The dynamics of intended, emergent and realized strategies in SMEs: A longitudinal study

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Abstract

The paper studies the nature of strategy process and its impact on firm performance using a longitudinal study of small and medium-sized enterprises (SMEs) in Austria. In two surveys in 1995 and 2003 data on the strategic behavior and performance of the same group of 91 firms was gathered. In contrast to other studies the strategy-making mode was not measured by a self-assessment of the managers related to questions about the strategy process but by the analysis of strategic intentions and corresponding actions in both periods of observation in the market, product and quality domain. Three strategy-making modes were defined: deliberate, emergent and reactive. About one third of the firms employ an emergent strategy-making mode whereas these firms usually develop their strategies deliberately, too. The analysis revealed no evidence that specific forms of planning, the use of methods or excessive control constraints the emergence of strategies. Neither ownership, participation, nor the existence of a supervisory board had an impact on the strategy-making mode. However, emergent strategists assess the corporate goal growth and technological leadership strategies less important as deliberate strategists. Thus, an attitude towards growth is obviously less compatible with an open but at the same time rather passive attitude towards new upcoming opportunities associated with the emergent strategy-making mode. Firms employing an emergent strategy-making mode were associated with higher employment growth in the low-tech industries while in medium and medium-high-tech-industries both strategy-making modes performed equally well.

Keywords:
Small and medium-sized enterprises, performance, strategy-making mode, strategy process, emergent strategy, technological environmental, longitudinal study

Introduction

New concepts and models have elaborated our understanding of the strategy process in firms surmounting the view that this is a purely rational, intentional and goal-directed process. The definition of deliberate and emergent strategies, for instance, have extended the classical understanding of strategy formulation and implementation so as to give a better insight into the reality of strategy formation (Mintzberg and Waters 1985). Numerous studies have analyzed the strategy process to investigate the nature of successful strategy formulation and implementation which can lead to superior firm performance in different contexts. These studies focus on the influence of formal planning (e.g. Bracker and Pearson 1986), the role of the top management characteristics (e.g. Wood and Joyce 2003), the decision making process (Eisenhardt and Zbaracki 1992), interpretation of the environment (e.g. Beal 2000), the design of control systems (e.g. Conant et al. 1990), the influence of the environment (e.g. Brews and Hunt 1999) and the relationship between strategy process and content (e.g. Segev 1987).

Only a few studies investigated different strategy-making modes based on a broad sample of firms (Hart and Banbury 1992, Lumpkin and Dess 1995, Covin and Slevin 1997). The empirical evidence for the emergent nature of strategy has so far mostly been analyzed by case studies or is of anecdotal evidence (Burgelman 1983, Mintzberg 1994, Brown and Eisenhardt 1998). Empirical studies investigating the nature of strategy process over a longer period of time are rare, despite the repeated emphasis of the importance of such a perspective (e.g. Venkatraman 1989, Parnell 1996, Gibbons and O'Connor 2005). McKiernan and Morris (1994) and Gibson and Cassar (2004) are amongst those few authors that involve longitudinal surveys of strategic processes in small and medium-sized enterprises (SMEs) and their impact on performance. They, however, focus on the role of formal strategic planning.

In this paper, the dynamics of strategy formation are to be examined based on a longitudinal study on SMEs. The study involves an analysis of strategic behavior and firm performance in 91 Austrian SMEs from 1992 to 2002 and draws upon a sample of manufacturing companies consisting of independent as well as dependent (e.g. subsidiary) firms with 20 to 500 employees. These firms were interviewed in 1995 and again in 2003 with the same standardized questionnaire covering questions on strategy content and process. SMEs are an interesting research subject as they embrace a broad scope of strategic behavior ranging from rational strategic planning, entrepreneurial-driven management to non-planning at all.

The study is based on different strategy-making modes (Mintzberg 1991, Idenburg 1993) and addresses the specifics of smaller firms. In particular, the concept of emergent and deliberate strategies is used to investigate the nature of strategy formation of SMEs over a longer time period. Therefore, different strategies in the field of market expansion, product innovation and product quality, hence the strategy content, are separated. These three strategies should allow to explore different strategy-making modes related to some major strategies which gained importance in the economy in many highly industrialized countries and in small open economies such as Austria in the last decade (Spanos et al. 2001, Sun and Chen 2002, Armbruster et al. 2005). The dynamics of strategy formation is operationalized by two measures, the strategic actions and strategic intentions aiming to get a more accurate measures as suggested by Lyon et al. (2000). These two measures are used to classify the firms according to three strategy-making modes. We thus go beyond traditional measurement techniques as applied most commonly in literature which assess the strategy-making directly by a self-assessment of the managers (e.g.

Segev 1987, Hart and Banbury 1994, Slevin and Covin 1997, Gibbons and O'Connor 2005). Thereby, we aim also to link more closely strategy process and content research and try to understand how different strategies are formed and implemented. Hence, we aim to contribute to the understanding of the dynamics between planning and emergence.

Based on the conceptualization of different strategy-making modes we are interested in three specific questions. Firstly, what is the role and nature of different strategy-making modes in SMEs? Secondly, to what extent does the strategy process and context factors are associated with different strategy-making modes? Thirdly, what is the link between the strategy-making mode and performance considering different environmental contexts?

The paper is organized as follows. In the next section, we develop hypotheses and explain the measurement of the strategic variables and performance of the SMEs. We then present the results of the statistical analysis and conclude with a discussion of our main findings.

Theory

Strategy process research has provided many frameworks and taxonomies which describe different strategy-making modes and its relationship to the strategy content, organizational structure, environment and performance (e.g. Mintzberg 1973, Chaffee 1985, Hart 1992, Idenburg 1993). Mintzberg (1973) described the strategy-making process as entrepreneurial, adaptive or planning. While the entrepreneurial model is characterized by a permanent search for new opportunities where the power is centralized in the person of the entrepreneur, in the adaptive model the managers try for avoid uncertainty by a rather searching for reactive solutions to existing problems. In the planning mode analyses are dominating the strategy-making process.

