An Integrating Model of Autonomy in Corporate Entrepreneurship

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ABSTRACT

This research in progress paper elucidates the multidimensional phenomenon of autonomy which determines the success of teams developing a new business in small and medium-sized high-tech firms. In a previous inductive study we had revealed that this phenomenon is described through four autonomy dimensions: functional autonomy, decision autonomy, structural autonomy and strategic autonomy. In this paper we operationalize these dimensions on the basis of empirical findings discussed in literature and integrate the operationalized autonomy dimensions into a theoretical model. Thereby the paper contributes to theory because autonomy as a multidimensional phenomenon is not well understood in corporate entrepreneurship and respective models are barely available. In practice, the challenge is to establish a level of autonomy that enables business development teams to experiment in market interaction and at the same time enables the supervising manager to keep control over the new business. Our model describes criteria that facilitate managers to balance the level of autonomy in this manner.

Keywords:

Model of Autonomy, New Business Development Teams, Corporate Entrepreneurship, SME

Introduction

High-tech markets are characterized through dynamic market parameters (e.g. changing customer needs, technological changes or new competitors) which are determined through accelerated technology and market life-cycles. Firms in such environments are required to continuously explore market- and technology-based business opportunities in order to adapt their value-creation to these changing conditions. One successful way for exploring new business opportunities is to establish teams which develop a new business around new technology or in a new market.

Multinational corporations (MNCs) organize these new business development teams in rather functional complete organizations that operate outside the parent organization. In contrast, small and medium-sized enterprises (SMEs) implement these teams rather embedded in the parent organization. This is for example indicated through the fact that new business development teams share functional expertise and other resources (e.g. sales channels or established customer contacts) with the parent organization and engage in competition for resource allocation with other business units.

Managing these embedded teams is however a challenge for the supervising managers in the parent organization. Particularly at an early stage, market parameters are unfamiliar and the new business thrives though experience that the team gathers when engaging in close market interaction. Therefore, teams require rather high levels of autonomy such as access to functional experts and the autonomy to coordinate them, the autonomy to make decisions autonomously when engaging in market interaction or the autonomy to guide the future direction of the new business based on experience.

In contrast, activities in established businesses are coordinated on the basis of determined planning and autonomy is carefully dosed as high levels of autonomy increase organizational inefficiency. Similarly, the level of autonomy that business development teams inhere needs to be managed as too much as well as too little autonomy increases the failure rate. The challenge for supervisors is to establish a level of autonomy that enables business development teams to gather experience in market interaction without losing control over the new business. However, literature provides limited support for managers as the phenomenon of autonomy is not well understood in corporate entrepreneurship (Lumpkin, Cogliser, & Schneider, 2009).

Therefore, we had undertaken (and reported elsewhere) a sensitizing inductive study which identified four dimensions of autonomy: functional autonomy, decision autonomy, strategic autonomy and structural autonomy (Gard, Baltes, & Katzy, Forthcoming 2013). In this research in progress paper we review these dimensions on the basis of literature with the aim to operationalize the dimensions into empirically testable hypotheses with an integrating theoretical model. In the following, we discuss the four autonomy dimensions theoretically and derive testable hypotheses before operationalizing the determining measures. In the final section, the integrating model of autonomy is presented before implications for theory and practice are discussed and recommendations for future research are provided.

Discussing autonomy as a multidimensional phenomenon

Corporate entrepreneurship is here defined as a team that develops a new business embedded in the parent organization (SME). In order to develop something new, these teams need to operate outside the existing norms and constraints of the parent organization which enables them to act and think independently from their supervisors in the parent organization (higher level managers) (Kanter, 1985; Lumpkin et al., 2009). This argument is supported by the finding that firms fostering innovation strategy (prospector) provide lower level managers with the freedom and the authority to try something new when exploring market- and technology-based opportunities (Miles & Snow, 1978; Stonehouse & Pemberton, 2002).

Autonomy is required for new business development as the knowledge concerning market parameters (e.g. technology or customers) in the new business is low, which inheres a high level of unpredictability of business development activities (Kanter, 1985). In such conditions, business development activities are determined through the experience that teams gather when interacting closely with market stimuli (e.g. customers or technology) (Hurley & Hult, 1998). Thus, business development activities are hard to plan and manage from the outside requiring supervisors to disperse autonomy to lower level managers (the leader of the business development team) (Floyd & Wooldridge, 1992).

