Tell, Joakim

Article
Challenges facing small-firm managers in growing manufacturing firms

Journal of Innovation and Entrepreneurship

Provided in Cooperation with:
SpringerOpen


This Version is available at:
http://hdl.handle.net/10419/146837

Standard-Nutzungsbedingungen:
Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen. Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes. You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

http://creativecommons.org/licenses/by/4.0/
Challenges facing small-firm managers in growing manufacturing firms

Joakim Tell1,2

Abstract

Purpose: The purpose of this article is to better understand the management challenges facing managers in small growing firms.

Design/methodology/approach: Empirical data have been collected in Sweden through structured observations (approx. 20,000 min) of the working days of six top managers in fast- and six managers in slow-growing small manufacturing firms in order to compare managerial behaviour in two different contexts.

Findings: Managers in small firms are engaged in many different activities, but a small number of activities tend to take up the majority of the managers’ time. These activities can be classified as either operational or administrative. There are notably small differences (both in variance and differentiation) between the behaviours of managers in fast- and slow-growing firms; actually, there are more similarities than differences. There is also surprisingly little time spent by the managers on strategic work, even in the group of fast-growing firms. This might explain why growth and innovation in many cases come to a halt or even decline in these firms and represents such a challenge for the managers when they do not prioritize strategic work.

Originality/value: The study shows that managerial work in small firms is characterized by a generic behaviour and that the managers mainly use a habitual and limited behavioural repertoire. Many managers have difficulties in changing their mainly operational and administrative behaviour and thus the underlying strategy of the firm. They are ‘stuck’ in a path-dependency mindset, even though the development of the firm might require another strategy taken by the manager, as a response to meet environmental demands.

Keywords: Managerial strategies, Observational studies, Habitual and limited behaviour, Path dependency, Innovation, Networks

Background

How is rapid small-firm growth described in the academic literature? In reviewing the literature, there are many different attempts made to explain this relation. Researchers from diverse disciplines are taking part in this quest and searching for explanations on many different analytical levels. Some have focused on the impact of factors in the environment of the small firm (e.g. Covin and Slevin 1989; Sadler-Smith et al. 2003; Iraj and Besnik 2011), while others have focused on the structure of the firm (Pelham and Wilsson 1995), and still, others have been concentrating on the significance of top managers (Wiklund 1998).
One of the most influential and pioneering articles in this field was written by Birch (1979), who showed that fast-growing small firms are important when it comes to creating new jobs. Since then, there has been an ever-increasing interest in the relatively few small firms that grow fast and the question of what makes some small firms grow while the bulk of them do not and why it is so hard for small firms to continue and grow (for a conceptual review of the relationship between the manager and growth in small firms, see Andersson and Tell (2009)).

The focus in this article is on the analytical level of the leader, sometimes referred to as the upper-echelon perspective (Hambrick and Mason 1984), which contends that firm performance is a reflection of its manager, or as Morrison et al. (2003, p. 418) write concerning characteristics associated with growth in small firms: ‘It would appear that there is a common, dominant thread woven through these characteristics, that is, the human factor of the owner manager’. The study of managers is well established, and that top managers have an effect on their firms’ performance is an accepted proposition (e.g. Day and Lord 1988; Carpenter et al. 2004). Numerous studies have focused on this relationship from the perspective of managerial efficiency (Kotter 1982), business performance (Thomas 1988), and firm growth (Russel et al. 1994).

In focusing on the relationship between the manager and growth in small firms, three dominant views on and distinctions within this relationship seem to be presented in the academic literature (Andersson and Tell 2009, p. 589).

1. Whether it is something the manager has concretized as personal characteristics or traits (see for instance Gartner 1988)
2. Whether it is something the manager wants concretized as the motivation or the aspiration (see for instance Wiklund and Shepherd 2003)
3. Whether it is something the manager does, concretized as a behaviour (see for instance Gartner et al. 1992; Sarasvathy 2001 or Sadler-Smith et al. 2003)

These distinctions of the manager are well established in the academic literature concerning entrepreneurship and small businesses, and we found support of this in a large literature review conducted where we searched in more than 60 journals (see Anderson and Tell (2009)) for the relationship between the manager and growth in small firms.

A closer analysis of the research that focuses on top-management shows that the greater parts of the research have focused their explanatory proposals on leader characteristics and motivations. This analysis has been done using primarily quantitative methods and conducted from a trait perspective. Although some psychological traits have been found to be slightly more common among managers and entrepreneurs, research has shown that these people constitute a very heterogeneous group (Davidsson 1992).

