, 1967b, 1991), innovation (Schumpeter 1934), opportunity recognition and the entrepreneur's alertness (Kirzner 1979). Whereas Schumpeterian opportunities require new information and are innovative, Kirznerian opportunities may not require new information and are less innovative. The work of both authors can add substantial nuances to Shane's interpretation (Shane 2003) of how they define opportunity based on market disequilibrium but not to the nature of the required information to reduce information asymmetry in it. Noteboom's (2000) entrepreneurial innovation is both Schumpeterian in that it creates forms that did not exist before and Kirznerian in that uncertainty is reduced and gaps between actual and possible use are lessened.

Hayek (1937) proposed that opportunities are objective but their perception is subjective; his statement that if people have access to all pertinent information they are in equilibrium is true 'simply because that is how equilibrium is defined' reflects a neoclassical economic tenet on the distribution of information and information processing by the entrepreneur.

Recently Kaish and Gilad (1991) have identified 'problem solving' and 'disequilibrium' opportunities. The first one relates to assembling known components into a coherent and anticipated whole and the second one to an associative search linking unrelated information cues to form a picture of opportunity. Kaish and Gilad relate the question 'How do entrepreneurs position themselves to encounter these opportunities?' to three information dimensions: sources of information, alertness to information and information cues.

We will examine existing research on the links that bind entrepreneurial information processing to opportunity identification, then limit the scope of our research and propose an integrative framework, and, finally, assess its practical application. Our objective is to 'penetrate the black box' of entrepreneurial opportunities in order to understand how these

opportunities are identified with the help of the entrepreneur's information processing. The survey of the literature reveals the importance of information processing by the entrepreneur in order to identify opportunities. It does so by discussing opportunity related questions and the necessary information input without elaborating on the latter. An answer to the question: *How do entrepreneurs process information in order to identify opportunities?* should fill this gap.

## EXTANT RESEARCH

According to the literature, information processing, knowledge creation, innovation and opportunity identification are closely related to one another (Noteboom 2000) and opportunity is a critical attribute of entrepreneurship (Shane and Venkataraman 2000).

Audretsch and Feldman (1996) try to distinguish information from knowledge through proximity and communication, what some researchers (Julien 2007) have called the economics of 'proximity'. Audretsch and Feldman (1996: 630) posit that 'the cost of transmitting information may be invariant to distance, presumably the cost of transmitting knowledge rises with distance.'

Information (and not data) is difficult to separate from knowledge. Knowledge is created and put to use in at least four ways: accumulation, organizational proximity, social proximity and recombination transformation. Specifically, knowledge can be created and put to use by accumulation, hence the importance of absorptive capacity; it can also be created through organizational proximity where collocated experts and novices 'rub elbows' enabling swift information exchange. Physical proximity is enhanced by collocation and a smaller relative size mitigates barriers to knowledge transfer. Knowledge can be created by putting in context new information acquired through social proximity provided by networks and social capital (Yli-Renko *et al.* 2001); finally, it can be created by recombination-transformation, synthesizing and putting in context shared information through a shared culture, hence the importance of shaping common cognitive schemata stressing the value of rich information (Greve and Salaff 2003). These are key elements of the economics of proximity and the sharing of information.

Innovative activity itself based on knowledge creation and information sharing tends to cluster spatially; tacit knowledge sharing, normally transmitted by direct contact, makes this point very vividly. Proximity and context, prior knowledge (Shane 2000), trust (Lewicki and Benedict-Bunker 1996) and information sharing help transform information into knowledge. In other words, the entrepreneur's network (Burt 1992; Johannisson 2003) and his organization's absorptive capacity (Cohen and Levinthal 1990; Zahra and George 2002) help transform information into knowledge, which triggers innovation and opportunity identification and supports decision making (Vaghely *et al.* 2007). Although

knowledge can thus be defined as contextual, relevant and actionable information, Zeleny (2005) provides a sharper albeit somewhat more controversial distinction: 'knowledge is action and information is a description of action' somewhat altering the philosopher Habermas's (1981) definition as information sharing that triggers action and Venkatraman's DIKAR model (2002) that establishes a chain of progression linking data, information, knowledge, action and results. We would argue that know-how qualifies as action and that information sharing builds up knowledge that can trigger action.

Sarasvathy and others (2003) also present opportunity identification as it relates to information. They call the neoclassical economic tenet the 'allocative' process view where opportunities are recognized and supply and demand are brought together to exploit existing markets; economic agents are perfectly informed through arbitrage. The authors present two other views of entrepreneurial opportunity: the 'discovery' view, where opportunity consists in the exploitation of existing or latent markets with imperfect information about the supply or the demand factor; and the 'creative' view where no prior information exists, ignorance by most being the key to opportunity creation. In sum, perfect but randomly distributed information, imperfect information and absence of information respectively define information processing in the allocative, discovery and creative viewpoints on opportunity identification. Time is not factored into these three views on opportunity identification. Opportunity construction and enactment take time. Information processing and maturation require time so patterns of opportunity can emerge for discovery and recognition.

Acs and others (2005) acknowledge that the entrepreneurship literature considers opportunity to exist exogenously, focusing on the cognitive context of the individual; here opportunities are discovered or recognized in the Kirznerian sense. The authors observe that in the economic literature opportunities are also systematically and endogenously created through the purposeful investment in new knowledge by a decision-making process of the firm; here opportunities are constructed according to Weick's (1995) enactment through sensemaking.

Today's perspectives on opportunity identification are based on the theories of the Austrian School; on work by Schumpeter and Kirzner. According to Shane (2003) opportunities are discovered; Baron (2004) says that they are recognized; they are enacted through retrospective sensemaking according to Gartner and others (2003); socially constructed say Sarason and others (2005) and constructed and intentionally perceived according to Krueger (2000).

Krueger (2003) has raised the question of discovered and enacted opportunities. Baron and Ward (2004) asserted that the number one issue in relation to cognitive science is that of heuristic and systematic thinking by the entrepreneur; stating that 'it may be the case that successful entrepreneurs are more adept at switching between these two modes of thought as the need arises.' Another issue raised by Baron and Ward (2004: 558) poses

the question: ‘Do entrepreneurs have greater capacity than other persons to focus their attention on pertinent information?’

This research on human information processing by entrepreneurs has at its core these questions. The survey of the literature reveals the critical importance of information processing by the entrepreneur for opportunity identification.

## SCOPE

In this study the entrepreneur is the fundamental unit of analysis, if we consider opportunity as endogenous discovery. The entrepreneur and his environment, which includes his organization, his information network and the industry, represent the units of analysis, if we consider opportunity as an (exogenous) enactment. We are looking at opportunity identification from a human information processing perspective where information schemata are shaped by the entrepreneur’s environment. This scope does not use an ontological perspective where exogenous enactment would not be considered.

Figure 17.1 illustrates the locus of this analysis: The entrepreneur’s information processing is linked to his immediate environment, what Julien (2007) and others call his *milieu*, his network, which includes his organization as a source and use of information and the environment where opportunities are enacted.