However, high levels of autonomy inhere the risk that activities become inefficient (muddling through) and supervisors lose control (Ansoff, 1967; Eden & Ackermann, 1998; Lindbolm, 1959). Hence, the challenge for supervisors is to manage autonomy in order to enable business development teams to gather experience through close market interaction without losing control over their activities. Managing autonomy has significant implications for the success of new business development as it is shown that too much as well as too little autonomy increase failure rates (Shimizu, 2012).

Autonomy is however complex as it consists of multiple dimensions (Brock, 2003). These dimensions are not clearly defined in corporate entrepreneurship and autonomy is often too simplified as only single dimensions (e.g. decision autonomy) are considered (Hornsby, Kuratko, & Montagno, 1999; Hornsby, Naffziger, Kuratko, & Montagno, 1993; Kuratko, 2010; Lumpkin & Dess, 2001). Therefore, the multidimensional phenomenon of autonomy requires better understanding in corporate entrepreneurship (Lumpkin et al., 2009). We therefore had conducted an inductive study for describing this phenomenon for business development teams embedded in SMEs (Gard et al., Forthcoming 2013).

These previous results highlight a conceptual framework in which the following four dimensions of autonomy determine the success of business development teams: functional autonomy, decision autonomy, strategic autonomy and structural autonomy. This framework argues that new businesses emerge and thrive through the experience that business development teams gather when engaging in experimentation in market interaction. The four dimensions of autonomy define how autonomous (free from direction and limitation of the parent organization) the team is able adapt business development activities in response to gathered experience. In the following, the four dimensions of autonomy are discussed on the basis of this conceptual framework.

Functional Autonomy

Functional autonomy is defined through the locus (parent organization or the team) of functional expertise and the level to which these resources are shared among the parent organization and the team. Some research highlights a positive relation between autonomy and team performance in most functional areas (Hill & Hellriegel, 1994) whereas other research indicates a positive relation only in single functional areas (Manolopoulos, 2006; Newburry & Zeira, 1999; Varblane, Männik, & Hannula, 2005; Wooldridge & Floyd, 2006).

These results indicate that functional autonomy depends on the functional area (e.g. marketing, controlling or R&D). This argumentation is supported by the finding that the level of functional autonomy depends on the nature of the functional area (e.g. operational vs. strategic). For example, it is shown that high levels of functional autonomy are established in (operational) functional areas which is required for close market interaction whereas low levels of autonomy are shown in functional areas relevant for guiding the future direction (strategic) of the new business (Edwards, Ahmad, & Moss, 2002; Harzing, 1999; Hedlund, 1979; Martinez & Jarillo, 1991). Thus, there is consensus that functional autonomy has a positive impact on performance of the new business but this depends on the nature of the function.

We therefore argue that functional autonomy can at the same time be high in some functional areas and low in others, thus the level of functional autonomy contradicts among functional. We therefore expect no significant impact of overall functional autonomy on the performance of business development teams. Literature indicates however, that the impact of functional autonomy will be significant when considering the nature of the function (e.g. operational functions). More specifically, we argue that the impact of functional autonomy on performance is significant in functional areas that enable the team to interact with market stimuli as this is required for gathering experience. Based on this argumentation, we develop the following hypothesis.

H1: There is a significant impact of functional autonomy on the performance of new business development teams in functional areas that enable the team to interact with market stimuli.

Research has produced controversial results concerning the impact of resource sharing between the business development team and the parent organization. On the one hand, it is argued that the share of resources enables the parent organization to leverage established competences which has a positive impact on business development performance (Harzing, 1999; Macmillan, Block, & Narasimha, 1986). Other researchers argue that the share of resources may have a negative impact on the development of new competences as this might materialize in core rigidities (Birkinshaw & Hood, 1998), core incompetencies (Goehle, 1980) or competence traps (Birkinshaw, 1997).

These controversial findings can be explained through the fact that these studies do not necessarily consider that some resources are critical for new business success whereas others are not (Geringer & Hebert, 1989). We argue that the impact of functional autonomy on performance is stronger when autonomy is established in functional areas that are important for the success of the new business (functional importance). Recent research provides support for this moderation effect of functional importance (Crockett, Payne, & McGee, 2007).