From a theoretical point of view, this kind of explanatory approach has been exposed to some critique, and it has been suggested that research should be directed towards producing a better understanding of how leader behaviour affects small-firm performance (Gartner 1988; Gartner et al. 1992; Sarasvathy 2001; Sadler-Smith et al. 2003). It is only when characteristics/traits and motivation are put into action that they affect growth, or as Denison et al. (1995, p. 524) put it, ‘Leadership must inevitably be performed through action, not cognition’.
Additional critique has been directed towards this primary quantitative research from a methodological point of view; it has been argued that many aspects of the phenomenon of management and entrepreneurship are not very likely to be understood with quantitative and survey method techniques (Gartner et al. 1992, p. 26). Hence, it has been argued that research in this area should allow itself to deviate from its pursuit of ‘rigorous research’ and that researchers should spend more time with managers and entrepreneurs as part of the theory-building process (ibid., p. 22). This focus is also put forward as central in organizational behaviour management (OBM) studies, in order to understand effective organizational contingences (Houmanfar et al. 2009).

Wiklund (1998) brings up an interesting limitation of research focusing on management and entrepreneurial characteristics/traits, and that is that they have only an indirect effect on growth. If instead of focusing on defining the characteristics/traits of the manager, one follows the idea of Wiklund (1998), focusing on what the managers actually do and how this work relates to growth, it seems a promising way to reach an understanding of the relation between top-managers’ work and growth. This view also opens the possibility of joining the research tradition of traits with studies that have focused on the behaviour/roles of the entrepreneur/top-manager (for instance Choran 1969 in Mintzberg 1973, Noel 1989, O’Gorman 2001, Florén and Tell 2004).

So, in spite of the fact that the growth phenomenon has been researched for some time, research is still relatively limited, and the phenomenon is still not very well understood (Hendrickson and Psarouthakis 1998; Simpson et al. 2012). Both from theoretical and methodological points of views, new approaches have been sought (Hales 1986, Tipu and Arain 2011).

The purpose of this article is to try to understand better the challenges facing managers by comparing the behaviour of managers in slow- and fast-growing small firms, in order to see how their behaviours differ and how these could be related to the growth of the firm, and why it is so hard for small firms to continue and grow.

**Theoretical framework**

What then constitutes the successful manager of a growing firm? Central to most theories and empirical findings in the literature concerning SME growth that try to explain the successful top-manager is something that is well cited by Denison et al. (1995, p. 525) as ‘the notion that leaders can be classified in either one category or the other, or that certain styles and behaviors can be matched with certain situations to produce effective leadership’. However, this dichotomizing perspective has been criticized, and other approaches to studying leadership have been taken by, for instance, Slevin and Covin (1990) that sees upon leadership as situational.

From this perspective, successful companies are those which manage to cycle between different styles. The idea of seeing the phenomena as situational is also present in the leadership literature, where the general implication is that effective managers have the ability to both conceive and perform multiple and conceptually contradictory roles (Quinn et al. 1982; Denison et al. 1995; Hooijberg 1996), and which presents a more comprehensive way to describe the work of the managers.

From a situational theoretical perspective, the managers’ interpretation of the internal culture of the company, as well as the external environment in which the company
operates, a broad behavioural repertoire of leadership roles, and the frequent performance of conceptually contradictory roles seem to correlate to firm growth. 'Effective leaders are those who have the cognitive and behavioral complexity to respond appropriately to a wide range of situations that may in fact require contrary or opposing behaviors' (Hooijberg et al. 2001, p. 526).

So, from this theoretical perspective, it seems as if successful managers are those who manage to have a broad behavioural repertoire, compared with the less successful managers' more limited repertoire. On the other hand, as seen from a management perspective, the business environment in which many companies operates is often described and perceived as increasingly complex, unpredictable, and unstable (one statement that many managers share and that is well portrayed in articles in the field; see for instance, Simpson et al. 2012).