## KEY PROPOSITIONS

### Opportunity Identification

Before synthesizing the survey of the literature on opportunity identification it is important to state some assumptions about opportunities:

- Most opportunities are small, cumulative and complex, having their origins in minute information asymmetries that are not arbitrated by markets; these opportunities can be associated with Kirznerian

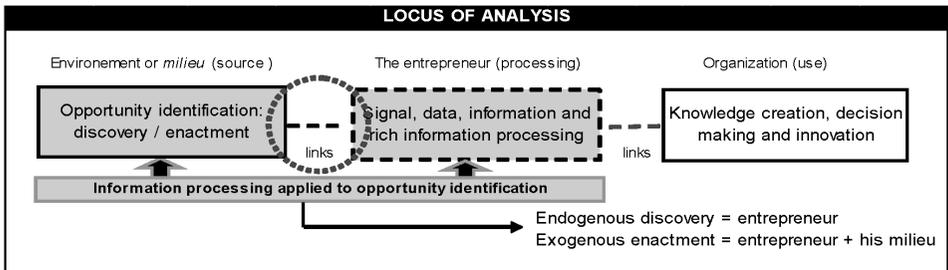


Figure 17.1 Locus of analysis.

disequilibria due to information asymmetries. Most are not based on innovations, or if they are, the innovations are small and/or incremental and diffuse rapidly (i.e., creativity or taste-related opportunities such as fashion items or the application of art). Here, information and speed-to-market are *the* key success factors.

- Some opportunities are based on breakthrough innovations; access to information about such opportunities requires specific know-how and specialized knowledge. These opportunities can be associated with Schumpeterian disequilibria and as such their base innovation tends to be disruptive with time (i.e., technology-related opportunities where change and leapfrogging are common). Know-how, knowledge, information and *timing* are the key success factors here.
- Opportunity identification is a process and therefore time sensitive/time dependant (Bruyat and Julien 2001). Time has a cumulative effect on experience, builds absorptive capacity and incubates intuition. Time can mean speed-to-market, it can also mean maturation or time required to develop rich information.
- Finally, opportunities require markets in an ends-means relationship.

In summary, from a human information processing point of view, the perspectives surveyed in the literature review on entrepreneurial opportunity can be grouped into two streams of opportunity identification. They are: the opportunity discovery or recognition viewpoint and the opportunity enactment or construction viewpoint. The first stream takes its source in cognitive psychology (Matlin 2005; Baron 2006) and the second stream in cognitive (Piaget 1975) and social (Vygotskii 1986) constructionism.

## **Entrepreneurial Information Processing**

From an epistemological perspective, cognitivists use formal models or algorithms. This perspective is characterized by the following treatment of information by the entrepreneur:

- Information shapes the representation of reality. Entrepreneurs compare their representations of the environment in order to shape the dominant logic of their network.
- On the basis of available information, the entrepreneur tries to shape a model of reality that is as accurate as possible. In this sense, the entrepreneur may be compared to an information processing machine; artificial intelligence, expert systems and environmental scanning all use such processes.
- According to the cognitivist vision of information processing, knowledge is explicit, codifiable and thus formal; such as, for instance, in multistage models of insight and innovation based on the entrepreneur's intuitive patterns that 'connect the dots' to identify new business opportunities.

The constructionist perspective uses interpretative or heuristic models and is characterized by the following treatment of information by the entrepreneur:

- Entrepreneurs process new information in an interpretative way; they construct their reality by using information from their environment. Information, in turn, leads to knowledge-based action.
- Entrepreneurs use two types of information: *explicit* information resulting from sensemaking with members of his organization and information network, and *tacit* information based on the entrepreneur's reconstruction, with his organization, of his own environment and on his innate abilities.
- According to constructionists, in order to share information, and create new knowledge, innovation and construct opportunities, the entrepreneur must justify the beliefs that are based on that information. Formalization of such information is the key to innovation and new business opportunities.

## Research Framework

In this research we use a working model of information processing that can provide a framework for understanding the entrepreneur's information processing and opportunity identification. It posits that the entrepreneur's information processing is a dynamic combination of algorithmic and heuristic information treatment combining opportunity discovery with opportunity enactment.

The model is divided into two distinct areas identified as (1) and (2) in Figure 17.2. The first area represents an algorithmic-heuristic continuum made up of seven stages of human information processing. The algorithmic end treats the processing of information as 'pattern recognition', which is associated with the use of information schemata and scripts of cognitive psychology. The heuristic end posits that information processing is a trial and error process of interpretation associated with sociology's constructionism.

Both ends show intuition as part of typical information processing. In the first case intuition is a process of 'connecting the dots' by entrepreneurs using cognitive frameworks acquired through experience (Gioia 1986a, 1986b; Csikszentmihályi and Sawyer 1995; Baron 2004). In the second case intuition is constructed by interpretation (Daft and Weick 1984) of the entrepreneurs' environment through sensemaking and discussions with members from the entrepreneur's information network and his organization. Uncertainty at the algorithmic end can be reduced or eliminated by the acquisition of information; on the other hand, ambiguity on the heuristic side is a 'state of nature', requires sensemaking and will always be present in the environment. It can be 'integrated' only through choice of one signal over another by the entrepreneur.

The intermediate steps are used to illustrate typical algorithmic or heuristic information processing behavior: strong signals from archived information in filing cabinets or on computer hard disks or weak signals from

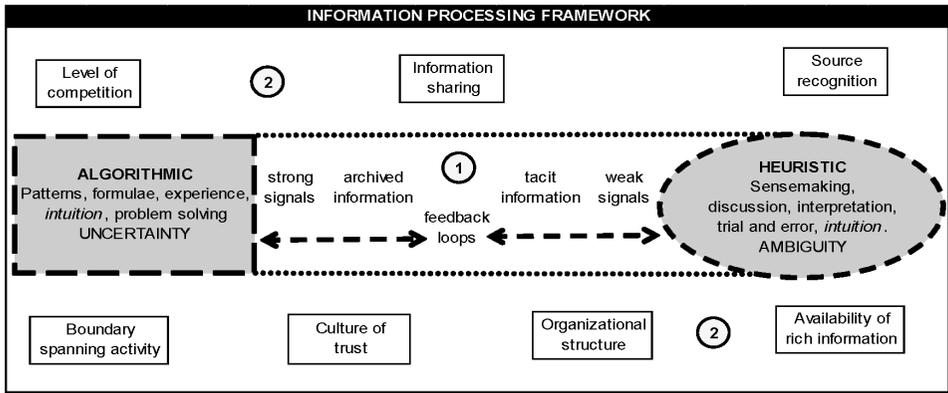


Figure 17.2 The entrepreneurial information processing framework.

tacit information associated with know-how, for instance. The middle position represents the entrepreneur’s information quality check mechanism, which in this case is a feedback loop.

The model’s second area (2) represents contextual factors or environmental determinants, which are factors shaping the entrepreneur’s information processing scripts at the cognitive algorithmic end and his interpretation of the environment at the constructionist heuristic end. Factors such as culture (Creed and Miles 1996; Kramer and Tyler 1996) and structure (Galbraith 1977, 1995; Stinchcombe 1990) have been scrutinized in numerous research papers and their impact on human information processing in organizations is clearly established. But other factors such as the level of competition within the entrepreneur’s industry (Porter 1985), the impact of ‘boundary spanners’ (Tushman and Scanlan 1981a, 1981b), the recognition of information sources within or without the entrepreneur’s information network (Julien 2007), the level of information sharing within that network and the availability of ‘rich information’ (Daft and Lengel 1984) to the entrepreneur have not been, to our knowledge, closely linked to the level of human information processing by the entrepreneur.