H2: The impact of functional autonomy on performance is stronger when functional autonomy is established in functional areas that are critical for the success of the new business

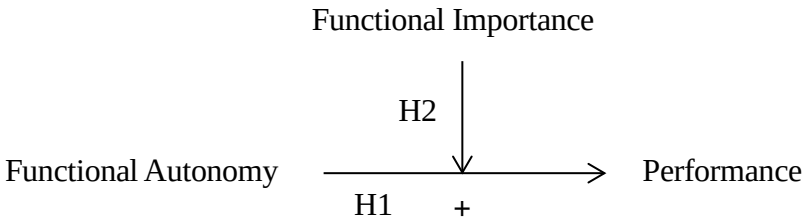

Figure 1 – Partial model: Functional autonomy in corporate entrepreneurship

Decision Autonomy

Decision autonomy is closely related to the concept of decentralization as autonomy refers to the authority of lower level managers to make decisions concerning their own work without consensus seeking with their supervisors (Brock, 2003; Burns & Stalker, 1961; Hage & Aiken, 1967; Pugh, Hickson, Hinings, & Turner, 1968). Decision autonomy is seen as a major determinant for new businesses to emerge and thrive (Hornsby, Kuratko, & Zahra, 2002; Kanter, 1989; Kuratko, Ireland, Covin, & Hornsby, 2005; Lumpkin et al., 2009; Lumpkin & Dess, 1996). One reason is that decision autonomy increases the responsiveness of a team as it enables immediate (re)action when gathering experience through market interaction (Andersen & Segars, 2001; Block, 1989; Dougherty, 1995; Hanan, 1976; Huber, 1990; Kanter, 1985; Sarasvathy & Venkataraman, 2011). In line with these findings, it is found that decision autonomy positively influences knowledge creation, transfer and application as well as learning effectiveness due the tendency to learn from failure (Boyd & Reuning-Elliott, 1998; McGrath, 2001; Miller, 1993).

Some research indicates however that too much decision autonomy increases the risk of failure (Block & MacMillan, 1993; Gebert, Boerner, & Lanwehr, 2003; Simon & Houghton, 1999). The reasoning behind this phenomenon is for example explained through opportunistic behavior of team members (Eisenhardt, 1989; Fama & Jensen, 1983) which may shift the vision of the new business towards individual interests (Guth & Macmillan, 1986) materializing in inconsistencies with corporate strategy (Feldman, 1989). Thus higher level managers are required to manage decision autonomy in order to reduce failure rates.

It is shown that decision autonomy is functionally aligned as decision autonomy can simultaneously be high in some functional areas and low in others (Crockett et al., 2007; Hill & Hlavacek, 1972). Researchers have focused on the criteria that determine the level of decision autonomy in functional areas. Results are however controversial as some authors argue that the level of decision autonomy should be highest in marketing related function (Garnier, 1982) whereas others found evidence that autonomy is determined by the level of integration versus local responsibility (Edwards et al., 2002), the level of local market orientation (Harzing, 1999; Martinez & Jarillo, 1991), the level of embeddedness of the team in local clusters (Birkinshaw & Hood, 2000), the negotiation power of the team (Varblane et al., 2005), the market context in which the team operates (e.g. high-tech vs. low-tech (Birkinshaw, 1997) or the maturity stage of the new business (Hill & Hlavacek, 1972).

We argue that the leader of the business development team requires decision autonomy in order to enable him and his team to engage in responsive market interaction for gathering experience which is decisive for new business development. We build on the finding that decision autonomy should be highest in market related functions as this facilitates responsive decision making which is required for close market interaction. Based on this argumentation, the following hypothesis is developed.

H3: Decision autonomy in functional areas that are required for market interaction is positively related to the performance of business development teams

The following hypothesis argues that the importance of functional areas for the success of the new business moderates the relation between decision autonomy and team performance. Dispute exists whether decisions related to critical functional areas should be made in the team or in the parent organization. On the one hand it is argued that decisions should be made by the parent organization in functional areas that are critical for success as this has a positive impact on new business performance (Thornhill & Amit, 2000).

In contrast, a positive performance relation is found when decisions in critical functional areas are made within the business development team (Crockett et al., 2007). More recently, it is indicated that decision autonomy in critical functional areas should be established in the business development team as this increases responsiveness and flexibility (Gard et al., Forthcoming 2013). We follow these findings and argue that the impact of decision autonomy on performance depends on the importance (critical for success) of the respective functional area.

H4: The impact of decision autonomy on performance is higher when decision autonomy is established in functional areas that are critical for the success of the new business.