Later on, Mintzberg and Waters (1985) defined the concept of emergent strategy which serves also as starting point for this study. According to them strategy is consistency in behavior, whether or not it is intended. They define emergent strategies as a pattern in a stream of actions (Mintzberg and Waters 1985). In contrast, according to this conception, deliberate strategies are strategies where intentions that existed previously were realized (Mintzberg 1987). Deliberate and emergent strategies are independent of each other as intended strategies might go unrealized while emergent strategies appear without preconception. Realized strategies are at the end the result of intended and emergent strategies and Mintzberg suggests that only 10–30 percent of intended strategies is realized. Mintzberg and Waters (1985) separate various kinds of strategies on a scale ranging from rather deliberate to mostly emergent. Thereby they also distinguish entrepreneurial strategies, which they characterize as intentions existing in the personal vision of the leader. Entrepreneurial strategies are relatively deliberate but can emerge too. In contrast, planned strategies are clearly formulated intentions that are articulated by the top managers and implemented by formal controls and are so highly deliberate.

With their holistic framework for the strategy process Chakravarthy and White (2001) are separating also between decisions and actions as the core elements of any strategy process, which both culminate in a long sequence to a strategy. Moreover, the work of Burgelman (1983) and his notion of induced and autonomous change is related to this idea stressing specifically on the role of middle mangers. He delivered evidence that implementation somehow precedes strategy formulation which is considered as formal decision making by the top management. The work of Nonaka (1988) who distinguishes between deductive top-down and inductive bottom-up driven strategy formation, too, is similar to Mintzberg's distinction of intended and emergent strategies.

The work of Quinn (1980) on 'logical incrementalism' and Weick (1985) as well as recent studies which understand strategy as a form of social practice (Whittington, 1996, Hendry, 2000) are belonging also to the stream of research which is studying the intermingling of actions and intentions.

The quoted scholars criticized all more or less the basic assumption of rational planning, too, that it is possible to divide formulation and implementation in a linear sequence. According to them, strategic planning is in particular a sense-making event that helps to rationalize past actions and decisions. Thus, organizations might often formulate a strategy after they have implemented it, strategic planning helps to discern a pattern in past actions and articulate it as a strategy. Mintzberg (1994) and others criticized traditional strategic planning with its use of extensive analytical methods and techniques which harm strategic thinking, synthesizing and creative problem-solving. Thus, strategic planning could become bureaucratic and might force managers to stick on their strategies, and thus constrains to respond adequately and quickly to upcoming promising opportunities or events. This issue was raised in the innovation literature, too (e.g. Christiansen 1997).

Hart (1992) is proposing an integrative framework of strategy-making that includes key dimensions, contingencies and performance implications. He proposes the command, symbolic, rational, transactive and generative forms of strategy making. Hart (1992) describes the command strategy-making process where the vision of the entrepreneur provides the direction for the firm's development, and employees are regarded as followers which carry out these commands. The opposite is described as generative mode of strategy-making, here the individual employees enjoy much freedom and are encouraged to take risks. With the symbolic mode Hart (1992) defines strategy-making which rests strongly on organizational culture and values. Finally, the rational mode is associated with a high emphasis on centralized strategic planning.

Another strategy-making mode was defined by Lumpkin and Dess (1995) who combined the command and symbolic modes of strategy-making which they frame as simplistic mode. This is a narrowly constructed decision process around the top manager or entrepreneur that focuses on a specific internal strength or external opportunity. Verreynne (2006) is arguing that Lumpkin and Dess's model of the simplistic mode is highly appropriate for small firms.

Even though the different strategy-making modes can be interpreted as alternative approaches, most authors (Hart 1992, Mintzberg 1973, Verreynne 2006) are arguing that different strategy-making modes can be used at the same time by a firm. However, every strategy-making mode requires a certain level of competencies (Hart and Banbury 1994). Hart and Banbury (1994) studied the performance impacts of adherence to one, two, three, four, or all five strategy-making modes based on Hart's (1992) taxonomy. A firm was defined as having competence in a given mode if its value fell into the upper-one-third of the sample distribution for the mode in question. They delivered evidence that companies which had the competency to integrate different strategy-making modes performed better with respect to product development and employee satisfaction, however, they found no clear association with economic performance. Based on the arguments provided we propose the following hypothesis:

Hypothesis 1: SMEs are performing different strategy-making modes simultaneously, whereas in the field of market expansion and product innovation the emergent strategy-making mode is more common than in the product quality domain.

Hypothesis 2: SMEs which display a deliberate or emergent strategy-making mode are associated with higher turnover and employment growth rate as SMEs which display a reactive strategy-making mode, not considering the environmental context.

The nature of decision making as core question of strategy process research has been studied by many scholars, too. This research uses often the rational or boundedly-rational perspective. Eisenhardt (19989), for instance, found that the comprehensiveness and extent of analysis had a positive impact on the speed and effectiveness of decision making. Langley (1990) revealed evidence that formal strategic analysis support the convergence towards actions.

Miles and Snow's (1978) strategic typology dealing with the orientation towards product-market development is also addressing the strategy process. Their work is one of the few approaches, which combines strategy dynamics and the underlying process and can be seen as a comprehensive approach to the organization-environment adaptation cycle. Miles and Snow (1978) distinguish between four types: prospectors, analyzers, defender and reactor and align these four types with underlying organizational processes. The prospector, which aims to be the first in new product and market areas, is most compatible with the entrepreneurial mode of Mintzberg (Burgelman 1983). In contrast, the reactor responds only when forces to by environmental pressure while the defender is a rather mid-range strategic type which are searching for stable niches which they then strive to maintain. With their ambition to offer higher quality or lower prices they rather protect their domain and do not to move aggressively (Segev 1987). Finally, the analyzer is seen as a hybrid between defender and prospector, they are adopting early new technologies and opportunities but at the same time try to maintain a stable line of products. They also regularly monitor the action of their competitors aiming to imitate strategies or innovations.

Some studies have been investigated and developed models of strategy formation in small firms (e.g. Cooper 1979, Chicha and Julien 1981, Bhide 1994, Hanlon and Scott 1995). Harris et al. (2000) found that strategy-making in small firm is emergent, adaptive and based on personal relationships. Visions play also an important role for small firms, a model which corresponds to Hart's command strategy-making mode. However, Mintzberg (1991, 609) sees a drawback in the inability of the visionary entrepreneur to elaborate a strategy formation process insofar as this kind of strategy is "locked in a single brain". Empirical literature, too (e.g. Gibb and Scott 1985), stresses the importance of visions and leadership for strategic behavior in entrepreneurial firms.