## METHODOLOGY

In our study of the entrepreneur’s information processing we aim to develop a database that can provide a basis for parametric analysis of the relationship of environmental determinants with the information processing variables. The sampling was designed to generate a variety of information processing styles, cultures and structures in small and medium enterprises (SMEs) of different sizes. This has allowed for the contrasting of results from these varied sources and provided a finer grain appraisal of the model’s process variables and contextual factors. A summary of the participating SMEs where entrepreneurs were also interviewed in our ongoing study is provided in Table 17.1.

Table 17.1 Participating SMEs

<i>SME</i>	<i>Product/Process/Service</i>	<i>Mio \$</i>	<i>Employees</i>	<i>Remarks</i>
W	Plastic parts, blow moulding and casting	65	140	manufacturing
A	Customer broker, forwarder and freight agent with warehousing	45	450	service
S	Industrial parts and speciality painting	35	90	manufacturing
L	Pressure moulding and machining of aluminium parts	30	110	manufacturing
D	Construction materials manufacturer with 8 product lines	80	250	manufacturing
U	Machine shop: thermal treating, welding, transmission assy	15	120	manufacturing
C	Transmission systems manufacturer	20	110	manufacturing
T	Consultants in freight and data management	12	35	service
R	Die casting, foundary and machine shop	18	78	manufacturing
P	Plastics packaging	11	42	manufacturing

- We have generated data by administering in-depth qualitative interviews.
- The protocol for the in-depth interviews was designed to help measure the contextual factors and process variables in the model. Cues were used to start a dialogue and to establish a level of trust necessary for the exchange of rich information. Thus, the basic concepts of the model, namely the seven contextual dimensions and the seven process variables were operationalized by using triggers and indicators. Their relationship to the different dimensions of the information processing framework is shown in Table 17.2. These triggers and indicators are:
  1. success stories
  2. changes in the gross margin
  3. handling of major customer complaints
  4. new ideas or innovations (if they were identified as such)
  5. the definition of personal and organizational information
  6. information sharing
  7. information processing

These performance indicators led us to discuss how opportunities were identified (discovered or constructed) and disseminated within the organization. The interview guide was tested with a variety of people in a participative research within a division of a large organization and adjusted within a single SME. The latter's results were contaminated and thus not used.

Table 17.2 Operationalization of Concepts

	Success stories	Changes in gross margin	Handling of customer companies	Innovations	Personal/organizational information	Information sharing	Information processing
<div style="border: 1px dashed black; padding: 5px; display: inline-block;">                     Information processing triggers and indicators                      Dimensions of human information processing                 </div>							
<i>Contextual factors</i>							
<i>Facts</i>							
Organizational structure	x				x	x	
Boundary spanning activity	x	x	x	x	x	x	x
Use of rich information		x	x		x		x
Information sharing	x	x	x	x	x	x	x
Recognition of information sources	x					x	x
Industry competition		x				x	x
Information alert and trust building culture			x	x		x	x
<i>Information processing variables</i>							
Algorithmic processing (use of formulae)	x					x	x
Strong signal processing	x				x	x	x
Archived information use	x						x
Use of feedback loops		x	x	x	x	x	
Tacit information processing			x	x			x
Weak signal processing				x	x		x
Heuristic processing (use of trail and error)		x	x	x			x

- The analysis of the in-depth interview data consisted of an initial review of notes taken during the interviews, listening to the recordings of the interviews and taking note of the salient facts. Based on the interviews and this initial review, five-point measures were finalized for each of the seven variables and contextual factors. A value was assigned for each process variable and contextual factor for each interview. The aggregate results for each firm were then discussed and validated with the firm's entrepreneur. We thus generated a benchmark coding for the SMEs and had the opportunity to further explore the entrepreneur's information processing behavior and the nature of his links to his *milieu*. The ten entrepreneurs were also CEOs of their organizations.
- Respondents were selected on the basis of their high information processing functions in sales, purchasing, credit, R&D and pricing. For this sample, care was taken to obtain input from the entrepreneurs as well as representatives from the organization's strategic, functional and operational levels. As shown in Table 17.3, sixty-five subjects in ten SMEs with a range of four to eleven interviews per firm were conducted for this sample.
- In order to determine the significance of the respondents' overall level of information processing performance, their performance for each variable and contextual factor was measured on a five-point scale. These individual measurements had to be made in order to generate an aggregate result for each organization.
- We further refined the five-point measures on the basis of discussions at a meeting with the entrepreneurs and of a subsequent review of the interview transcripts when they became available six months later. The elapsed time allowed us to take a critical distance from the benchmark coding and to present these results to the participants for a final discussion and validation. We made further refinements to the measures before a second phase of coding. The second phase comprised three successive adjustments to the results of the benchmark coding, as well as a forced choice adjustment in order to eliminate all decimals from the final scores.

The results of the analysis for the ten organizations are based on this double review, the rating process, the interpretation of salient facts, the two successive coding phases and the comparison to the interview notes. This process also contributed to refine our interview methods.

## APPLICATION AND RESULTS

### The Entrepreneur as Information Processor

In this sample we have found individuals that have a special ability to process information. They process information in an algorithmic fashion as

well as in a heuristic one. They are fully at ease in either mode and can switch rapidly from one to the other. They can quickly assimilate pattern-like information and accommodate themselves to new information by trial and error. They tolerate uncertainty and equivocality equally well.

We found that four out of the ten entrepreneurs had this special ability with two boundary spanners and four people whom we call *information catalysts*. We can refer to Von Krogh and others (2000) who also use the term catalyst for their so-called knowledge creation activist, or to Anderson and Jack's (2002) terminology. In their terms, the catalyst acts as both the glue that reinforces interpersonal relationships and the lubricant that facilitates intercommunication throughout the firm. In some organizations, we found that the catalyst had a somewhat meaningless title, such as director of one thing or another, while his actual job was to be wherever he was needed to facilitate the information transformation process. In the organizations we studied they complement the entrepreneur and boundary spanners as the third leg of the firm's vital information processors. The organization's level of information alertness is determined by these three categories of information processors and, to a larger extent, by the information catalyst's propensity to stimulate information sharing. It is important for the organization to recognize this special ability of the information catalyst by reinforcing his role as a rich-information disseminator, and by using his special ability to insert such rich information into product or process innovations and strategy formation to recognize or even generate nascent opportunities (Vaghely *et al.* 2007).

Using results in Table 17.3, the three types of information processors that have this special ability are four entrepreneurs who use this ability to identify opportunities in organizations W, A, P and U; two boundary spanners, one a senior sales and marketing manager and the other a senior purchasing and R&D manager, they interpret and adapt environmental information for the organization, in organizations where there is a high level of boundary spanning activity (W and A); and four information catalysts who provide critical information at the right time and thus provide rich information for decision making in organizations W, A, S and L.

We are interested in the entrepreneur as the opportunity identification-oriented information processor and the social ties he establishes with his organization's high level information processors in order to help him shape his organization's culture and structure. Where the scores related to these factors (culture and structure) are high we should have a strong information processor entrepreneur. Such is the case for W, A, P and U. Boundary spanners arbitrage information between their organization and the environment. Level of boundary spanning activity and recognition of information sources are factors that relate to their activity. Information catalysts share information within the organization; they synthesize this information and provide timely, rich information for input into the decision process. In W and A boundary spanners and information catalysts are linked to the entrepreneur and provide him with rich information; not so for organizations P and U where the entrepreneur does not have such links.