Managers’ perception of their operating environment interacts with the ways in which they organize and process information. It is very difficult for individuals to process large volumes of incoming information comprehensively, so theories of managerial cognition (Stubbart 1989) suggest that managers utilize habitual ways of organizing and processing information to adjust to these complex information processing demands. This contradicts a situational perspective when it suggests that managers do not use a broad behavioural repertoire in order to cope with the complex everyday life of managing a small firm. Another way of describing the limited use of different behaviours by small firm managers is the use of a simplistic strategy-making process, which Verreynne (2006) found is the most commonly used strategy in small firms. The simplistic strategy-making process is defined by Lumpkin and Dess (1995, p. 1386) as 'an overemphasis on the very things that made them successful in the first place'. This is also referred to as the informal strategic management mode (Mintzberg 1978 and Charles et al. 2015).

So, managers in slow-growing firms seem to use a more habitual behaviour, representing a more limited behavioural repertoire, and this might explain their more limited ability to respond to the external environment context and might shed some light on why they do not grow. This implies that managers having a broad behavioural repertoire and performing different roles frequently will perform better than their peers having a simplistic strategy-making process, which is characterized by a lack of variance in the behaviour of the manager.

In daily life, this means the managers in slow-growing firms take on to a larger extent a specialist or substitute role working mainly with a few tasks such as the firm's competitive advantage. As the dominant leader, even though he/she completes many tasks during the workday, the manager has a narrow focus of attention, often on a single goal or strategy, that is a low differentiation in the manager’s attention. Dess et al. (1997, p. 686) make this point when they write that a manager in their study has ‘a blueprint set some time ago that has changed very little’. In adopting the simplistic strategy, managers often neglect other important factors because of this single-focus goal. They are ‘stuck’ in a path-dependency mindset, even though the development of the firm might require another strategy taken by the manager. On the other hand, managers who show a broad behavioural repertoire and perform different roles frequently will be more successful when they can adopt better to different situations. According to the strategic management literature, fast-growing firms seems to be more successful in adopting management strategies that are
suited to the environment in which they are applied (Parker et al. 2010), which suggests that these managers have a broad behavioural repertoire.

This study addresses the following key research questions:

1. Do managers in fast-growing firms possess a larger behavioural repertoire than managers in slow-growing firms?
2. Do managers in slow-growing firms possess a more limited and habitual behavioural repertoire than managers in fast-growing firms?
3. Can the larger behavioural repertoire explain why managers in fast-growing firms have the ability to take decisions that could explain growth of the firm?
4. Can the behaviour of the small-firm manager explain why it is hard for small firms to grow?

**Results and discussion**

From observations of the actual behaviours of the managers, they have been inductively classified to 13 main functions that the managers perform. Then, the variety (that is the variance and differentiation) of the functions between the two groups, the external and internal orientation and the dominance in the behaviour of the manager, has been studied in order to see what managers in fast-growing firms do differently from managers in slow-growing firms.

The analysis of the strategic behaviour of the managers has been done in two steps. First, after three rounds of classifications of the approximately 2500 activities, a decision on a final classification of three main activities has been done, that is, strategic, administrative, and operational activities. Within these main activities, 13 sub-activities have been identified (see Fig. 1).

Strategic activities are activities in which the managers work with important, long-term decisions related to the company’s future. Administrative activities relate to support areas such as finance, administration, and personnel. Operational activities relate to the daily work of production, including purchasing, manufacturing, marketing/sales, and delivery.

In the second step of the analysis, the variety has been examined (that is, the variance and differentiation) of the 13 sub-activities at the individual and the group levels, the manager’s external and internal orientation, and the manager’s leadership dominance.

---

**Fig. 1** Thirteen main functions performed by the managers (slow-growing/fast-growing) from the observational studies
The purpose was to determine the percentage of time the managers spent on each sub-activity in order to identify their main strategy according to the typology developed.

Coming back to the two first key research questions, the findings show that managers in fast-growing firms do not possess a larger behavioural repertoire than managers in slow-growing firms. Neither do managers in slow-growing firms possess a more limited and habitual behavioural repertoire than managers in fast-growing firms.

What instead becomes obvious when studying the different functions carried out by the two groups of managers is that there are more similarities than differences. The variety (that is the variance and differentiation) between the functions fluctuates very little.

Three functions or management roles (Mintzberg 1973) take up most of the manager’s time and are the same for both groups, and they are as follows: manufacture and control (monitor), working with personnel-related questions (leader), and strategic development work (entrepreneur) taking up 50 % of the time in slow-growing firms and 55 % percent of the time in fast-growing firms. When looking at five of their functions that they work most with, economy and administration take up 10 % (slow-growing firms) and 7 % (fast-growing firms) of the time, respectively, and the production process takes up 10 % (slow-growing firms) and 8 % (fast-growing firms) of the time, respectively. This then adds up to exactly the same distribution of time and functions carried out by the managers, which is 70 % of the time they spend on the same five functions. That is, the variety of tasks and the differentiation are the same between the groups.