Moreover, research in small firms showed the strategies are often informal, e.g. non-written, and intuitively derived. Studies about the nature of strategy formation in SMEs (e.g. Gibb and Scott 1985) illustrate that strategy formulation and implementation are not as formal as in larger firms. In this line of arguments, we assume as well that the formulation of a strategic plan is not a precondition for strategic thinking and acting by SMEs. Studies about strategic planning in SMEs show that formal strategic planning in SMEs is, on the whole, not as widely diffused and popular as in large firms, which is mainly because of lack of managerial expertise and time. Some studies demonstrated that entrepreneurial firms such as start-ups and high-tech firms plan more than other SMEs (Bhide 1994). In contrast, Berry (1998) delivered evidence that in the early stages of the company's life strategic planning does not have to be a highly formalized process. There is also some evidence that younger firms perform less comprehensive planning (Risseeuw and Masurel 1994). With respect to decision making Brouthers et al. (1998) found that small firm

managers tend to be rational in information gathering but rely on intuition with respect to strategic decision making. In the context of decision-making in small, entrepreneurial firms, Mintzberg and Lampel (199) propose intuition as the driver for decisions and actions, too.

Thus, emergent strategies should play an important role for SMEs. However, the nature of emergent strategies might be different interpreted in small versus large firms: In small firms emergent strategy formation is strongly related to the personality of the owner, who, in turn, is able to quickly capture new opportunities in dynamic environments. This could be also interpreted as responsive actions by the top managers in the course of 'logical incrementalism' (Quinn 1980). In contrast, the literature about strategic development in large firms stresses traditionally the role of middle managers as agenda setters and facilitators for the emergence of strategies (e.g. Floyd and Wooldridge 1997). Based on the Bower's (1970) work about the interplay of decisions and actions, Burgelman (1983) stressed the importance and the interactions of functional, middle and top managers in forming strategy. Andersen (2004) delivers empirical evidence about the role of decentralized decision making by middle managers in international firms, who are able to take new initiatives without permission of the top management team. He shows a positive impact of decentralized strategy-making on the performance in large firms.

The probably oldest research question addressed within the strategy research literature is the relationship between planning and performance. In general, like for large firms, the evidence about performance effects of strategic planning on SMEs is inconclusive (Ackelsberg and Arlow 1985, Bracker and Pearson 1986, Shrader et al. 1989, Waalewijin and Segaar 1993, Gibson and Cassar 2005). In particular, recent studies reported also that strategic planning is effective even in dynamic environments (Miller and Cardinal 1994).

More interesting for this paper are the studies on strategy-making and the role for emergent strategies. The study of Covin and Slevin (1997) explicitly deals with emergent and deliberate strategies which are measured on a scale which allows to distinguish strategy-making on a continuum between formal, planned strategy formation on the one hand, and informal, emergent strategy formation on the other hand. They measure strategy formation with a five-item, 7-point scale asking the importance of factors by phrases such 'trial-and-error actions', 'carefully planning before actions are taken' and 'formal plan precedes the action'. They found no direct relationship between strategy formation and performance. However, when the organizational structure is considered in addition, they deliver some evidence that a planned strategy is positively related to firm growth when associated with a mechanistic organizational structure whereas an emergent strategy best performs when associated with a more organic structure. With respect to the tendency in the literature to label planned or emergent strategies as superior they conclude that in order to answer this question on have to consider broad range of contextual forces that could potentially moderate the effectiveness of these approaches (Slevin and Covin 1997, 202).

The study of Gibbons and O'Connor (2005) is among the few surveys dealing with SMEs and emergent strategies. They are separating between two strategy-making modes: 'incremental and emergent strategy formulation' and 'comprehensive, thorough strategy formation'. Gibbons and O'Connor (2005) postulate that conservative firms are more likely to adopt the emergent strategy-making mode while entrepreneurial firms adopt comprehensive approaches. Gibbons and O'Connor (2004) are using Slevin and Covin's (1997) scale to measure the strategy-making mode, too. Gibbons and O'Connor (2005) deliver evidence that entrepreneurial firms tend to

adopt more formalized planning approaches while firms with a conservative orientation use incremental methods of strategy formation. They argue that the need for entrepreneurial firms to frequently review the bases upon which their competitive advantage rests might explain the surprising greater use of extensive analysis and planning. At the same time, the basis of competitive advantage may not be subject to the same level of questioning in firms that are more conservative, which hence allows relying on informal and emergent planning.

Another recent study is provided by Verreynne (2006) who studies the role of strategy-making in small Australian firms. She is using Hart's (1991) scale as modified by Dess et al. (1997) in order to operationalize Hart's four strategy-making modes. This scale conceptualizes strategy-making basically by two dimension, that is the top 'management intentionality', and the 'organisational actor autonomy'. Verreynne (2006) shows that the simplistic strategy formation mode contributed most to performance, followed by the adaptive mode of strategy-making, while the intrapreneurial strategy-making mode had even a negative impact on firm performance.

To sum up, a set of general and specific factors can be applied to capture strategic formulation and implementation processes in SMEs: In this connection, the formality of the planning process, the comprehensiveness of information gathered, processed and interpreted by decision makers, the involvement in the decision making process, personal characteristics and market orientation are commonly accepted as having an significant impact on the strategy-making mode and moderate the strategy-performance link. This leads us to the following hypotheses about strategy-making in SMEs:

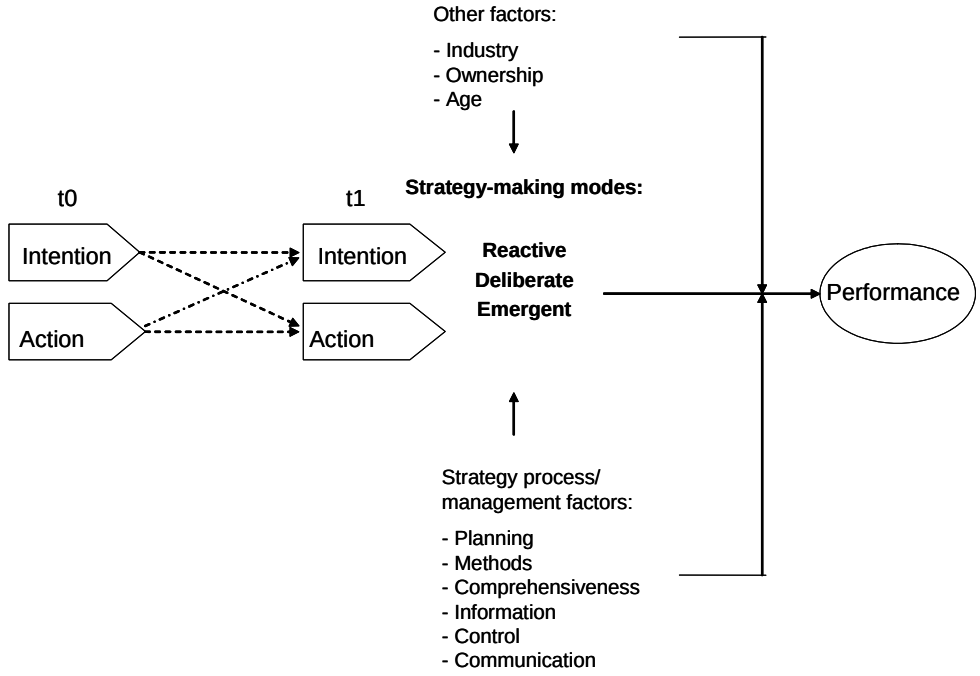
Hypothesis 3: With increasing size, age, ownership dependency, the existence of a supervisory board and managerial leadership the probability increases that a SME display a deliberate strategy-making mode.