Further controversial results exist concerning the locus of decision autonomy. Research seeking to identify where to locate functional aligned decision autonomy (in the parent organization or in the new business) produced contradicting results (Gifford, 1998). Some authors argue that decision autonomy in operational functions (e.g. project management) should be established at the new business and decisions related to strategic functions (e.g. finance) should be made through the parent organization (Hedlund, 1979). Others found that decision autonomy should be highest in marketing related functions (Garnier, 1982) or in functions closely related to local markets (Edwards et al., 2002).

We argue that these findings are not necessarily inconsistent when considering the argument that best decisions are made by the party that holds the functional expertise (Crockett et al., 2007). We build on this argument and develop the hypothesis that decisions should be made by the party (parent organization or the team) that provides the respective functional expertise.

H5: The impact of decision autonomy on performance is stronger when decisions are made by the party that holds the functional expertise

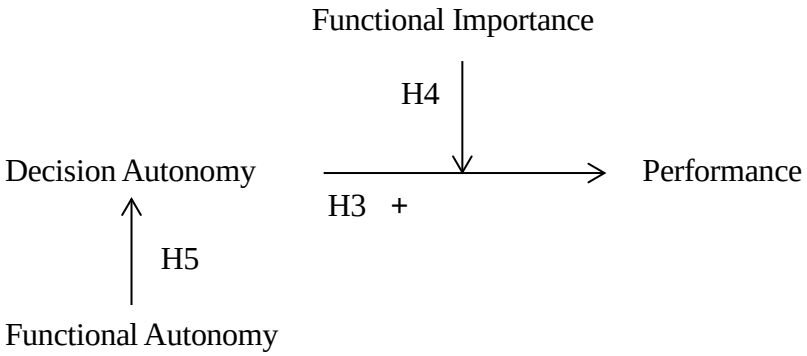

Figure 2 – Partial model: Decision autonomy in corporate entrepreneurship

Structural Autonomy

Structural autonomy is defined as the authority of a team leader to coordinate individual competences that contribute to the development of the new business autonomously from supervising managers. Basically, this refers to the team leader's authority to define the work criteria, scheduling and work methods for the members of his team without consensus seeking with the supervisor (Breaugh, 1985; Gulowsen, 1972). This enables the team leader for example to commit experts to certain business development activities and adapt the key performance indicators (KPIs) to their new work autonomously. Thereby, the team leader has the ability to coordinate the competences of his team in response to experience that was gathers through market interaction which enables him to iteratively implement strategy (Wooldridge & Floyd, 2006). Furthermore, as the leader of the team coordinates the teams competences, he actively shapes the teams portfolio of competences which influences future strategic options (Eisenhardt & Brown, 1998). Thus, structural autonomy enables the team leader to iteratively implementation strategy based on experience and at the same time to guide the strategic direction of the business through competence development. This is in line with the finding that strategy can emerge from lower level management (Mintzberg & Waters, 1985).

The autonomy to coordinate competences free from organizational constraints and direction (Lumpkin & Dess, 1996) is found to have a positive impact on the success of new business development (Lassen, Gertsen, & Riis, 2006; Srivastava & Agrawal, 2010). Similarly, research argues that lower level managers should inhere the authority to implement strategy as they are a better knowledge source (than their supervisors) due to front war experience (Floyd & Wooldridge, 1992, 1994). This enables team leaders to fit (re-configure) competences to changing market conditions which is seen as one way to achieve sustained competitive advantage in dynamic environments (Teece & Pisano, 1994). Furthermore, research shows that lower level managers are one major driver for such (re-)configuration and this often happens

without the knowledge of higher level managers (Andersen, 2000). According to these findings, we develop the following hypothesis.

H6: Structural autonomy has a positive impact on the performance of new business development teams

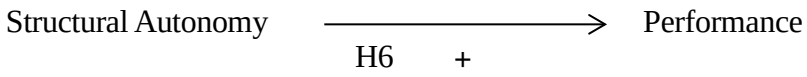

Figure 3 – Partial model: Structural autonomy in corporate entrepreneurship

Strategic Autonomy

Strategic autonomy can be defined as the authority of lower level managers to make strategic decisions without consensus seeking with supervising managers or to influence strategic decision making through participation in strategy making (Andersen, 2004). Strategic autonomy is rooted in emergent strategy theory where it is argued that new business opportunities emerge from and thrive through the managerial grassroots (Bower, 1986; Burgelman & Grove, 1996; Floyd & Wooldridge, 1992; Mintzberg, 1973, 1978, 1994; Mintzberg & Waters, 1985). This requires that the new business (idea) emerges unhindered (Bouchard, 2002) by organizational constraints and the current concept of corporate strategy (Burgelman, 1983), sometimes even unintended by higher level managers (Mintzberg & Waters, 1985). Thus, it is argued that lower level managers should have the ability to define ends for their new business rather autonomously (Bouchard, 2002; Lumpkin et al., 2009).