The remaining eight functions that make up the last 30 % of the managers time are also equally distributed, with very few differences, as shown in Fig. 1. These functions consist of generic small-firm managerial work such as the following: market and sales, the handling of delivery and complaints, external contacts, the purchase of all kind of material, product development (PD) and construction work, operative development work, mail and paperwork, and social talk and private issues. The numbers of internal contacts are also almost identical between the two groups.

This also means that the focus on operational, administrative, and strategic activities is the same between the two groups—that is, approximately 55 % of the time is spent on operational activities, 30 % on administrative activities, and 15 % on strategic issues. The conclusion is that although managers perform many activities during the workday, they narrowly focus on a few activities. This suggests that there is a low variance/differentiation in behaviour as the managers prioritize some activities over others, which suggests the use of limited and habitual behaviour (as discussed by for instance by Verreynne (2006)).

The finding that slow and fast-growing firms have more similarities than differences is built on almost 20,000 min of observational studies and connects to the last two key research questions. First, the study shows that managers in fast-growing firms do not have a larger behavioural repertoire than slow-growing firms that could explain growth of the firm. Neither could the behaviour of the small-firm manager explain why it is hard for small firms to grow.

The findings, however, raise some interesting reflections and further questions. One question is if it really matters what the top-manager does or is the growth just built on luck or external forces out of their control? Another reflection is whether the work of the top-manager in small firms is so generic that only a minority of the hours per week are spent on activities that generate a difference in value, or whether the method of observation is not precise enough in catching the unique features of leadership in small growing firms?
Conclusions

Research on small-firm growth clearly indicates that firm growth presupposes that the degree of formalization will increase (Greiner 1972; Mintzberg 1983). It therefore could be expected that managers in fast-growing firms work more with strategic and administrative questions than operational questions when the company grows. However, it is important to take into consideration that the majority of the small firms do not want to grow due to ‘the managers’ perception of how feasible and desirable the strategy is and their propensity to follow this course of action’ (Mazzarol et al. 2009, p. 323). Many firms are survival-oriented firms that are controlled by a family and are seen as providing a small income, but the managers see that growth might jeopardize the existence of the firm (Poutziouris 2003). One expectation is, therefore, that there ought to be differences between how fast-growing and slow-growing firms are led by the managers.

One interesting conclusion in the study is, therefore, that due to the generic features of managerial work, managers in small manufacturing companies, irrespective of whether they grow or not, engage in similar activities that take almost 90% (30% administrative, 55% operational) of their time. A total of approx. 15% of the manager’s time is spent on strategic activities, and when there is no difference in the length of time spent between the managers in the two studied groups, as well as no difference in the variation or differentiation of their focus on different activities, it seems that managerial behaviour cannot explain the difference in growth between firms.

Another conclusion of this study is that the managers in slow-growing firms find it hard to let go of the very thing (e.g., operational issues such as production processes) that caused the firm to grow initially (a simplistic strategy). There may be a strong tendency towards path-dependent behaviour by managers. Parker et al. (2010, p. 223) state that ‘firms are unlikely to be successful if they attempt to draw lessons from observing growth in one period and applying these lessons routinely at a different point in time’. Imitating past managerial policy may result in future inflexibility with little innovation. As Leitner and Güldenberg (2010) claim, a small firm requires a combined strategy of innovativeness and efficiency. However, under the constraint of scarce resources typical of small firms, it is difficult for the top managers to change their behaviour in order to find time to focus on strategic issues. The small firm that was once fast-growing may be stuck in the paradox of its own success. Such success, as Elsass (1993, p. 84) writes, makes ‘organizations lose the ability to recognize and respond to environmental demands’. This could be seen in the growth patterns of fast-growing firms, where the growth rate is substantially lower in the 5 years after the first growth period, and even this growth pattern is non-linear rather than linear. Parker et al. (2010) claim these findings follow Gibrat’s rule of proportionate growth: growth is not serially correlated but randomly distributed. As a result, the typical gazelle growth pattern is a short spurt of growth followed by a return to the industry average growth rate (Acs and Mueller 2008).