Hypothesis 4: The involvement of different actors in strategy formulation and an open communication culture is associated positively with the emergent strategy-making mode in SMEs.

Hypothesis 5: Extensive strategic planning, and the extensive use of methods and control mechanisms constrains the emergence of strategies in SMEs.

Based on the arguments provided we are also able to depict a framework (Fig. 1) summarizing the main relationships which explain the nature and interaction of strategy content, process and contingency factors over time studied in this paper. Hence, attention is being paid to the question which process factors and firm characteristics foster the emergence of strategy or the successful implementation of a strategy.

Figure 1: Conceptual framework



Apart from internal contingencies, the business environment plays a major role in explaining the nature of strategy formation and a possible positive impact on performance. While some older studies found that classical rational planning processes are effective in stable industries (e.g. Fredrickson 1984), recent studies show that strategic planning is effective in dynamic environments, too (Brews and Hunt 1999). In turbulent environments, scholars are arguing very often for 'discovery-driven planning' (McGrath and Mac Milan 1995). In such environments a company must keep a certain level of strategic flexibility which thus constraints the possibility to achieve strategic implementation consistency. McCarthy et al. (1987), for instance, propose that in high-tech environments firms have to rely stronger on intuitive decision making. Burgelman and Grove (1996) showed that in highly dynamic environments an alignment of a firms' strategy intent and action is particularly difficult to achieve and, hence, such industries show a lower degree of strategy implementation consistency. However, the empirical evidence is inconclusive, while some authors are arguing that planning is beneficially even in turbulent environments others claim that it is useless then. Though, different environments, for instance characterized by hostility, dynamics, growth, and munificence, should offer more or less opportunities for effective emergent strategy-making.

The above mentioned study of Hart and Banbury (1994) found partially support for the impact on environmental turbulence on the strategy-making performance linkage. They found that in munificent environments the strategy-making process capabilities had no impact, while in turbulent environment, contrary to their expectations, both, high as well as low strategy process capability were associated with high performance. They speculate that firms in high velocity environments have to make a choice, and either develop 'fast-cycle' competencies in multiple modes of strategy-making, or concentrate on content of the business and do not worry too much about the strategy-making processes.

The study of Slevin and Covin (1997) also investigated the relationship between strategy formation and environment. They demonstrate that firms that follow an emergent strategy mode were astonishingly more often successfully in benign environments. In a more recent study, Covin et al. (2001) analyzed the interaction between strategy-making in different environments considering again the internal fit with the organizational structure. In their study on 96 firms with more than 50 employees they found evidence that in a high-technology environment firms achieved higher return on sales when they combined intuitive-experiences based decision making embedded in a mechanistic structure, or when the mixed a technocratic decision making style with an organic structure. The two decision making modes are strongly associated with the emergent-to-planned strategy formation modes applied in the earlier study (Slevin and Covin 1997). They conclude that not the strategy-making process itself matters but its fit with the internal organizational structure as well the fit with the environment, which thus calls to adopt a configuration perspective. However, the relationships were more clear with respect to return on sales and somehow ambiguous with respect to sale growth, which, according to them, indicates that there exists probably a tradeoff between 'managing for effectiveness' (e.g. sales growth) and 'managing for efficiency' (e.g. return on sales).

Based on the contingency perspective of the strategy-making mode we propose the following hypotheses:

Hypothesis 6: Firms that are following an emergent strategy-making mode are associated with higher performance in medium and medium-high-tech industries compared to low-tech industries.

Sample

This paper is part of a larger study on strategy content and processes in SMEs in Austria. The data analyzed and interpreted for this article is taken from an empirical study of SMEs with 20 to 500 employees. Thus we excluded very small firms in order to aim SMEs with a higher demand for strategic behavior. The sample size of 91 firms allowed for representative findings given the firm population in the different sectors in Austria as found in available enterprise statistics. The study includes both, independent firms as well as firms owned by other firms, although the latter were only allowed to participate if they had the possibility to formulate their own strategies (e.g. were not pure production units) and, hence, retained a certain level of strategic independence from their owners (e.g. larger international firms, financial investors).

The firms were selected at random from the Dun&Bradstreet database which covers all Austrian companies with more than 10 employees. The use of multi-industry samples allowed us to study the extent to which firm performance was influenced by industry performance levels, while the distribution of the firms across each sector represents the industry distribution across Austria and thus is a good representation of the studied sectors in Austria. The selected firms are distributed across the Austrian industry classification standards as follows: manufacture of wood and of products of wood (NACE 20): 16%; manufacture of furniture (NACE 36): 10%; manufacture of basic metals (NACE 27): 11%; manufacture of fabricated metal products (NACE 28): 24%; manufacture of machinery and equipment (NACE 29): 19%; manufacture of chemicals and chemical products (NACE 24): 4%; manufacture of pharmaceuticals (NACE 24.4): 4%; manufacture of rubber and plastic products (NACE 25): 12%.

The first empirical survey was carried out in 1995. 120 firms were contacted by telephone, and an interview date arranged. A total of 100 firms agreed to participate in the study. An analysis of the motives for the non-participation of the other firms revealed no evidence that there was a bias in the sample with regard to performance or strategic behavior. The interviews were carried out by phone with the managing directors of the firms using a standard questionnaire and lasted about 90 minutes .The second survey was carried out in 2003. Nine of the companies initially interviewed had since gone bankrupt, therefore, only 91 companies participated in the second survey, providing data on strategic behavior and performance based on a slightly shorter questionnaire. Once again, the interviews were carried out with the managing directors.