High levels of strategic autonomy are often implemented through visionary leadership which facilitates to establish direction and managerial oversight (control) and at the same time provides the freedom (to lower level managers) to define ends in situations with unfamiliar conditions (e.g. new technology or new market) (Ahmed, 1998). This encourages lower level managers to engage in a certain degree of risk taking which is required for new business development activities (Hart, 1991; Hart, 1992; Lumpkin & Dess, 1996; Miles & Snow, 1978). Risk taking is required as teams need to engage in experimentation in market interaction for gathering first-hand experience (Garvin & Levesque, 2006; Sarasvathy & Venkataraman, 2011). Particularly at an early stage, the strategy for the new business is hard (if not impossible) to plan and rather emerges based on the lower level manager's experience (Dess & Lumpkin, 2005).

Empirical results provide evidence that strategic autonomy positively influences firm performance especially in dynamic environments as this increases the awareness and openness for new business opportunities (Andersen & Knudsen, 2006; Andersen, 2004; Burgelman, 1983; Kuratko et al., 2005). In other research it is argued that strategic autonomy increases the ability to respond to changing environmental conditions which is determined through the fact that time-consuming approval processes with higher level managers are avoided (Andersen & Segars, 2001; Huber, 1990). Strategic autonomy seems to have a positive influence on performance particularly in dynamic environments where the cost for increased informal coordination of resources (for mutual adjustments) are outweighed by increased adaptability (Perrow, 1967; Thompson, 1966). We follow these findings and develop the following hypotheses.

H7: The ability of the team leader to make strategic decisions without consensus seeking with higher level managers is positively related to the performance of business development teams

H8: The ability of the team leader to influence strategy through participative strategic decision making is positively related to the performance of business development teams

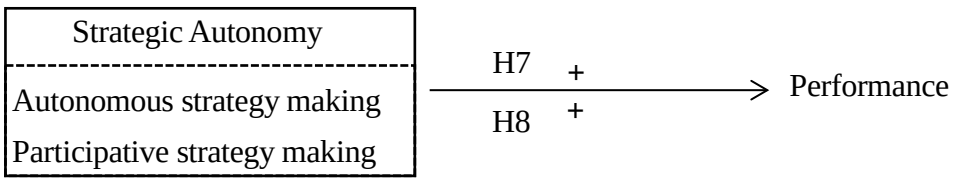

Figure 4 – Partial model: Strategic autonomy in corporate entrepreneurship

Operationalizing the measures

In order to enable testing of these hypotheses, the measures are operationalized on the basis of established constructs. However, these constructs required adaptation in order to assure applicability and comprehensiveness for the specific context of business development in technology-oriented SMEs. For this purpose some of the questions were modified several times until maturity was reached. Adaptation was based on pre-tests that were conducted with the leaders of business development teams and their direct supervisors in German high-tech SMEs. A 6-point Likert scale was chosen as this reflects the grading system in German schools and was therefore comprehensive for the participants. The results of the pre-tests are presented in the following.

Identification of functional areas

In a first step, relevant functional areas needed to be identified in advance of the pre-tests. Therefore, semi-structured interviews were conducted with thirteen experts (actively involved in business development) in German technology based SMEs with the aim to describe functional expertise that is required for developing a new business. This approach was frequently used in related studies in corporate entrepreneurship for identifying relevant functional areas (Crockett et al., 2007; Varblane et al., 2005). The following eight functional areas were identified by these experts – Marketing (e.g. marketing of new products and services), HR (e.g. qualifying and recruiting), Sales (e.g. sales activities), Customer Service (e.g. support and service), Controlling (e.g. project-controlling and profit-loss-accounting), Legal Issues (e.g. cooperation, patents), Project Management (e.g. definition of milestones and key performance indicators), Research and Development (e.g. development- and programming activities).