Practical implications

For managers, the findings imply the need to take one step back and reflect on the way the firm is managed and find a better balance between innovativeness, meaning having a broad behavioural repertoire to be able to see and respond to different situational contexts, and efficiency, using a habitual response, representing a more limited behavioural repertoire, in order to be cost effective. One way to create this possibility for
reflection is to engage in critical dialogues not only with suppliers and customers, but also with intermediates and universities in different network constellations (see for instance Street and Cameron (2007) or Laforet (2011)), in order to get new perspectives. This is sometimes referred to as a specific type of dynamic capability, that is, ‘the capacity to purposefully create, extend, or modify the firm’s resource base, augmented to include the resources of its alliance partners’ (Furlan et al. 2014, p. 35).

In the field of managerial development, collaborative learning in so-called learning networks has been found to be one way to overcome internally the problem of scarce resources. Learning networks are defined as ‘network(s) formally set up for the primary purpose of increasing knowledge, expressed as an increased capacity to do something’ (Bessant and Francis 1999, p. 377). A learning network could be understood as a platform for conversations/talks, reflection, and sense-making, where managers come together in a non-competitive environment to discuss and reflect upon different issues in their day-to-day work. The learning network approach is, in this respect, a highly interactive pedagogical model where participants are encouraged to discuss different issues related to their own organizations. These actors provide a non-hierarchical arena for experience exchange and learning, which is expected to increase entrepreneurs’ abilities to take advantage of business opportunities. This could help the managers overcome the difficulties to find a better balance between innovativeness and to be cost effective.

**Future research directions**

The finding that very little time is spent on strategic work and the weak correlation to growth is consistent with findings from a study by Coad (2009), in which he found that in 12 reviewed studies, eight report $R^2$ values of below 10% and six report $R^2$ values of 5% or less in explaining the relationship between the growth of the firm and strategic work by top management in small firms. How could this be explained?

One interesting reflection is if, over time, the behaviour of the managers in fast-growing firms is becoming more and more generic and habitual (similar to managers in slow-growing firms) due to external and internal demands on the firm, as well as the situation when the managers become more experienced. The managers’ perception of their operating environment interacts with the ways in which they organize and process information, and managers utilize more and more habitual and limited ways of organizing information after a while to adjust to the complex information processing demands. Also, what Mazzarol et al. (2009) refer to as strategic myopia, a condition characterized by a short-sighted focus on the daily operational matters, makes most managers gravitate to a similar behaviour. Here, experience is negative only when it seems to hamper the innovativeness of the firm and thus the capability to grow. This could explain why growth in many firms comes to a halt after a couple of years (Coad 2009).

One future research direction is to develop the method of studying further, by gathering managers (of slow- and fast-growing firms) and conducting an experiment as Isenberg (1986) did. He asked two different groups (experienced managers and students) to think aloud about how to solve different business cases. If one uses the same approach in comparing the behaviour of managers in slow- and fast-growing firms, solving different cases or situations they face in their daily work in simulated situations, this method might find the unique features of leadership in small growing firms not seen in the use of observations.
Methods

This study draws on the method of structured observation designed by Mintzberg\(^4\) (1973). Data for the six slow-growing companies were collected during the winter of 2002/2003, and for the six fast-growing ‘gazelle’ companies, data were collected during the winter of 2006/2007. During the 6 weeks of observation (1 week for each manager in the group of slow-growing firms and 3 days at the fast-growing firms), Mintzberg’s chronology, contact, and mail records were used. In total, approximately 20,000 min of work and approximately 2500 activities were observed and characterized according to their activity pattern and roles. During the observations, extensive field notes were taken to support the recapitulation of ‘stories’ and ‘events’.

In our observations, we noted all the managers’ activities contemporaneously, minute by minute in chronological order (see Appendix). During the observations, I and a colleague took turns observing the managers and we shared the task of typing each day’s data into Excel spread sheets the day after each observation. We then summarized and presented this data to the managers in focus groups for our joint analysis. We used these focus groups to verify the ‘normality’ of the data and of the sense-making related to the data. In short, these sessions helped us understand the data at a higher level than that of mere activity patterns.