Measures

Strategy-making variables
Studying the role of different types of strategy formation processes based on a broad empirical base is challenged by the question of the measurement and operationalization of a complex phenomenon as deliberate and emergent strategies. In the literature, so far, different strategy-making modes have been operationalized largely by asking amongst others the importance of strategic goals and statements regarding the role of participation, use of formal plans, risk-taking of organizational members and information which is used for decision taking (e.g. Hart and Banbury 1994, Covin and Slevin 1997).

Lyon et al. (2000) are dealing with the question of measuring the strategy processes in entrepreneurial firms and are suggesting three approaches: managerial perceptions, firm behaviors, and resource allocations. The first one, survey-type measures, is most commonly used and based on the managerial perceptions related to specific questions gained by interviews or questionnaires. For the measurement of firm behavior they propose to use content analysis of publicly available documents. Resource allocations are employed already to some degree in entrepreneurial research too, for instance by measuring R&D expenditures or the standard deviation of a firm's return on assets over time which might serve as risk taking measure. Lyon et al. (2000) are suggesting to combine these measurement approaches to achieve grater measurement accuracy which also motivated the measurement approach employed in this study.

For the purposes of this study, we aim to operationalize the strategy formation process by capturing intentions and actions. We therefore separated three strategies (content): product innovation, market expansion and product quality. As studies show, these three strategies are of high importance generally for SMEs and gained importance in the 1990ies (e.g. Armbruster et al. 2005). Thereby, product innovation and product quality can be regarded as differentiation strategy in the classical tradition of industrial economy (Porter 1985, Kay 1993). As many empirical studies show, differentiation is the most important generic strategy followed by SMEs (e.g. Dess et al. 1999). Market penetration and development offers another importance strategic goal aiming to growth which is related to Ansoff's (1965) taxonomy of corporate strategy. The study includes the strategic option of market expansion by targeting new customer groups or developing new geographic markets. This strategy is highly relevant for SMEs, as for instance many companies were, due to increasing competition, forced to growth in the past in order to survive, and thus, for instance, expanded their business in the new European member states. Due to the different nature of these three strategies and the capabilities required, we aim at the same time to be able to observe both, deliberate and emergent behavior.

For each of the three strategies two factors were identified: a question addressing specific strategic intentions and a question on related managerial activity in the past (e.g. enlarging the customer base, launching new products, quality measures). In relation to the product innovation strategy we asked the firms about the importance of the strategic goal product innovation. To capture the corresponding activities we asked if the firm has introduced an improved or new product within the three years prior to the interview date. We thus followed the suggestion in the innovation literature (Baldwin and Johnson 1996). Changes that only involved minor design alterations were not considered valid.

Quality is another important choice in helping SMEs gain competitive advantage. This strategy was captured by a question related to the importance of differentiation by product quality as strategic goal (intention) and a question whether a quality measure (action), e.g. ISO 9000 certification or the TQM framework, was introduced in the previous three years. The market expansion strategy was assessed by a question regarding the importance of market development as corporate goal (intention), and a question whether the firm had gained access to new customer groups or geographical markets in the past three years prior to the survey.

Based on the relation between planning and implementing, we were then able to classify different strategy-making modes, whereby we distinguished between “reactive”, “deliberate”, and “emergent” types (see Figure 1 and Table 1). In order to identify the strategy-making mode of a firm we first defined for each of the three strategies the specific strategy-making mode. Using the two criteria in both points of time, we were theoretically able to separate 16 combinations, which served as base for the classification of the strategy-making mode (see Table 1). Thereby, firms which continuously follow a strategy over the whole time span (t0 and t1) were categorizes as ‘planners’. Firms which successfully realized their intended strategies were regarded too as planners. Cassells et al (1995) are describing clearly deliberate strategies as associated with a consistent pattern and precise intentions. They are arguing that clearly emergent is „a lack of intention but consistent pattern”. In line with this argumentation we categorized emergent strategic behaviour based on the information on action and intentions. Those firms which acted without formal recognition of the strategy in t0 were framed as ‘emergent strategists’. Finally, firms which had in just one or both periods just intentions without any corresponding activities or neither intentions nor actions at all were classified as employing a ‘reactive’ strategy-making mode. See also Table 1 for the most important combinations observed and how they were categorized.

By considering the strategy-making mode in the product, quality and market domain we were then able to classify the strategy-making mode on an aggregated level. Thereby we pursued the following procedure: If a company in one of the two domains was considered as deliberate strategists, we categorized the firm as belonging to the deliberate strategy-making mode. Companies which at least in one dimension displayed an emergent strategy-making mode were classified to be an emergent strategist. The remaining group contains all other firms, that are these firms which neither deliberately nor evolutionary realized or followed a strategy between 1995 and 2003.

Table 1: Coding of strategy-making mode

1995 (t0)	2003 (t1)	Strategy-making mode
Intention	Intention	→ Reactive
Intention	Intention and Action	→ Deliberate
Intention	Action	→ Deliberate
Action	Action	→ Emergent
Action	Intention and Action	→ Emergent
Intention and Action	Intention and Action	→ Deliberate
Intention and Action	Action	→ Deliberate
Intention	Neither Intention nor Action	→ Reactive
Action	Neither Intention nor Action	→ Reactive
Neither intention nor action	Action	→ Emergent
Neither intention nor action	Intention and Action	→ Deliberate
All other combinations		→ Reactive

Strategy process variables

In order to study the role of various strategic management instruments and approaches we measured the use of methods, the comprehensiveness of decision taking, the extent of planning, and the strategic control activities. These variables were all calculated as the sum of a given set of activities (not applied, applied) which were assessed by the firm and allowed to construct an index for each variable. The comprehensiveness of decision taking was the total sum of five criteria (cost/benefit, risks, time, synergies, response of competitors). Participation was the total number of internal and external persons which are regularly involved in strategic formulation within the firms (e.g. people from sales, manufacturing, R&D, banks, consultants, etc.). To measure the use of strategic management methods the application of key financial performance measures, SWOT analysis, portfolio analysis, market analysis, competitive analysis and core competence analysis was assessed by the firms. In order to measure the intensity of implementation activities the importance of implementation plans, nomination of people responsible for implementation, milestone control, quantitative performance measures and regularly target-performance comparisons were used. With respect to planning we calculated the total number of years in five different areas (production, sales, finance, product development, human resources) for which the firm drafts operational or strategic plans.