Functional Importance

This measure was adapted from Crocket et al. 2007. In the pre-tests maturity was reached when participants were asked to indicate the importance of each of the eight functional areas for the success of the new business on a 6-point Likert scale. A score of 1 means that the function has a low influence on success and a score of 6 means that the function is critical for the success of the new business development.

Functional Autonomy

The construct for measuring functional autonomy was adapted from Hill and Hellriegel (1994) and Crocket et al. (2007) which similarly applied these measures in the context of new business development. Comprehensiveness and appropriateness was reached in the pre-tests when participants were asked to indicate whether expertise in each of the eight functions was rather available in the team or was rather provided externally through the parent organization or elsewhere. Therefore, a 6-point Likert scale was used. A score of 1 indicated that expertise was provided externally and a score of 6 indicated that expertise was primarily available within the team.

Decision Autonomy

Measuring decision autonomy on the basis of functional areas is common practice in corporate entrepreneurship literature (Birkinshaw, 1997; Birkinshaw & Hood, 1998; Crockett et al., 2007; Edwards et al., 2002; Hedlund, 1979; Hill & Hellriegel, 1994; Manolopoulos, 2006; Varblane et al., 2005). Maturity was reached when participants were asked to indicate how frequent the leader of the business development team relies on the approval of supervisors when making decision in each of the eight functional areas on a 6-point Likert scale. A score of 1 means that approval is almost always required and a score of 6 means that approval is almost never required.

Strategic Autonomy

The measure of strategic autonomy builds on the two dimensions, autonomous decision making (without the approval of the supervisor) and participation in decision making developed by Aiken and Hage for measuring centralization (Aiken & Hage, 1971; Hage & Aiken, 1967). Andersen (2004) modified these measures through the consideration of strategic issues such as

“market activities, product and service developments, change in practices and policies” (Miller, 1987). For the purpose of this paper, these strategic issues were specified in order to increase comprehensiveness and applicability to the business context of SMEs. More detailed, strategic issues were modifies as follows - research and development initiatives, new products and services, qualification of employees for future projects, new market segments, new customer segments, new business practices. Thus, the strategic issues highlighted by Miller (1987) were applied and enlarged in the sense that the development of individual competences was considered.

Both dimensions were operationalized on a 6-point Likert scale. Concerning the first dimension, autonomous decision making, a score of 1 means that the leader of the business development team almost never makes strategic decisions without the approval of his supervisor whereas 6 means that the leader makes almost every strategic decision without approval. Concerning the second dimension, participation in decision making, a scale of 1 means that the leader of the business development team almost never has substantial influence on the corresponding strategic decision whereas 6 means that the leader almost always has substantial influence.

Structural Autonomy

The measure of structural autonomy built on the work of Breaugh (1985) which highlights three major dimensions that describe the autonomy team members enjoy in their job(Breaugh, 1985; Breaugh, 1999). These dimensions are method autonomy -”the degree of discretion/choice individuals have regarding the procedures/methods they utilize in going about their work”, scheduling autonomy -“the extent to which individuals feel they can control the scheduling/sequencing/timing of their work activities” and criteria autonomy -“the degree to which individuals have the ability to modify or choose the criteria used for evaluating their performance”. These dimensions were adapted for measuring to what degree the leader of the business development teams has the autonomy (without the approval of the supervisor) to control the work procedures/methods, scheduling/sequencing/timing and the key performance indicators of his team members. Comprehensiveness and applicability was reached when participants were asked to indicate how frequent the leader of the business development team can act without the approval of the supervisor in each of these aspects on a 6-point Likert scale. A score of 1 means that approval is almost always required and a score of 6 means that approval is almost never required.

Performance measures

Subjective measures were chosen for measuring the performance of business development teams. This choice was made as financial performance measures which are typically applied for established businesses are inadequate for new businesses. Particularly at an early stage of the new business for example, turnover may not be the primary aim of the new business or profitability would be inadequate because the business had not enough time to reach break-even. For such situations, subjective performance measures are useful (Dess & Robinson, 2006). Subjective performance measures enable to gather the perception of managers (Bantel, 1998) as well as their satisfaction with the performance of an organization (Covin, Slevin, & Covin, 1990). Two dimensions of subjective measures were used - perceived financial performance and overall satisfaction. The measures for perceived financial performance were satisfaction with turnover, satisfaction with the time in which break-even is reached and satisfaction with the increase of the sales margin. Overall satisfaction was measured via general fulfillment of expectations, overall success of the new business, achievement of milestones, and achievement of defined performance criteria. Comprehensiveness and applicability of the measures was reached when participants were asked to indicate to what degree they agree with these aspects on a 6-point Likert scale. A score of 1 means that the participant totally disagrees and a score of 6 means that the participant fully agrees.