The sample in the study comprises two groups of six small-firm managers, respectively (i.e. 12 managers in total) (see Table 1). The managers taking part in the study are managing Swedish manufacturing companies in traditional branches having between 10 and 99 employees. The group of growing firms was selected from a list of ‘Gazelle-firms’ developed by the major daily economic journal in Sweden (Dagens Industri [Industry Today]). Their definition of a growing firm is as follows:

- Should have published public accounts at least 4 years
- Should have a revenue over 10 million Swedish crones (approx. $14 million)
- Should have at least ten employees
- Should have increased their revenues continuously the last 3 years
- Should have doubled their revenues during the same period
- Should have positive accumulative operating results for four accounting years

<table>
<thead>
<tr>
<th>Study</th>
<th>Focus of study/number of employees</th>
<th>Sex/age</th>
<th>Time as manager</th>
<th>Empirical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>No/slow growth</td>
<td>6 owner-managers (17–43 employees)</td>
<td>Male/between 43 and 58 years</td>
<td>Between 1 and 28 years</td>
<td>1 week of observation</td>
</tr>
<tr>
<td>Range –61 to +28 % increase turnover 6 years prior to observation</td>
<td>Average 26 employees</td>
<td>Average 49 years</td>
<td>Average 14 years</td>
<td>Data collected in 2002/2003</td>
</tr>
<tr>
<td>Fast growth</td>
<td>6 owner-managers (10–38 employees)</td>
<td>Male/between 35 and 65 years</td>
<td>Between 3 and 20 years</td>
<td>3 days observation</td>
</tr>
<tr>
<td>Range +241 % in average turnover 6 years prior to observation</td>
<td>Average 24 employees</td>
<td>Average 49 years</td>
<td>Average 12 years</td>
<td>Data collected in 2006/2007</td>
</tr>
</tbody>
</table>

Data collected in 2006/2007
- Growth should be organic and not by acquisition

The slow-growing firms represent the typical firm, which has almost no growth at all. There is a danger in this study’s approach to exploring the relationship between managerial behaviour and small-firm growth. The danger is that the conclusions from a sample population are not generalizable to a larger population owing to the number of variables influencing the results. I have therefore, together with a colleague, invested time and effort in identifying small manufacturing firms that have similar characteristics in order to keep as many variables as possible constant.

An advantage of direct observation compared to interviews is that observational data are less subject to participant constraint and interpretation. It is, however, necessary to consider the ‘researcher effect’ (or the ‘Hawthorne effect’ as it is often labelled). Although this effect is neither avoidable nor measureable, it is important to recognize that the presence of the researcher in observations may affect the data and the research results. In this research, I dealt with possible distortions from the researcher effect by frank discussions with the managers, both individually and in groups.

Endnotes

1 A number of definitions of small firms are available. In this article, I use the definition by Storey (1994), in which a small firm employs 10 to 99 employees.

2 [Beaver (2007):12] suggests four reasons that many small firm managers do not work with the strategy process: not enough time, unfamiliarity with strategic management techniques and processes, lack of skills, and lack of trust and openness.

3 Innovativeness reflects a firm’s tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Lumpkin and Dess 1996).

4 For a thorough description of the use of this methodology, see Mintzberg (1973), Appendix.

Appendix

Table 2 Chronological record

<table>
<thead>
<tr>
<th>Chronological record</th>
<th>Date:</th>
<th>Managers name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of day</td>
<td>Medium</td>
<td>Reference</td>
</tr>
</tbody>
</table>

Table 3 Mail record

<table>
<thead>
<tr>
<th>Mail record</th>
<th>Date:</th>
<th>Managers name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>Form</td>
<td>Sender/recipient</td>
</tr>
</tbody>
</table>

Table 4 Contact record

<table>
<thead>
<tr>
<th>Reference</th>
<th>Medium</th>
<th>Purpose</th>
<th>Participants</th>
<th>Initiative</th>
<th>Time (min.)</th>
<th>Place</th>
</tr>
</thead>
</table>

Competing interest
The author declares that he has no competing interests.

Authors’ information
Joakim Tell is Associate Professor in Industrial Management at the School of Business and Engineering, Halmstad University. His research interests include the development of different action technologies, such as learning networks, managerial behaviour in small enterprises, business simulations, and leadership and learning issues in general.

Acknowledgements
The author is grateful for the financial support from the Knowledge Foundation (KK-stiftelsen) in Sweden. I also want to express my appreciation to the journal’s editor and reviewers for their excellent support. This research was financed by grants from the Knowledge Foundation (KK-stiftelsen).

Received: 4 June 2015 Accepted: 26 October 2015
Published online: 04 November 2015

References