We also measured to what extent different information sources were used for strategic development by asking the respondents about the importance of different internal and external sources. With respect to the importance of internal sources we were interested in the relevance of information from employees from the manufacturing, employees from sales, employees from marketing, employees from R&D, and the use of an in-house suggestion scheme. External sources considered the importance of market research, customers, trade fairs, competitors, and co-operation partners. The strength of the communication culture was assessed on the 5-point Likert scale by the firms. Finally, the importance of the corporate goal growth was assessed by a 5-point Likert scale ranging from none important to very important.

Structural and performance variables
Moreover, some structural factors related to ownership, size, age and industry characteristics were used. These variables were measured on dichotomous and ordinal scales. Industry growth figures and R&D-intensity of the eight sectors were taken from the Annual Statistical Yearbook published by the Austrian Statistical Office.

Three performance indicators were used in the study for both time periods, namely average profitability, turnover growth, and employment growth. It is often difficult to obtain data on the profit levels of small firms as they are, in many cases, not obliged to publish their results and are also often reluctant to provide financial information (Sapienza et al. 1988). Profitability was thus measured on the basis of a self-assessment by the interviewees, who were asked to compare themselves with their competitors using a 5-point Likert scale (where 1=very poor and 5=very good). Profitability was measured as the annual average value from 1992 to 2002. Literature shows that there is a strong correlation between self-reported, perceived measures of performance and objective measures of performance (Venkatraman and Ramanujam, 1987; Dess and Robinson, 1984), a correlation widely used in strategic management literature.

The figures for turnover and employment growth from 1992 to 1994 and 1995 to 2002 were reported by the interviewed firms in both surveys. The annual average was then calculated to enable a comparison of the two figures and an adjusting the data for the different time periods. The analysis of the turnover and employment growth rates show extremely high values for some firms, a result which clearly reflects the success of a particular strategy, but also introduces some limitations in the application of statistical tests. Consequently, a winsorization procedure was used to replace extreme values beyond a specific lower and upper percentile with the value at the percentile.[1] A subsequent analysis of normal distribution showed that all three performance variables were normally distributed.

Results
The analysis of the strategies indented and realized in 1995 and 2003 according to our classification schema delivers first insights in the strategy formation process and dynamics in SMEs. First of all, based on our conceptualization we were able to identify emergent strategic behavior which plays an significant role in SMEs. Obviously, as expected by Hypothesis 1, emergent strategic formation is relevant particular in the market and innovation domain where new opportunities can arise quite often within as well as outside the firm (e.g. new customer request, ideas for the improvement of products from employees). In the quality domain, emergent strategy was also observed, but to a lesser degree, which is also due to the nature of quality management which usually requires just from the beginning on a higher formal procedures, e.g. in the case of an ISO certification, which might also explain why it gets more rapidly deliberate. In the case of market expansion, emergent strategies are even as important as deliberate strategies, which seems to be feasible having in mind, that, for instance in the past decade many Austrian SMEs incrementally expended their business in new European member states, an strategy or intention which might in many cases evolved over time and was not the result of grand master plan or entrepreneurial vision.

Within the deliberate group there was also a certain number of companies which successfully implemented their plans or intentions between1995 to 2003 (not displayed here). 19 out of the 44

[1] Values outside the 5^{th} and 95^{th} percentile were winsorized.

firms belonging to the deliberate strategy-making group successfully implemented their strategies in the classical view that actions follow intentions or plans. The proportion was higher in the case of the product quality strategy, which like the product innovation strategy can considered as differentiation strategy.

Combining the different strategy-making modes in the three strategy content domains allowed assessing the overall behavior of the firm. As already mentioned, all companies, which had in at least one content domain an emergent strategy were accordingly classified as emergent strategist. The analysis of the data revealed furthermore that most of these companies had at same time in at least one area a deliberate strategy. Interestingly, only one company was a pure emergent strategist. Thus, the results deliver evidence that companies are combining different strategy-making modes simultaneously, as suggested by Hypothesis 1. The strategy-making modes in the three strategy domains and the aggregated grouping shows that about one third of all studied SMEs embrace, emergent strategy-making, which means, that they according to our definition embrace, both, emergent but also deliberate strategy-making.

In total, we were not able to allocate a company to the deliberate or emergent strategy-making group in 14 cases. This means that the companies had not taken meaningful actions in both periods and thus obviously followed no clear strategy. Some of them might probably follow pure cost leadership strategies which were not captured explicitly in this study. However, according to other studies in Austrian SMEs (Armbruster et al. 2005) this strategy is of less importance and thus should not affect this result significantly. In this respect, the comparison of means showed no significant difference with respect to profitability and turnover, but revealed some evidence, although significant only on the 0.1-level, that firms with a reactive strategy-making mode growth less as the other two groups. Thus, this result partly supports Hypothesis 2.

Table 2: Overview of strategy-making modes

Strategy domain (content)	Strategy-making mode		
	Reactive	Deliberate	Emergent
Market expansion	53	19	19
Product innovation	42	31	18
Product quality	23	62	6
Total[1)]	14	44	33

1) emergent: at least in one domain emergent
deliberate: at least in one domain deliberate (and not emergent at all)
reactive: in every domain reactive

To test the various strategy process variables and its relationship with the three strategy-making modes we carried out comparisons of means and t-tests between the deliberate and emergent strategy-making group.

Hypotheses 3 and 4 are dealing with the role of firm size, age, ownership, the existence of a board, ownership-management, participation, and communication culture as enhancing or constraining the emergent strategy-making mode. On overall, we found rather weak relationships between the different strategy-making modes, whereby the largest differences were mainly between the reactive strategy-making group on the one hand and the deliberate and emergent strategy group respectively on the other hand. On average, deliberate strategists are using more

sophisticated management methods and plan more. However, the difference between the deliberate and emergent strategy-making group is not significant. The only factor, which discriminates between deliberate and emergent planning is a strong communication culture, which contrary to our expectations, was stronger in the deliberate strategy-making group. Thus, we found hardly any no support for Hypotheses 3 and 4.

The impact of ownership (independent or subsidiary) and the existence of a board was tested using a Chi-Square statistics. While the existence of a board had no impact, we found that subsidiaries, contrary to our expectations, were more often in the emergent strategy-making group and had at the same time in only one case reactive strategy (Chi-Square: 5.636; 0.1 sign.-level). However, comparing just the emergent and deliberate strategy-making mode revealed no significant difference.

