

ORGANIZATIONAL BUILDING AND UNEXPECTED RESISTANCE

Theme 22, at the 27th EGOS conference 2011

Keywords:

Organizational formalization, high-tech ventures, individual resistance, and territorial behavior

Author:

Ingela Sölvell, PhD, ingela.solvell@hhs.se
Stockholm School of Economics, P O Box 6501, SE-113 83 Stockholm, Sweden

ABSTRACT

This paper reveals that, the earliest formalization of organizational characteristics, engages employees differently; resulting in territorial behavior and resistance. Based on emergent knowledge about the benefits and process aspects of early organizational building, formalization appears as a continuous process, but with territorial dynamics due to individual reactions. Particularly the implementation of formalization gives rise to questioning by individuals, irrespective of position; interpreted as negative territorial behavior. The territorial behavior is here also characterized as unexpected resistance. The investigation increases our knowledge about early organizational challenges, interpreted through the theoretical concept of organizational territoriality (Brown, Lawrence, & Robinson, 2005). The contribution extends our knowledge about the theoretical concept of organizational territoriality on an individual level as problematic, based on the contextual conditions where it occurs. In addition the results reveal the non-linearity of the initial formal organizational characteristics at the time of their creation, which extends our knowledge about the process of formalization.

INTRODUCTION

Multiple contributions from an organizational ecology perspective¹, witness in a deterministic way that, formalization of employment models enhance the subsequent development and performance of young high-tech ventures² (Hannan, Baron, Hsu, & Kocak, 2006; Hannan, Burton, & Baron, 1996), without informing us about how this implementation develops. Based on founders' cognitions, they were found to adopt models of employment that facilitate market establishment and survival in turbulent environments (Baron, Hannan et al. 1996; Burton 2001; Baron and Hannan 2002). Clear firm individual formal employment models, with a variety of recurrent dimensions³, were all established as beneficial to hold onto for survival and/or performance reasons (Baron & Hannan, 2002). A general explanation is that clear models reduce uncertainty, increase focus of employees in pursuing their tasks, and in their creation of organizational identities. An interpretation at the employee level is that, initial employment models, regardless of character, generally direct employee behavior in new organizations (Baron, 2004). The formal models become part of the socially coded identities of new organization, this in turn enable the individual identity creation of employees (Hannan, Pólos, & Carrol, 2002); but with the risk of destabilizing if changed (Hannan et al., 2006).

Other research has in the same vein confirmed, that also in dynamic environments, there are efficiency effects to gain from early organizational formalization (Sine, Mitsuhashi, & Kirsch, 2006). Revising old truths of Burns and Stalker, arguing for an organic development (1961), Sine et al. suggest that administrative intensity, team formalization, and specialization are all encompassing and performance enhancing undertakings in new high-technology ventures. Extending this knowledge, another contribution revealed how such formalization is actually pursued on a micro level (Sölvell, 2008). While management is holding back on increased formalization, employees take initiatives and responsibility, resulting in a dual-actor process.

¹ Refers to the SPEC, Stanford Project on Emerging Companies, is a panel study examining the founding conditions, the evolution of employment practices, organizational designs, business strategies, and the longer-term consequences of early organization building in high-tech ventures located in Silicon Valley.

² Here defined as high-technology based ventures younger than five years.

³ The recurrent dimensions are attachment, selection and coordination and control

This is a major shift in focus from regarding organizational formalization at early stages being primarily a legitimizing undertaking (Stinchcombe, 1965), that is to a large extent externally enforced (Meyer & Rowan, 1977). In addition, the assumption that formalization is primarily a management occupation, that is expected to intensify over life-time cycles (Kazanjian 1990; Kotey & Slade 2005) needs to be reevaluated as well, when dispersed employees are identified as taking initiatives and pursuing activities related to the formalization process. Taken together, formalization appears as an early process in high-tech ventures, but is pursued with diverse purposes and by different actors. At early stages of venturing disparate characteristics that co-exist with a prevailing informality can therefore be expected. The co-existence open for both informally and formally interpretations of how to behave.

This is reinforced by the understanding that, employee involvement in formalization can vary from either being actively involved to distanced from the process. The reason is that the sub-process of employee involvement is not an outspoken or distributed role, but is mainly on the employee's own initiative (Sölvell, 2008). Some take individual initiatives to increase formalization based on their current operational role. Exceptionally, some may be assigned by management to identify operation-based knowledge for increased formalization, while other employees remain passive. Once increased formalization is to be implemented, those that have remained passive in the formalization process react strongly. This complication in organizational development has not been elucidated by organizational or entrepreneurship theorists. Present knowledge about venture organizations, tends to perceive it as a linear management driven development, which occurs at later stages of organizational development (Mintzberg, 1979). The principal focus in this paper is employee reactions to implementation of increased formality. While an emergent strand of knowledge argues for early formalization as an overall supportive way of creating stability and clarity in new ventures, as well as enhancing external legitimacy towards different contingencies (Burton, 2001), unexpected resistance remains to take into account.