Table 17.3 Results

Likert Scale (1 = none, 5 = extensive)	W	A	S	P	L	R	D	U	C	T
Number of interviews = 65	6	7	5	11	4	11	8	5	4	4
<i>Contextual factors</i>										
Level of influence of organizational structure	4	3	4	4	3	4	3	3	4	4
Level of boundary spanning activity	4	4	3	2	4	2	4	3	3	2
Level of use of rich information	4	4	4	4	4	2	4	3	3	3
Level of information sharing	4	3	4	4	2	2	2	2	2	3
Level of recognition of information sources	4	3	4	4	2	2	2	2	2	3
Level of competition in industry	4	4	3	4	4	4	3	3	2	1
Level of information alert and trust building culture	3	4	3	4	3	3	2	3	2	2
Information catalysts	1 catal.	1 catal.	1 catal.		1 catal.					
<i>Process variables</i>										
Level of algorithmic processing (use of formulae)	4	4	4	4	4	4	4	4	4	4
Level of strong signals processing	5	4	4	4	4	4	4	3	4	4
Level of archived information use	5	3	3	4	3	4	4	3	4	4
Level of use of feedback loops	4	4	4	3	4	3	3	2	3	2
Level of tacit information processing	4	3	4	2	3	2	2	3	3	3
Level of weak signal processing	4	4	2	3	3	2	3	2	3	2
Level of heuristic processing (use of trial and error)	4	3	3	3	4	3	3	3	2	2
Entrepreneur as information processor	Entr.	Entr.		Entr.				Entr.		

In organizations P and U we have found that when processing information, for instance, the entrepreneur with an engineering background, as in P, tends to refer to established scripts and patterns of an algorithmic nature. When the situation called for innovation and opportunity identification, however, this entrepreneur's problem-solving approach rested on experience-based patterns of creative intuition. Opportunities are recognized as patterns with the help of algorithmic information processing. Conversely, for example, a former artist turned entrepreneur, as in U, tends to construct creations by trial and error relying on sensemaking and insight, which are

mostly heuristic types of information processing at the other end of the information processing model. These entrepreneurs use a process of social construction based on the communication of new information (insight) in combination with existing tacit information (intuition). Opportunities are constructed by retrospective sensemaking of new information with the help of heuristic, trial and error information processing. What is missing in P and U is the rich information from the boundary spanners and information catalysts to adapt structure and shape culture.

The information processing results for both organizations (P and U) show low levels of heuristic processing (see shaded areas in Table 17.3). The entrepreneurs are aware of this situation. P's entrepreneur, who processes more on the systematic side, recognizes the need for a more trial and error approach to information processing. The entrepreneur for U accepts that his organization has a low level of tolerance for ambiguity. He feels that one 'artist' is enough in a sophisticated manufacturing environment. Neither P nor U have strong boundary spanners and both organizations lack an information catalyst to compensate for the low level of heuristic information processing.

From the interviews with the entrepreneurs we found that algorithmic information processing helped them to recognize opportunities based on existing problem-solution pairs and heuristic processing helped them to recognize opportunities based on new problem-solution pairs. In the interpretation, construction and enactment of their environment, all four entrepreneurs in organizations W, A, P and U used a heuristic type of information processing for sensemaking and opportunity construction, which they combined with algorithmic pattern processing-related opportunities based on their experience. The strength of the level of information processing in W and A is attributable to the algorithmic-heuristic information processing of their entrepreneurs. This is sustained by the social links that these entrepreneurs have established with their boundary spanners and information catalysts. This strength provided the entrepreneur with the appearance of ease and self-confidence when using information.

### **Information Processing to Identify Opportunities**

We now examine more closely a new result in this area of research, namely, the role of the entrepreneur as a high level information processor.

As noted earlier, we have identified four entrepreneurs as exceptional information processors within this sample. These individuals facilitate information transformation and exchange; they process and synthesize rich information effectively along an implicit algorithmic-heuristic continuum in accordance with our model.

The organizations where we found such an entrepreneur linked to an information catalyst (W and A) outperformed the information processing level of those without such an entrepreneur and catalyst. For comparison

purposes, to help interpretation and discussion and to show differences between firms, Table 17.4 presents the two highest scoring firms of the sample (W and A) and the two lowest scoring firms of the sample (C and T) for information processing.

Interpretation of results regarding the environment or milieu:

- The two best of sample organizations live in symbiosis with their environment, this is not the case for the two worst of sample organizations; witness the perceived level of activity of boundary spanners and the level of use of rich information, which is strategic information made available when required.
- The best of sample have a culture of sharing information, this is not the case for the worst of sample; compare results for the level of recognition of information sources, for a trusting culture and for information sharing.

*Table 17.4* Highest and Lowest Performances Compared

Likert scale (1= none, 5 = extensive)	W	A	C	T
Number of interviews = 21	6	7	4	4
<i>Contextual factors</i>				
Level of influence of organizational structure	4	3	4	4
Level of boundary spanning activity	4	4	3	2
Level of use of rich information	4	4	3	3
Level of information sharing	4	4	2	2
Level of recognition of information sources	4	3	2	3
Level of competition in industry	4	4	2	1
Level of information alert and trust building culture	3	4	2	2
Information catalysts	1 catal.	1 catal.		
<i>Process variables</i>				
Level of algorithmic processing (use of formulae)	4	4	4	4
Level of strong signals processing	5	4	4	4
Level of archived information use	5	3	4	4
Level of use of feedback loops	4	4	3	2
Level of tacit information processing	4	3	3	3
Level of weak signal processing	4	4	3	2
Level of heuristic processing (use of trial and error)	4	3	2	2
Entrepreneur as information processor	Entr.	Entr.		

Interpretation of results regarding information processing:

- The most remarkable result (which is the same for the entire database) is the inability of the worst in sample to process heuristic information and therefore to innovate more or less radically, making them less suited to identify Schumpeterian opportunities (see shaded area in Table 17.4). This is not so for algorithmic, pattern-like information where results are roughly the same across best of sample and worst of sample organizations making one as likely as the other to recognize Kirznerian opportunities.
- The heuristic-strong organizations have a dual advantage for processing information in an algorithmic and heuristic fashion, which becomes a single dimension for the only algorithmic-strong information processor.
- The entrepreneurs in W and A are strong information processors helped by catalysts, but not so for C and T; hence, the low impact of common schemata to develop an information alert and trust building culture within their organizations.
- The level of use of feedback loops is somewhat lower with the worst of group when compared to the two best of sample organizations.

From a marketing point of view, these entrepreneurs are knowledgeable enough about customer needs to recommend alternative and novel product solutions. They are very well apprised of their organization's capabilities to satisfy customers' expectations. They are one of the organization's most influential information processors. With the information catalyst, they often take direct responsibility for the preparation of competitive bids. In a manufacturing environment they are closely associated with R&D or job-cost estimates, so that they have a major impact on the organization's gross margin. What distinguishes them from other entrepreneurs is their use of this particular ability: first, to identify opportunities, second, with the help of boundary spanners, to translate environmental information for the organization and third, with information catalysts, to use rich information in the firm's decision process.