Table 3: Strategy-making mode, context and strategy process: Comparison of means

Dependent variable	Reactive n=14	Deliberate n=44	Emergent n=33	Sign. F-values	Comparison Deliberate versus Emergent[a)]	Hypoth. effect on emergent strategy-making
Employees	72	139	154	3.86**		-
R&D intensity	2.1	2.6	2.7			+
Age	55	49	48			-
Export rate	13.5	44	47	7.14***		
Ownership-management	4.3	3.2	2.6	4.32**		
Goal corporate growth	3.4	4.0	3.5	2.80*	P>E	+
Technological leadership	4.0	4.6	4.2	3.04*	P>E	
Intuition	3.3	3.4	3.2			
Participation	5.1	5.4	5.4			+
Methods	4.8	7.6	7.6	3.99**		-
Planning	7.8	13.1	11.5			-
Decision comprehensiveness	2.4	3.0	3.3			-
Information use external	6.4	8.2	7.7	3.09*		+
Information use internal	7.5	8.4	7.8			+
Communication culture	3.7	4.0	3.5	4.19**	P>E	+
Implementation activities	10.6	12.2	11.8			-
Profitability	3.59	3.65	3.65			
Turnover growth	1.01	1.76	4.47			
Employment growth	-2.91	0.71	1.85	2.51*		

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$
a) based on a T-test

According to Hypothesis 5, too much planning and the excessive use of analytical methods and control mechanisms should constrain the emergence of strategies in SMEs. However, as the comparisons of means and the standard deviation show, we found no support for this thesis. Further graphical analysis of the distribution revealed that both deliberate as well as emergent

strategists performed to some extent excessive planning. The same holds for strategy control activities and the use of management methods. Thus, obviously, formalization and the strategy-making mode are largely independent, i.e. planning does not per se hinder the emergence of strategies.

There is also no support for the rationale that firms that successfully implemented their strategies (a subgroup within the deliberate strategy-making group) are positively associated with higher levels of implementation plans and formal control systems. An additional post-hoc analysis revealed no significant relationship with various strategy process factors regarding this sub-group of 19 companies (not displayed here). Thus, there is no evidence that planning prohibits emergent strategizing and emergent strategists seems to have a similar "planning behavior" as purely rational, deliberate planners.

In order, to reveal further differences between deliberate and emergent planning we analyzed the role of the corporate goal growth and the importance of technological leadership. This analysis showed that the deliberate strategy-making group regarded corporate growth and technological leadership significantly more important, hence, emergent strategists are obviously following a more passive, reactive path than deliberate strategists.

Table 4: Strategy-making, context and performance: Regression analysis

Dependent variable	Profitability	Turnover growth	Employment growth
Constant	3.605***	-4.654	-3.805
Strategy-making mode (1= emergent)	0.328	13.000***	9.398**
R&D intensity (1999)	0.026	2.683***	1.531*
Strategy-making mode * R&D intensity	-0.019	-4.475***	-2.799**
Adj. R^2	-0.014	0.148	0.060
F-value	0.725	4.419***	2.253*

* p < 0.10; ** p < 0.05; *** p < 0.01

In order to test the association between strategy-making, environment and performance (Hypothesis 4) we performed regression analysis with the dependent variables profitability, turnover growth and employment growth, and strategy-making mode and R&D intensity as independent variables. We used an interaction term to test the contingency hypothesis. The regression models delivered evidence that companies with an emergent strategy-mode performed better with respect to growth in less R&D intensive industries, which is contrary to our expectations (see Table 4). Thus, Hypothesis 4 stating in technological dynamic environments emergent strategy-making is associated with performance, is not supported.

Limitations of the study

This study is of exploratory nature particularly with respect to the novel measurement approach employed and has limitations which have to be considered when interpreting the results.

The approach proposed in this study is inspired by the work of Lyon et al. (2000) which suggest to combine three approaches for measuring entrepreneurial orientation, managerial perceptions,

firm behavior and resource allocation.[2] With the measurement approach proposed in this study we aim separate explicitly between intentions, actions and formal procedures. In most studies, researchers are asking for the importance of formal plans, participation, and the risk-taking behavior of organizational members in order to assess or cluster different strategy-making modes. This factor is then associated with the strategy content or environmental factors. This study follows another approach. Based on the strategy content which is captured by related intentions and actions the strategy-making mode is operationalized. Subsequently, the relationship with strategy process factors such as planning or comprehensiveness of decision taking is investigated as well as the link with performance. Thereby we aim to achiever a greater independency of the different constructs and variables, i.e. formalization and strategic behavior. For instance, it could be that a strategy is formalized and planned, but at the same time has an emergent strategy, hence, both constructs have to be measures independently from each other. Moreover, we have not defined emergent strategy-making a priori as being more or less associated with formal planning, participation or other variables. We thus aim to be better equipped to test the thesis that too much planning restricts the emergence of strategy. However, we have not measured sequentially the complexity and dynamics of 'patterns' of decisions and actions involving different levels, domains and actors that accumulate into a strategy over time. With this study we captured strategy in both points of time by tracing the priorities of intentions and corresponding actions.

Moreover, we have not explicitly measured the decision making process within our survey, although, the actions which have been taken by the firms prior to the survey were probably mostly been associated with a decision making by the manager or entrepreneur, which is highly given considering that we suited small firms. We assume that the actions which are reported by the firms are most often the result of decisions. For instance, the introduction of a new product or the implementation of quality measure usually is initiated by the managers, even though in some cases initiatives might have come from middle mangers (e.g. director of production). A related constrain of the study is that we are not dealing explicitly to what extent different levels and members of the organization are involved in this process over time and thus form strategy.

Based on our operationalization we provide different types of strategy-making. However, in practice, there is a continuum between purely deliberate and purely emergent strategies and no ideal strategy types exist, an aspect, which has to be considered, too. However, as only one company was assessed as purely emergent, we were not able to assess this specific type.

In order to check for the plausibility of our results we compared the distribution and relative importance of the strategies identified in our survey with similar studies which measure strategic behavior for SMEs by self-reported assessments of strategies or resources allocations carried out in Austria such as the Innovation Community Survey (Leo et al. 1999) or the European Manufacturing Survey (Armbruster et al. 2005). We found no difference with respect of the evolution of the importance of different strategies in Austrian SMEs.[3]

Discussion

Strategy cannot be understood by focusing only upon single decisions or assessments of priorities but has the incorporate a sequence of decisions and actions that form a strategy over time. We

[2] common in sociology ?….
[3] reliability, validity …

aim to contribute to this premise by investigating the dynamics of intentions and actions in two points of time. The work builds on the ideas of Mintzberg and adopts it for the nature of strategy formation in SMEs. Although the importance of different strategy-making modes and the relevance of emergent strategies are recognized in strategy textbooks, there is still a lack of understanding and empirical evidence about the complex relationships between planning and emergence, which is addressed with this paper.