Conclusion and discussion

An integrating model of autonomy in corporate entrepreneurship

Literature provides a detailed characterization of the four autonomy dimensions, highlights interaction effects between them and provides indication for the impact of these dimensions on the performance of new business development teams. A model of autonomy could be developed which integrates these findings (Figure 5). This model shows that autonomy consists of four dimensions which are major determinants for the performance of new business development teams. Functional autonomy is an indicator for the degree of resources that the parent organization shares with the business development team. The impact of resource share on performance of business development teams is argued to be positive (H1). However, research provides evidence that this impact is moderated through the importance of functional areas (critical for business development success) (H2). Further, consensus exists that decision autonomy positively influences performance of business development teams (H3). It is however shown that this relation depends on the nature of the functional area (e.g. operational vs. strategic) and the impact on performance is moderated by functional importance (H4). There is also an interaction effect between functional and decision autonomy in the sense that decisions should be made by the party that holds the respective functional expertise (H5).

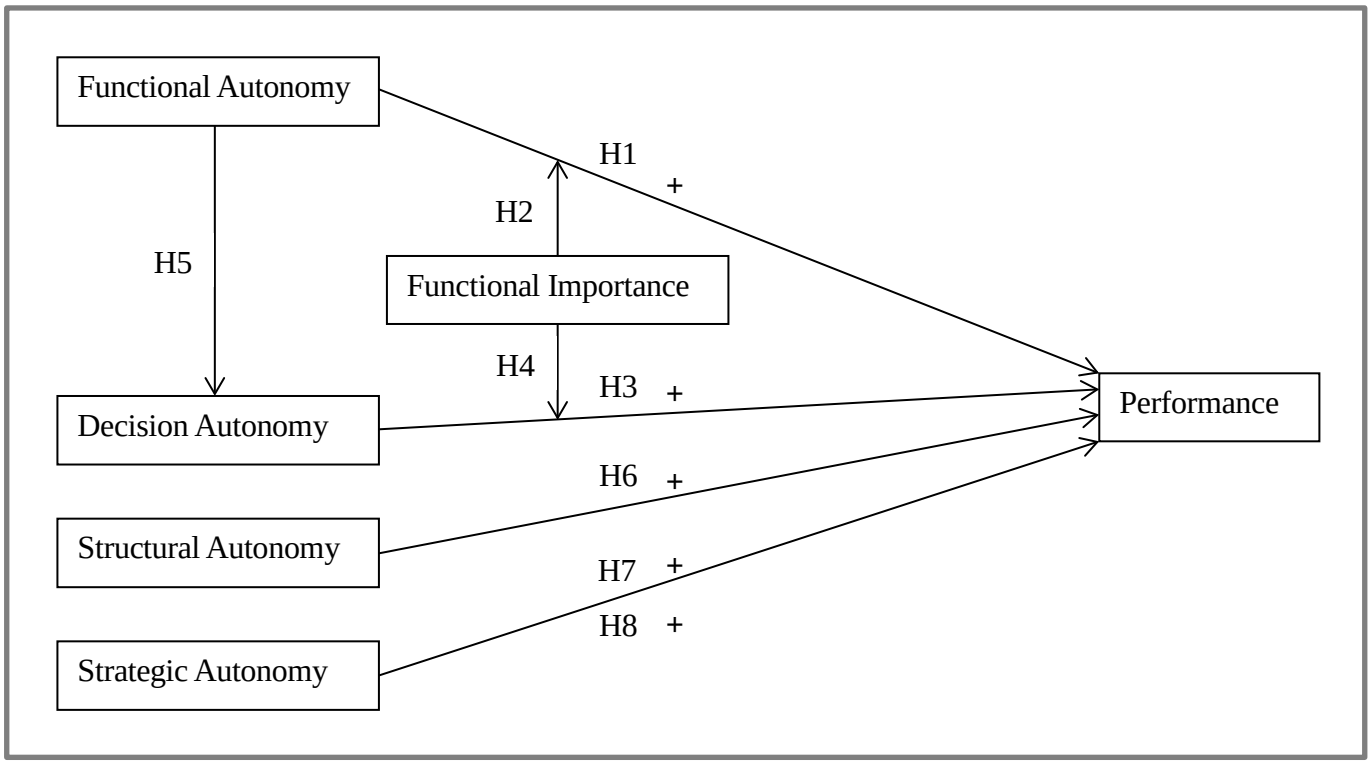

Figure 5 – Comprehensive model of autonomy in corporate entrepreneurship

Structural and strategic autonomy are indicators for the degree that strategy concerning the new business emerges from the leader of the business development team. Structural autonomy describes to what extend the leader has the authority to coordinate, thus develop individual competences which has a direct impact on future strategic options. Hence, structural autonomy enables the team leader to guide the future direction of the new business which positively influences the performance of the new business (H6). Similarly, strategic autonomy indicates the degree to which the leader is able to influence the strategic direction of the new business through autonomous and participative strategic decision making. Research provides evidence that strategic autonomy is positively related to new business performance (H7 and H8).

The literature review does not indicate interaction effect between strategic autonomy and structural autonomy nor between these dimension and functional autonomy or decision autonomy. However, this does not necessarily mean that these interaction effects do not exist in practice. This is because research generally focuses on single autonomy dimensions which might

be a reason why those interaction effects are not identified. These interaction effects should be investigated in future research.

Contribution to theory and practice and future research

The state of the art provides support for the recent critique that autonomy (as a multidimensional phenomenon) is not well understood in corporate entrepreneurship (Lumpkin et al., 2009). The phenomenon of autonomy has been studied from a resource based perspective (e.g. resource share), decision making perspective and emergent strategy perspective. However, knowledge concerning autonomy from an entrepreneurial point of view is rather weak despite autonomy is seen as one major dimension (among innovativeness, risk-taking and pro-activeness) that determines business development within established firms (Dess & Lumpkin, 2005; Hornsby et al., 1993; Kuratko, 2010; Lumpkin et al., 2009)