Research focus and purpose

It is widely recognized within organizational theory that organizational characteristics like structures and processes has a path dependence character, due to history determining their character at later stages (Hannan & Freeman, 1984); yet the creation process as introduced above is to a large extent neglected. This becomes apparent when looking into the implementation of initial formality, which is rarely taken into consideration. Thus, there is a theoretical gap in understanding the logics of initial formality creation, and the acknowledgment that organizational characteristics reflect the past, and are therefore challenging to change (Hannan et al., 2002; Vergne & Durand, 2011). The result is that we remain without knowledge about formal structures, and how they become strongly embedded in new organizations. Two important assumptions are taken as point of departure in this paper.

First, recognizing that the earliest formality influences venture performance, it is so far only investigated as a static relationship, like in the SPEC studies referred to above (Hannan, Baron, Hsu, & Kocak, 2000). This relationship is based on the intentional formalization by founders, and does not include the dual-actor perspective, which is a combination of planned top-down and bottom-up individual initiatives by disparate employees (Sölvell, 2008; Sölvell, 2009). The first assumption is that there is complicating dynamics involved in the formalization process, due to the multiple actor involvement, not the least related to the employees left passive. The assumption is based on that increased formalization inherently

arouse disparate engagement and behavior, which need to get its own attention. Reactions against increased formalization is given particular attention in this paper, while underlying reasons for differing behavior by other employees is used as an background for this paper (Sölvell, 2008). Second, despite acknowledgement of history dependence, the creation history of formal structures remain in darkness to a large extent for obvious reasons. The second assumption builds on the first, and acknowledge a need to access process aspects, revealed through inductive analyses of new venture formalization. Recognizing the difficulties in doing that, an appropriate theoretical lens is needed for analyzing inductively derived findings. For the specific purpose of understanding reactions against formalization the concept of organizational territoriality is applied (Brown, 2006; Brown et al., 2005; Brown & Robinson, 2007). This concept has opened for analysis of organizational behavior which occur in the complex context of new ventures. Such organizations are fraught with ambiguity and uncertainty regarding the evolving organizational characteristics, and has shown to include negative reactions due to perceptions of individual ownership.

Delimitations and structure of the paper

The paper delimits the dynamics and non-linearity of the entire formalization process to implementation phases; where reactions against increased formality appear as questioning and resistance. As such the results point to territorial behavior among individual employees. In the context of venture formalization this behavior appear as an important aspect to consider separately, to enhance our knowledge about early formalization and organizational venture development. Being important imprints for the future, the implementation of formal structures unravels as new venture struggles, that needs it own attention and solutions. Yet, for validation reasons, it has to be added that the empirical findings are limited to illustrations rather than results from an encompassing investigation of territorial behavior. They emerged during in-depth case studies pursued longitudinally (Delmar & Sölvell, 2005a, b; Sölvell, 2008), but called for a different analytical framework than the one applied in the case studies.

In the following current knowledge about initial formalization will first be presented. The analytical concept of organizational territoriality is thereafter introduced as a primary concept of analysis. It is followed by methodological considerations before the empirical data are presented and discussed. Finally, the results derived from employee engagement are presented, as enhancing our knowledge in the field of entrepreneurial organizing and organizational territoriality.

THEORETICAL BACKGROUND

A contemporary approach to formalization in new ventures

Apart from moving our focus on formalization from solely being an activity of management pursued in established firms, another more fundamental shift regarding formalization needs to be narrowed down. Informality in small and young high-tech firms has for long been taken for granted (Mohrman & von Glinow, 1990). Organizational informality and simplicity are perceived as competitive strengths, to be able to continuously change organizationally (Mohrman et al., 1990), and operate effectively in dynamic environments (Mintzberg, 1983). Specifically from an innovation perspective informality has been put forward as an advantage vis-à-vis established firms, which have become captured in formal filtering routines and structures (Henderson and Clark 1990; Katila and Shane 2005). It can neither be neglected when taking a new venture perspective, that there is an ultimate challenge to new high-tech

ventures, to progress efficiently during the resource scarcity period of establishment. It certainly includes efficient acquisition and use of resources, as well as reduction of other liabilities and uncertainties (Audretsch & Lehmann, 2006). Clarity about roles and the intra-organizational interaction patterns, and other specialization issues are therefore important aspects of performance enhancing measurements (Burton, 2001), as introduced above. If employee uncertainty is reduced, they will be able to focus on the task of transforming the venture idea to commercial products.