## IMPLICATIONS

The conceptual model of information processing integrates both epistemological (but not ontological) perspectives into a pragmatic 'frame' of the entrepreneur's information processing and opportunity recognition construction mechanisms. From an information perspective entrepreneurs use both approaches in order to identify opportunities; thus, entrepreneurial opportunities can be recognized and constructed at the same time and recognized or constructed individually. Witness the strong results for W and A in both algorithmic and heuristic information processing.

Along the entrepreneur's information processing continuum, the process that comes before and after insight/intuition is heavily dependant on social interaction. Cognitivists and constructionists agree on this. It is this process that transforms information into innovation and finally into entrepreneurial opportunity. Witness the strong links between the entrepreneurs, boundary spanners and information catalysts in W and A supported by outstanding results in their individual activities.

## CONCLUSION

In conclusion, the application of the conceptual framework on information processing to opportunity identification provides an answer to Krueger's question: Entrepreneurs discover and enact opportunities. It also answers Baron and Ward's concern that successful entrepreneurs are more adept at switching between algorithmic and heuristic modes of thought as the need arises.

In the sample, four out of the ten entrepreneurs are strong information processors and are at ease with both types of information treatment. Entrepreneurs for organizations W and A are exemplars of the dynamic combination of heuristic and algorithmic processing. They use problem-solving and sensemaking information applications that they combine with social interaction with their boundary spanners and information catalysts in order to identify opportunities. They combine opportunity construction with opportunity recognition and enactment.

The entrepreneurs for organizations P and U, although well at ease in both types of information processing, problem solving and sensemaking, show more skewed processing favoring algorithmic opportunity identification for P and heuristic opportunity identification for U. What they lack is a peer information processor to help them transform information into opportunities. This is also why P and U tend to underperform W and A in overall information processing.

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# 18 The Role of Adaptation and Learning of Entrepreneurs in Managing Outsourcing Relationships

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## INTRODUCTION

The management of outsourcing relationships is rarely discussed in entrepreneurship literature even though outsourcing is a very important tool for small and medium-sized enterprises (SMEs). Small enterprises cannot be treated as reduced large companies, as they differ not only in size, but also in other characteristics. In SMEs, the entrepreneur is the key person in deciding whether and what to outsource, within the outsourcing process and in the management of the outsourcing relationship. In the literature, the management of the outsourcing relationship is mainly incorporated in the outsourcing process itself, and no special attention is paid to the management. Such an approach neglects the importance of governing, supervising and developing a relationship with the outsourcing provider.

The adaptation of the entrepreneur and the entire enterprise is of crucial importance for a successful outsourcing relationship, because for the enterprise the relationship reflects new cooperation, established networks and changed boundaries. The success of the outsourcing relationship depends on some extent on the entrepreneur's characteristics. In this chapter we divided outsourcing into three parts: on the decision to outsource, on the introduction of outsourcing as a specific process and on the management of the outsourcing relationship. Within different phases of outsourcing, the entrepreneur has to play different roles and provide different skills, which are mainly phase specific. The entrepreneur needs to establish an efficient relationship management that requires the acquisition and development of new capabilities and skills, of learning and adaptation. We also discuss some basic issues relating to the importance of managing outsourcing relationships and the role of entrepreneurial adaptation and learning.

## THE OUTSOURCING CONCEPT

### Characteristics of Outsourcing in SMEs

Small enterprises cannot be treated as reduced large companies, as they differ not only in size, but also in other characteristics, such as independence,

limited resources and lack of knowledge (Carter and Jones-Evans 2000). One of the alternatives to overcome this deficit is to use outsourcing, which is defined as the transfer of certain activities from a company (Greaver 1999) and acquiring the results of these activities from an outsourcing provider, which the enterprise has not carried out before for different reasons (Gilley and Rasheed 2000).

However, outsourcing in small enterprises differs from that in large ones, since small enterprises are more flexible and already specialized in their business field. Small enterprises, in particular, need access to knowledge, technology, capital and other resources. Due to these specifics, outsourcing is not important to small enterprises for redefining and reorganizing their business processes, but mainly to achieve a responsiveness and effectiveness, as well as to allow an improvement of those enterprises' activities, which are already of a high quality (Corbett 2001).

Outsourcing has been defined from different points of view and by many authors (Greaver 1999; Linder *et al.* 2002), but, unfortunately, such definitions usually mean narrowing the concept. Therefore, we use a broader definition, provided by Gilley and Rasheed (2000) to treat outsourcing in a more strategic, holistic way. They defined outsourcing as a procurement of activities that were either originally sourced internally or could have been sourced internally, notwithstanding the decision to go outside (i.e., make or buy). This includes arrangements and concepts that have been termed: internal versus external sourcing, strategic make-or-outsource decisions, contracting out, subcontracting, purchasing, liberalization, make or buy decision, focus and others. They also included activities that were previously not performed in the company, which is especially significant for SMEs.

## **Background Theories in Outsourcing**

In the literature, different theories to explain outsourcing can be found. The most frequently used is the transaction cost theory. The concept of transaction cost analysis is that the costs of a transaction determine what structure is more effective—market or hierarchy. A company should choose the transactional mechanism that is most cost-effective. There are some difficulties though. Basic factors causing transactional difficulties include bounded rationality, opportunistic behavior, small numbers bargaining and information asymmetry (McIvor 2000). These transaction difficulties and associated costs increase when transactions are characterized by specific resources, uncertainty and infrequency. An alternative theory to understand the firm's boundary is the resource-based view. This is based on the understanding that the firm is a unique set of assets and resources that could create competitive advantage. The firm's internal resources are the principal drivers of the firm's profitability and strategic advantage (Penrose 1959; Barney 1991). The third theory to be considered is agency theory, which deals with problems arising from principal-agent relationships. The central issue is how to get the agent (employee, subcontractor, manager) to

act in the best interests of the principal (employer, contractor and owner), when the agent has an informational advantage over the principal and has different interests than the principal. The fourth theory is the evolutionary theory with two approaches on the industry level. First is the organizational ecology (Hannan and Freeman 1989) and the second is evolutionary theory of economic change (Nelson and Winter 1982). Mahnke (2001a) argues that although evolutionary theory does not focus directly on the question of vertical integration, it addresses well the process of disintegration. The evolutionary perspective on managing changes defines outsourcing as an experimental process of shifting from internal to external procurement of activities (Mahnke 2001b). Evolutionary theory provides the core of a process theory of economic organization (Mahnke 2001a). Although, evolutionary theory has not focused directly on 'make or buy' decision, it provides an insight relevant to the outsourcing concept. Evolutionary theorists assume three central elements of evolutionary explanations (Mahnke 2001a): a) bounded rationality of actors; b) units of analysis are path-dependent learning, problem solving and search processes and c) maintenance and development of organizational capability is exposed.

Williamson (1975) positions the sourcing choice between carrying out activities in-house, or under 'hierarchical governance', and outsourcing them and placing them under market governance. Such positioning will be determined by the relative costs of production and transactions. Williamson (1996) also argues that firms and markets are alternative modes of organization, and that the boundary of the firm needs to be derived, rather than taken as a given. In a similar vein, the property rights approach to the theory of the firm suggests that a merger between firms with highly complementary assets is value enhancing, and a merger between firms with independent assets is value reducing (Hart 1995).