We revealed evidence that emergent strategy-making matters and deliver proof of its relative importance in SMEs. Our survey shows that almost all companies which belong to the group of emergent strategist have at the same time realized planned strategies and thus are capably of performing different strategy-making modes simultaneously, a capability which is stresses as important in the extant literature (e.g. Hart and Banbury 1994). While in larger firms decentralized decision making and initiatives are the grassroots for emergent strategies (Burgelman 1983, Wooldridge and Floyd 1990, Andersen 2004) we found that in SMEs emergent strategists arise by responsive actions, grasping of new opportunities on markets or incremental product improvement by the small business manager or entrepreneur which can lead also to a realized and deliberate strategy over time.

We found that firms employing a deliberate strategy-making mode are associated with a higher ambition to growth. The study delivers some evidence that the emergent strategists are more passively which is also indicated by a lower importance of leadership strategies.[4] Probably the attitude of being a leader in the market and technologies is somehow conflicting with the idea to "wait for upcoming events and opportunities", also as expressed by the notion of logical incrementalism.[5] Thus, the emergent strategist can be described in the light of our findings as open but rather passively actor.[6]

In this context, our results confirm to some extent the work of Covin and Slevin (1989) and Slevin and Covin (1997) which found that the emergent strategy-making mode was astonishingly more often successfully in benign environments. We found that emergent strategists had higher growth performance in low-tech industries measured by the R&D intensity. This result is compatible with the observation that emergent strategists rarely aim to growth. This means at the same time that in technology-intensive and dynamic industries firms need to set more aggressive growth goals, ambitious targets and plans.[7]

The stronger articulation and prioritizing of the strategic goals we have observed over time can also be interpreted as a self-reinforcing process where success gradually raises the awareness for specific actions, which then gradually become more important, and then become more deliberate, too. Moreover, a stronger intention in the second period might by an indication of a post-rationalization of taken actions in the past, e.g. the continuous improvement of a product. This goes in line with a general attention to new strategies and concepts within and outside the firm such as in media, business press, fairs, industry associations, etc. Thus, the nature of emergent strategy-making can also be seen as enforcement of something that a company already did and became popular in the industry, too. We thus probably captured also to some extent the gradual adaptation and adoption of common industry trends or industry recipes (e.g. Spender 1989). Such

[4] This is in some contrast with Mintzberg's (1973) entrepreneurial strategy-making …
[5] obviously emergent events seldom lead to strong growth in more R&D intensive industries…
[6] miles and snow
[7] also to convince, … even when not realized ….

cultural and cognitive factors often evolve and are shared within an industry. In practice, in many industries firms are adopting very similar strategies which can explain the observed patterns and also delivers arguments that it is valid to focus only on a few strategies, in our case product innovation, product quality and market expansion. Indeed, as the propagation of ISO 9000 illustrates, the quality movement was one of the central trends among SMEs in Europe (van der Wiele and Brown, 1998; Sun and Cheng, 2002). However, we have only very limited evidence how these similar strategies were individualized by the firms, which might be a further interesting research questions.

How do small firms discover and learn new opportunities and paradigms? We offer two explanations, either by incremental actions which then also influence thinking which is also enforced by an increasing awareness within the industry and the public, or by implementing ideas and priorities in a more rational linear view, probably often associated with more visionary capabilities of the entrepreneur or SME manager.[8] Thus, the nature of emergence can also be interpreted as realization and deliberateness process of something that a company already did, e.g. trial and error, which became too popular in the industry and hence enabled this process. The study delivers evidence for the existence of an emergent, evolutionary, and non-teleological nature of strategy process in a large group of SMEs.[9]

Moreover, we dealt with the question if too much planning can even be harmful in SMEs and constraints emergent strategy-making. However, even though the deliberate strategist planned more on average, we did not find evidence that there is a significant negative relationship between planning and the strategy-making mode. Probably, small business managers and entrepreneurs are too clever to waste time in long planning exercises or do not have to convince so many stakeholders about the rationality of the chosen strategy as often the case in larger firms. However, in this respect, we found no relationship with the existence of supervisory board or the involvement of external members in strategy formulation.

Finally, we did not study in more detail the relationship between the strategy content and the strategy-making process. For instance, one could argue, that product innovation strategies require a specific strategy-making mode in contrast to companies realizing a quality management strategy. Moreover, we have not studied in more detail the role of managerial competencies in strategy-making. This might be an interesting research question for further studies. Moreover, comparing strategy-making as operationalized in this study with other industries (e.g. services, software, semiconductor) and within business units of large firms might be another research question to be studied in the future.

Acknowledgement

[8] The former stems from a steady monitoring of the environment while the later might be derived after strategy workshops, etc. …

[9] At the end, the emergent strategy-making mode can be also considered as ‘rational’ process from the perspective of the entrepreneurs or small business managers.

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Appendix: List of variables

Variable	Scale	Characteristics and coding
Context variables		
Firm size	ordinal	Number of employees
Ownership	dichotomous	0: independent (private), 1: subsidiary or majority owned by others
Board	dichotomous	0: no, 1: yes
Age	ordinal	Age in number of years
R&D intensity	metric	R&D intensity as % of turnover in the industry in 1999
Export rate	metric	Export rate in % in 1994
Strategic process		
Strategy-making mode	categorical	1: reactive, 2: deliberate, 3: emergent
Participation		Average number of persons involved in strategic formulation and decision taking
Planning	ordinal	Total number of years planned in all functional areas
Comprehensiveness	ordinal	Number of criteria used for the assessment of strategic decision making
Methods	ordinal	Number of strategic methods used for strategic decision making
Information use	ordinal	Number of sources used for strategic formulation
Communication culture	ordinal	Strength of communication culture within the firm compared to the competitors (1: very poor, 5: very good)
Implementation	ordinal	Number of activities to implement and control strategy
Performance		
Profitability	ordinal	Average score in every year form 1992 to 2002: self-assessment in comparison to the main competitors (1: very poor, 5: very good)
Turnover growth	metric	Average annual growth in % between 1992 and 2002 (industry adjusted)
Employment growth	metric	Average annual growth in % between 1992 and 2002 (industry adjusted)