Hence, in this paper formalization is based on a need for new ventures to create some organizational stability and clarity intra-organizationally, which is considered as complementary and integrative rather than replacing or opposing to formality (Farjoun 2010). As such it is considered as a process with attention on creating a dual organizational design, with integrated informality and formality. This takes formalization beyond a static and conservative perspective of regarding formality as opposed to informality (Morand 1995). It rationalizes the process from the contextual situation of new high-tech ventures; which is fraught with dynamics and competitiveness.

The process of formalization

Based on knowledge about how to implement functional formality successfully in general, it has been suggested as an anchoring through several steps (Stinchcombe, 2001). First the abstraction of formality needs to be derived from operations. If not, the outcomes risk remaining as abstractions with low applicability. Another prerequisite is that, formalization needs to be devoid of individual interests. If not, formalized structures will not be widely applicable on an organizational level, and consequently not be supportive to the mutual interest of the venture. In addition formalization has to be exposed intra-organizationally for questioning and revision before formal implementation. Taking these aspects into consideration, the expected result is functional formalization, which is idiosyncratic to the firm. From the suggestions presented, it can also be understood that employee involvement is important; both to understand ongoing operational activities, and for getting critical perspectives on the formality to be implemented. Contrastingly, due to the uncertainty connected to high-tech venturing, different formalization approaches evolve to a large extent in abstraction. They may even be distanced from the ongoing operations and its shifting character. As such the earliest formal structures primarily reflect the intentional activities of the founders (Burton, 2001), and their general knowledge and purpose of enhancing external legitimacy, instead of being anchored through processual steps (Stinchcombe, 2001). Based on founders' behavior we learn about their underlying perceptions, and get a top-down perspective on prioritized formal structures, but the implementation and employee involvement closer to operation is left out of the process development.

With the purpose of getting a holistic picture of the formalization process, the dual-actor approach as introduced above, raises attention for employee involvement (Sölvell, 2008). Employee initiatives were identifiable as individual initiation and outlining of formal structures. This appears however as a disparate occurrence, and does not take formalization to a venture level, in the sense of engaging all employees, as in the work of Stinchcombe (ibid). It can further be noted that employee engagement was distinguishable from management behavior in that, employees develop formality from operational experiences, while management pursued it instrumentally in abstraction, rationalized by the uncertainty about the future. That employees are engaged in a variety of issues may not be surprising in young and mainly informal small ventures (Aldrich, 1999). What makes it particularly interesting in the

context of this paper is that the kind of issues initiated by employees. They are closely related to learning from current operations and individually perceived needs of increased organizational formality. This is a complementary way of perceiving the formalization and inclusion of employees, which has earlier occurred as an interactive process between management and employees. Formalization has been presented as evolving through an ongoing organizational dialogue, emphasizing the sense making aspect of it (Bouwen & Steyaert, 1990). The dual-actor perspective rather reflects an employee sub-process in parallel with management-driven formalization. It differs generally from the interactive perspective in lack of coordination and integration, and does not necessarily include a plan for implementation.

Additional perspectives increasing the heterogeneous dimensions related to formalization, is the suggestion that formality evolves through informally repeated behavior which becomes taken for granted (Eisenhardt & Schoonhoven, 1990; Eisenhardt & Tabrizi, 1995). While research focusing on the intentional process suggests that initially created structures may be operationally effective if they have been processed before implementation (Stinchcombe, 2001), informal acceptance of formalization is totally devoid of processing. Consequently it does not enhance our knowledge about formalization dynamics. Nonetheless, it is embedded and accepted, which lead to an expected implication that, intentional implementation of formality might provoke the already informally established formality. Lastly, detached initial structures may have been created due to pressures from financial investors, or as enabling structures vis-à-vis partners or other external actors. Such formal structures may be accepted for their specific purposes and consolidated through legal agreements. The perspectives presented above about the role of employees as, pursuing a separate sub-process, or as interacting with management, are primarily related to the initiation of formalization. The exception is the more normative approach, where employees constitute critical testers of functional formality (Stinchcombe, 2001), but gives little understanding about the entire dynamics of it, and particularly excludes the emergence of negative reactions.