Existing research holds several limitations. First, research has focused on the autonomy of teams developing a new business supported through multinational corporations (MNCs) which distinguishes significantly from business development in SMEs. Consequently, such research concerning SMEs is rare. Second, empirical research investigating the effects of strategic autonomy and structural autonomy barely exists in corporate entrepreneurship research, despite emergent strategy is at the core of new business development. Third, research often builds on single functional dimensions, mostly functional autonomy or decision autonomy. As a result, autonomy is often simplified ignoring the fact that autonomy is a multidimensional phenomenon.

Eventually our results contribute to corporate entrepreneurship literature as we show that modeling autonomy as a multidimensional phenomenon is possible. Such models focusing on autonomy of business development teams are barely available for the context of SMSs. This conclusion might however be criticized as we presented the results of a semi-structured literature review. Therefore, a structured literature review with a focus on the four dimensions of autonomy should be conducted in the future.

Our results suggest three criteria that facilitate managers to balance the level of autonomy in the sense that business development teams are able to experiment in market interaction and at the same time enable management to keep control over the new business. A first criteria that seems to be an adequate criteria for balancing functional autonomy and decision autonomy is the importance of the respective functional area. Literature suggests that autonomy should be established in functional areas that are perceived as critical (important) for the new business. A second criteria refer to the nature of the functional area (e.g. strategic vs. operational). It is suggested that decision autonomy should be established in market related and operational functional areas. Third, the locus of functional expertise seems be a further criteria determining the level of decision autonomy as it is shown that best decisions are made by the party that holds the functional expertise. However, these criteria need to be evaluated for SMEs and should therefore be applied with caution.

Empirically testing our model is the next step in the research project. In this step, we focus on the German IT- and consulting industry for testing the hypotheses suggested in the model. This industry is chosen for two reasons. First, the business environment is characterized through increased technology- and innovation-cycles which requires the organizational ability to continuously adapt to the changing competitive landscape through new business development. Second, the industry is dominated by SMEs as less than 1,3% of the firms have more than 400 employees. Excluding the 10.180 “Mirco SMEs” with less than 30 employees, there are around 2800 SMEs (30-400 employees) that provide a high potential for hosting new business development teams. Hence, the German IT- and consulting industry seems to be a good choice for investigating the autonomy of teams that develop a new business embedded in SMEs.

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