Within his survey of the outsourcing model and management, Arnold (2000) has established that transaction costs and core capabilities supplement each other. A great number of survey results suggest that outsourcing should be considered as a competitive strategy of an enterprise, substantially influencing the improvement of its performance (Deavers 1997). Some other authors argue that decisions to outsource are made to improve incentives within the firm (Williamson 1988; Chalos and Sung 1998). In those cases managerial incentive intensity becomes the primary motivation for outsourcing, as managerial and entrepreneurial efforts could focus on the maximization of core competencies only when they are not occupied by noncore tasks (Williamson 1988; Holmstrom and Milgrom 1991; Chalos and Sung 1998). However, managers and entrepreneurs have to manage the relationship with the outsourcing provider, and that requires specific knowledge and adaptation to the new or adjusted mode of work.

A major influence impacting on the outsourcing of products and/or services is the consideration of scale and costs (Finlay and King 1999). Others

argue that the growth of 'noncore competencies' is increasingly being outsourced (Chalos 1994; Branda 1999). Lewis and Sappington (1991) have examined the incentives for outsourcing and argue that outsourcing is a trade-off between lower production costs (provided the supplier possesses lower-cost technology) and higher monitoring costs. During the 1990s, scholars and practitioners argued that global competitive pressures had positioned large companies to adopt greater market discipline, reducing their product range and loosening their vertical links in the production process (Grant 1995; Domberger 1998). As a result, corporations have divested 'peripheral or supplementary businesses to focus upon their core business and, in turn, have vertically de-integrated by increasingly outsourcing their requirements for components and business services' (Grant 1995: 160). Research shows that, even in the late 1990s, cost-savings and the freedom to focus upon core business were still major reasons for outsourcing (Currie and Willcocks 1997; National Computing Centre 1999). Scholars adopting strategic perspectives and practitioners adopting conventional wisdom argue that to preserve core competencies, core activities should stay in-house, whilst noncore activities can be outsourced (Prahalad and Hamel 1990; Bettis *et al.* 1992; Lacity *et al.* 1995; Quinn and Hilmer 1994; Rothery and Robertson 1995; Kelley 1995; Peisch 1995; Mullin 1996). A company's core competencies are essentially a bundle of that company's skills and resources, such as product or service design, technology creation, customer service and logistics (Prahalad and Hamel 1990). Outsourcing decisions should be driven by the nature of the sourcing contracts, the contractual and informal relationships between purchaser and supplier, the use of market opportunities for competitive advantage and the successful management of contracts (Willcocks and Fitzgerald 1993, 1994).

Some scholars researched outsourcing from the resource-based point of view. Bretherton and Chaston (2005) analyzed the impact of resources dependence on SMEs' strategy. Hurmerinta-Peltomaki and Nummela (2004) studied the impact of hiring expert services in SMEs. Wang and Lo (2004) studied the performance of enterprises from the resource-based view. More surveys are provided on the theoretical, conceptual level of analysis. On the conceptual level, Akhter and Robles (2006) analyzed the connection between the improvement of companies' internal competencies and managing environmental uncertainty.

DiRomualdo and Gurbaxani (1998) argue that firms use outsourcing to satisfy one or more of three strategic objects, namely, strategic improvement (cost reduction and enhancement of efficiency), strategic business impact (improving contribution to companies' performance within existing lines of business) or strategic market exploitation (focus on leveraging technology-related assets). Those issues turn us back to the resource-based view and to the improvement of core competencies.

Although the strategic literature suggests that the reason for outsourcing has changed primarily from cost disciplines to strategic repositioning,

core-competence enhancement, greater service integration and/or higher value creation (Quinn 1999), there is still evidence of cost-driven reasons, e.g., the auto industry (Chalos and Sung 1998). Other authors argue that decisions to outsource are made to improve incentives within the firm (Williamson 1988; Chalos and Sung 1998). In those cases managerial incentive intensity becomes the primary motivation for outsourcing, as managerial efforts could be focused on the maximization of core competencies only when they are not occupied by noncore tasks (Williamson 1988; Holmstrom and Miligrom 1991; Chalos and Sung 1998). A study conducted by Price Waterhouse Coopers (1999) has established that outsourcing has moved markedly from attending to a single function more efficiently, to transformation of a whole process to attain greater shareholder value across the enterprise. In effect, emphasis is shifting from outsourcing parts, facilities and components towards outsourcing intellectual-based systems, exemplified by customer response handling, procurement and management (Quinn 1999) to achieve greater quality, flexibility and innovativeness.

The emerging view from the literature is that service quality improvement, the need for strategic flexibility, a focus on core competencies and the innovativeness are now becoming predominant concerns for sourcing decisions (Van Laarhoven *et al.* 2000; Peters *et al.* 1998).

### **Outsourcing Models and the Role of the Entrepreneur**

Models of the decision whether to outsource or not are the first phase in deciding whether outsourcing should be part of an enterprise's strategy or not. During this phase, if the company decides to outsource, then further models become topical. Most outsourcing literature refers only to the outsourcing process. In particular, multistage models can be found, which are based on the progressive chronological process of assessing the decision in favor of outsourcing, and on the selection of one or more outsourcing providers. Most of the authors (Welch and Nayak 1992; Probert 1996; Sink and Langley 1997; Bagchi and Virum 1998; Vining and Globerman 1999; McIvor 2000; Fill and Visser 2000; Tayles and Drury 2001; Momme and Hvolby 2002) include four or five phases in the outsourcing process. The models of managing outsourcing relationships and measuring the effects of outsourcing are not frequently a topic in the literature. Particularly, the management of the outsourcing relationship with the outsourcing provider is rarely a subject of analysis.

As entrepreneurs represent a primary, principal and fundamental source of all production factors in an enterprise (Brush *et al.* 2001), they are also a key factor when making a decision to outsource. As such, an entrepreneur's involvement is essential to the following three processes of the outsourcing concept: (a) deciding to outsource, (b) during the outsourcing process and (c) in the management of the outsourcing relationship. An entrepreneur's decision to outsource represents the first stage

of an enterprise's outsourcing process, and this process becomes topical only when the entrepreneur makes this decision. As the entrepreneur is the main decision-maker in the outsourcing process, it cannot be studied without first studying his characteristics and intentions.

## MANAGEMENT OF OUTSOURCING RELATIONSHIPS

According to Sharpe (1997), outsourcing is a management tool that affects the competitiveness of an enterprise in such a way that its business strategies are based on core capabilities, while noncore activities are outsourced. We suggest classifying outsourcing into three main parts, each with its own specifics and characteristics: (a) the decision to outsource or not, (b) the outsourcing process and (c) managing the outsourcing relationship.

Managing the outsourcing relationship is incorporated mostly in the outsourcing process itself, and no special attention is paid to it, although it is crucial for the effectiveness of the outsourcing relationship. Such an approach neglects the importance of governing, supervising and developing the relationship with the outsourcing provider, particularly because the outsourcing literature relates mainly to large companies. A considerable number of SMEs have had negative experiences with outsourcing because no relationship management had been established, and this is an area in which a great deal of effort should be applied during the outsourcing process (Embelton and Wright 1998). Large enterprises have tended, rather, to establish teams of employees who govern the outsourcing process.

In the management of outsourcing relationships there are several issues that need special attention. Power and others (2006) classify them into five major areas: work administration, communication management, knowledge management, personnel management and financial management. Work administration ensures that the work undertaken is done and involves tracking work assignments, deliverables and resource consumption, and ensuring that the timeline is reached (Power *et al.* 2006). Communication management is especially crucial in the early stages of the relationship when partners do not know each other. However, managers and entrepreneurs often believe that when the contract is signed, their work is done. In time, communication is simplified as the partners get to know each other. Training and education (Power *et al.* 2006) of the leader and involved employees is an inevitable part of the outsourcing relationship because cooperation with the other company provides different ways of doing things; their cultures, forms of communication and other issues are different. During outsourcing the entrepreneur is constrained to gain new knowledge and experiences. Knowledge management involves sharing best practices, ideas and innovations, and improving processes with the outsourcing provider. This involves establishing new routines (Power *et al.* 2006). Personnel management involves managing the employees involved

in the outsourcing process and, when appropriate, establishing different teams (e.g., a governance team, a financial team). Financial management is the area in which monitoring and controlling are crucial, particularly in the early stages of cooperation and particularly if performance standards have not been implemented as agreed.

### **The Role of the Entrepreneur in Managing Outsourcing Relationships**

In managing an outsourcing relationship, the entrepreneur has to play different roles and perform tasks that should cover all the aforementioned areas. Large companies usually form a special 'board of directors' (Greaver 1999) responsible for managing the relationship. The board often comprises a relationship manager, account manager and oversight manager (Greaver 1999). In SMEs, the entrepreneur does not have enough resources to form a similar board. Therefore, he is mainly responsible for all the 'board's' roles. Consequently, for a successful outsourcing relationship he needs to manage not only operational tasks but also strategic tasks, which may become very demanding.

The role of an entrepreneur in the outsourcing relationship of an SME differs from that of a large company's outsourcing manager, because entrepreneurs cannot afford to be occupied with outsourcing on a full-time basis. In SMEs, entrepreneurs establish a simple organizational structure; there is no formal reporting system, they are ready to take a risk, they do not plan sufficiently and they have no strategic management (Rebernik 1999). Moreover, entrepreneurs make most of the decisions themselves, and, in many cases, single-handedly manage the enterprise at all management levels.

An efficient outsourcing relationship depends on many factors, of which the most important are openness, teamwork, acquaintance with the current situation on productivity and profitability, understanding mutual needs and advantages, and sharing risks (Rothery and Robertson 1996). All those issues require the entrepreneur's adaptation to new ways of acting and working. The entrepreneur needs to establish an efficient relationship management that requires the acquisition of new capabilities, learning and adapting. It must be borne in mind that outsourcing partners can behave opportunistically, be bounded rational, tend to reduce risks, are exposed to information asymmetry and own asset-specific resources (Kohtamäki *et al.* 2006).

Of the many skills an entrepreneur has to master, business management skills and personal entrepreneurial skills (Hisrich and Peters 2002) are the most important in building and managing an outsourcing relationship. Only appropriate management will enable a successful outsourcing relationship. The success of outsourcing could be measured by financial and nonfinancial factors. Financial factors can include measurements of productivity, quality, timeliness, creativity, outputs and financial (Greaver

1999). Most of the nonfinancial factors are bound up with the entrepreneur and could involve the following: commitment of the entrepreneur, development of the outsourcing plan, use of outsourcing consulting, dedication to the best internal resources, recognition of the impact of cultural differences, the establishment of a formal outsourcing management, learning (Brown and Wilson 2005), openness and the appropriate use of acquired experiences and knowledge.

### **The Role of Adaptation and Learning**

As stated already, in small and medium-sized companies the entrepreneur is the main decision-maker. His decisions are based mainly on his attitudes towards risk and on his growth aspirations. From a practical point of view, outsourcing is a tool to be employed when a company wants to grow—either in terms of improving its performance or in focusing on core competencies that will allow the company to grow into the next phase. The importance of an entrepreneur's willingness to grow is likely to be relatively greater in a small company than in a large firm. But not all entrepreneurs are willing to grow their business, since they may expect some consequences of growth to be negative and in conflict with their goals (Kolvereid 1992; Storey 1994). According to Shane and others (2003), the attributes of people making decisions about the entrepreneurial process influence the decisions they make. All human actions are the result of motivational and cognitive factors, on the one hand, and the result of external factors on the other hand. Motivational factors include personality traits such as the need for achievement, locus of control, desire for independence, goal setting, etc.; cognitive factors include ability, intelligence and skills. An individual's personal perceptions and judgments about existing opportunities, about the acceptance of entrepreneurial behavior in society and about her/his skills, are often formed on the basis of shared norms and values in society; they are often biased, but nevertheless influence an individual's entrepreneurial plans and actions.

The logic of the model of occupational choice (Wennekers and Thurik 1999; Wennekers *et al.* 2002) brings us to the conclusion that an entrepreneur's decision to grow via outsourcing depends on his opportunity costs. The benefits of exploiting the opportunity should outweigh the opportunity costs, both in terms of wages, time and effort expended, and as a reward for alertness, risk bearing and uncertainty (Casson 1982; Kirzner 1997; Venkatraman 1997; Shane 2003). Entrepreneurs have certain expectations regarding the growth of their companies in the future. Various factors influence these expectations for future growth. A higher degree of motivation can be expected in those environments where entrepreneurship is socially legitimate and where people are encouraged to explore business opportunities (Tominc and Rebernik 2007). Not every entrepreneur is willing to expand his/her firm. In the early 1980s, Ambrose (1985: 3) pointed out:

The expectations of the entrepreneurial class must be modified downward greatly. The belief that each and every member of the class is highly motivated is naïve . . . only about one third of the owners and managers of businesses can be truly classified under the full definitional expectations as entrepreneurs. That leaves two thirds with a shortfall of both commitment and motivation. That also requires that one third of highly motivated entrepreneurs accomplish what are normal expectations of the full class structure of the entrepreneurs.

An entrepreneur's motivations are strongly connected with her/his goals and explain why he or she chooses to move in a certain direction. Not all entrepreneurs have the goal to grow (with or without outsourcing) since they may expect some consequences of growth to be negative and contrary to their goals.

When a company outsources it has to adapt at three levels: company, entrepreneur and employees. This adaptation takes place with the help of learning, i.e., acquisition of the new knowledge of the persons who are able and prepared to use acquired knowledge in decision making and influencing other organizations (Miller 1996). This learning results in modified behavior (MacDonald 1995) or, to put it differently, the result of learning is the adaptation. Even more, in the process of adaptation the entrepreneur also has to unlearn many previously set rules and ways of doing business.

There is an abundance of literature on organizational learning (see, e.g., Hedberg 1984; Cummings 2003; Argyris 2004; Esterby-Smith and Lyles 2005), and many concepts and theories of learning exist. Google returns some 350 million hits on the term 'learning', and some fifty theories of learning are to be found. For the purpose of this chapter the definition by Simon (1991) that 'an organization learns in only two ways: a) by the learning of its members or b) by ingesting new members who have knowledge the organization didn't previously have' may prove useful. Looking at organizational learning in that way and understanding outsourcing as a learning process, one can expect a company to outsource if the entrepreneur is willing and able to learn, and capable of delegating some business tasks to outsourcing partners. When current knowledge and required new knowledge are closely related, learning is not difficult, but when there is a wide gap between current knowledge and new knowledge, individuals and organizations have to invest in it. An important part of investment is unlearning obsolete knowledge and values that impede our ability to absorb new information and exploit it.

Any understanding involves both learning new knowledge and discarding obsolete and/or misleading knowledge. Sometimes the unlearning may be as important as the acquisition of new knowledge (Hedberg 1984; Sinkula 2002). Conceptual understanding of organizations as information processing systems draws our attention to experiential knowledge that is stored in organizational memory (Christensen *et al.* 2004). Much of the

experiential knowledge collected in the 'pre-outsourcing period' may have become obsolete and should be disposed of because it has become useless and impedes the accumulation of new knowledge and the creation of sustainable relationships. The presence of certain knowledge may constrain learning or even encourage ineffective learning (Cummings 2003). It has been suggested that the proponents of experiential knowledge may be the worst at unlearning, as the accumulation of such experiential knowledge requires considerable investment of time and resources. Knowles and Saxberg (1988) also suggest that those who have invested heavily in their current knowledge may not be willing to unlearn. It would stand to reason that long-held views and knowledge acquired and reinforced over a long period may be considered more difficult to unlearn than recently acquired knowledge, to which the individual has less of an emotional attachment. This viewpoint contrasts with that which relates to absorptive capacity, which claims that without an appropriate knowledge base, new knowledge cannot be absorbed. Nonetheless, regardless of whether previously acquired knowledge helps unlearning or hinders it, previously acquired knowledge is recognized as having some influence on unlearning. Tacit knowledge, in particular, raises issues in relation to unlearning due to the fact that it is less easily identified or articulated, meaning it may be less easily challenged as part of the unlearning process (Becker 2006).

Similarly, as a firm must 'disorganize' some part of its knowledge store (Holan *et al.* 2004), disorganization must take place also at individual levels. Cohen and Levinthal (1990) coined the term 'absorptive capacity' to describe the observation that prior related knowledge enables recognition of the value of new information, its assimilation and its application to commercial needs. They emphasized that 'the ability to assimilate information is a function of the richness of the pre-existing knowledge structure: learning is cumulative, and learning performance is greatest when the object of learning is related to what is already known' (Cohen and Levinthal 1990). According to that, learning is more difficult when individuals and organizations are faced with an unfamiliar situation.

According to Johanson and Vahlne (1977) knowledge is stored in the decision-making system and when decision-makers leave the company that knowledge is lost. In the case of outsourcing in SMEs the decision-maker stays in the company, but, along with the activity previously performed within the company, some of the knowledge is gone. The internal knowledge is replaced by external knowledge over which the entrepreneur has no power except that designated by the outsourcing contract.

An important learning objective is to prevent the outsourcing partner from possible opportunistic behavior. Namely, the success of an outsourcing relationship depends on cooperation among participants, who must share their business information; without this sharing cooperation will not be possible. In this process some attributes, such as bounded rationality, information asymmetry and opportunistic behavior, manifest. Viewing

cooperation as information sharing implies the possibility of both moral hazard and adverse selection. Cooperation needs private information and a requisite minimum of shared, common, public information that establishes a platform for cooperation. In the case of cooperative participation, every participant will also make his private information available. Some participants, though, may behave in an opportunistic way and put less private information on the table than the others do; they may not own this information or they may be only fictitious team members, or tend to hide their private information because they expect to benefit from it later in the process. In business relationships it is impossible to foresee every relevant possibility or incident that could happen during a relationship. It is reasonable to be prepared for possible opportunistic behavior. This does not mean that participants in outsourcing have completely different goals, but that their interests in some circumstances may be contradictory. Because of information asymmetry, and the possible worst-case scenario of the outsourcing contract being a failure, one must admit not only the possible opportunistic behavior of participants, but also any unintentional harmful actions arising from bounded rationality. Therefore, some safeguards to prevent the outsourcing partner from acting opportunistically have to be set in advance (Rebernik and Bradač 2006).

## CONCLUSIONS

Small and medium-sized companies differ from large companies in several characteristics besides scale: These include limited resources, a lack of knowledge, informal organization and others. Small companies, especially, are confronted by scarce resources that could be partially compensated with by using different tools, among which outsourcing is becoming more and more attractive. However, outsourcing in SMEs differs from that in large companies. The first reason is that the main actor in SMEs is the entrepreneur, who plays a key role in making all the decisions, including outsourcing.

The outsourcing concept could be divided into three main parts: on the decision to outsource, on the introduction of outsourcing as a specific process and on the management of the outsourcing relationship. The entrepreneur is the essential person in all three parts of the outsourcing. Because the entrepreneur is the main decision-maker the outsourcing process cannot be studied without getting an insight into the entrepreneur's characteristics and intentions. Within different phases of outsourcing, the entrepreneur has to play different roles and provide different skills, which are mainly phase specific. Most of the literature in the field deals with the outsourcing process, with scant attention paid to the management of the outsourcing relationship, even though it is crucial for effective outsourcing. Entrepreneurs have to manage all aspects of the outsourcing relationship with the outsourcing provider, and this requires specific knowledge and adaptation

to the new or adjusted way of work. A considerable number of SMEs have had negative experiences outsourcing, particularly in cases where no relationship management has been in force.

Recognizing the required skills and characteristics in all three phases of outsourcing is important in successfully implementing and managing the outsourcing relationship. In the first phase of outsourcing, the decision to outsource, the most influential factor is the growth ambitions of the entrepreneur. If the entrepreneur sees outsourcing as an opportunity for growth, influential factors are his competences, knowledge and motivation to exploit it. In this phase the person's entrepreneurial attributes and growth aspirations are most important. In the introduction phase managerial skills are more necessary, although entrepreneurial skills are still very important. In this phase the entrepreneur has to rethink his enterprise and adapt the company and himself to the new way of doing business. His role is to prepare the company for a new relationship, to choose the right outsourcing partner, to establish the relationship and legally accomplish mutual cooperation. The entrepreneur must also build governance structures to protect against possible opportunistic behavior by the outsourcing provider. The success of this phase depends mainly on the entrepreneur's knowledge and experiences.

The introduction phase is followed by implementation and management of the outsourcing relationship. An efficient outsourcing relationship depends on many factors, among which the most important are openness, teamwork, understanding mutual needs and advantages, sharing risks and commitment. In the case of outsourcing in SMEs the decision-maker stays in the company, but with the activity previously performed within the company some of the knowledge is gone. Internal knowledge is replaced by external knowledge over which the entrepreneur has no power except that designated by the outsourcing contract. The new relationship is based on the legally agreed upon performance and other terms and conditions. However, during the time partners begin to build their relationship on trust, what is also important is the duration of the cooperation. To achieve the best output performance interdependence requires the entrepreneur to learn about the partner's culture and the way he operates and communicates. All those issues require continuous learning and adaptation of the entrepreneur to new ways of thinking, acting and working.

The results imply that the entrepreneur as a key actor in a company should have all necessary managing skills, including expertise in outsourcing management. However, managing outsourcing is much more than the day-to-day running of a business—it is managing the relationships with providers. The entrepreneur has to be capable of achieving synergy of outsourced and internal activities. Therefore, the entrepreneur basically needs two types of skills and competencies: operational and social. Social skills and competencies first of all include communication, teamwork and acceptance of the outsourcing provider's culture. Operational skills include

knowledge on searching potential partners, their evaluating, negotiating and selecting. The second set of skills is based on more explicit knowledge and easier to achieve than the social skills. Therefore, the entrepreneur should pay more attention to social competencies and try to develop them by attending different workshops and trainings in social skills development. They should be developed before and during the relationship with outsourcing partners to successfully run the relationship and to develop it into a successful partnership.

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