Formalization dynamics as unexpected resistance

From a contextual point of view, the perspectives presented in the previous sections imply that there are reasons to believe that new ventures have some kind of formal structures already from founding that are complemented early by formal ones. It is worth noting that, from a life cycle perspective, a taxonomic study of high-tech organizations revealed that high-tech based firms deviate from the linear organizational development expected (Hanks, Watson, Jansen, & Chandler, 1993). The main reason is that formalization is part of the organizational challenges at all stages. This highlights that there is dynamics related to organizing in general, including the formalization process, without informing us about how the dynamics is shaped. Emergent knowledge about formalization in new ventures, even if disparately derived and with fragmented results, needs therefore to be understood from a dynamic process perspective, including encountered resistance.

Also, against the theoretical background presented, it can logically be understood that initial structures are constituted by provisionally outlined formal structures, in comparison with traditional measurements (Pugh et al., 1963; Pugh, Hickson, Hinings, & Turner, 1968). The primary explanation is the relative smallness and uncertainty about operations. As exposed, their diversity may also span from division of labor, human resource related issues, information processes, to external interaction (Vlaar, Van den Bosch, & Volberda, 2006). They can be related to what Stinchcombe (2001) raise alertness for; structures created based

on general knowledge instead of operationally derived structures, As such they are devoid of exposure for questioning before implementation, which can be expected to be a potential for negative reactions.

In addition, regarded from a dual-actor perspective, employees may both outline formal structures and implement them. This is yet another indication of why negative reactions may occur, from founders as well as other employees. Thus, irrespective of initiation differences in increased formalization, it can be expected to encounter resisting and questioning reactions once implemented on an organizational level. These reactions take us to the analytical concept of organizational territoriality.

Organizational territoriality

Research on organizational territoriality draws on earlier studies in anthropology, geography, and social environmental psychology, to alert organizational scholars on the significance of territoriality as an analytical concept for understanding organizational interactions (Brown et al, 2005), and identity creation. Territoriality in organizations ranges from perceptions of ownership of artifacts to individual preoccupation with guarding tasks, ideas (Brown et al, 2005), or products (Das, 1993). Thus, one aspect of perceived territoriality is feelings of psychological attachment, whereas another important aspect is the actual behavior to defend it.

Individual territorial feelings are suggested to be widespread in organizations. A leading author introduced the concept to organizational theory, suggesting that it is applicable in complex organizational settings (Brown et al, *ibid.*). The concept has been developed from being primarily suggested as a key attribute to organizations and employ identity creation, to adding less advantageous dimensions. Such dimensions can even become destructive because they occupy attention among individuals who want to mark and defend their territories (Brown et al., 2005; Brown et al., 2007). As such territorial behavior can be expected to be detrimental to venture performance in a short perspective. In this paper it has been implied that negative reactions could occur during the implementation phase of new formal structures, for several reasons; that formalization is pursued in abstraction, detached from operations; that it may collide with already informally accepted formality; that it is a disparately occurring phenomenon pursued as sub-processes, or that it encounters structures that have been implemented with regard to external interaction. The concept of territorial behavior is applicable for analyzing a variety of reactions that differ in their underlying reasons and purposes.

Central aspects of organizational territoriality

Some central aspects related to territorial behavior in organizations is *marking* and *defense* of what individuals perceive as psychological owned (Brown et al., 2005). Marking aims at constructing and communicating territories, while defending marking refers to how individuals maintain and restore territory (Brown et al., 2005). The two core concepts reflect the introduced range of behavior; which at the one end is based on perceptions of ownership, and at the other emerges as guarding of what is perceived as individually owned in the collective setting of an organization.

Marking can be physically, orally or formally expressed. You can physically mark a place at a conference table; you can orally express who came up with an idea; or you can formalize in

written your claims to an idea through patent filing. Patent filing would logically be a more permanent territorial marking than marking you chair at a conference table. Initial marking of a place at a conference table can stay with the constructing and communicating phase. For example, if it is a behavior that occurs during a time period that is limited to one conference, an individual could leave a jacket on a chair to claim a specific chair to get back to during the conference; it is more of the constructing interpretation of marking. However, if the person gets back half a year later to the same place, together with the same people, and try to occupy the same chair, there might be a collision of behavior, because nobody else is conscious about this territorial claim. The marking person does intentionally try to get hold of the same chair, while others are not occupied with the same intentions. The marking person's behavior would then be more of control-oriented marking, with the intention to restore order and maintain earlier conquered territory. Still, it may be without much plainness or awareness among others.

The aspect of marking relates to how formalization in new ventures has been presented; as a construction of meaning between individuals that ultimately enables organizational interaction (Bouwen et al., 1990; Brytting, 1991; Vlaar et al., 2006). It also connects to the need of organizational identity creation clarifying the individual in relation to the collectivity of an organization (Baron, 2004). As exemplified above, the marking spans over different intentions, and has different underlying purposes. The scope can, as alluded to above, be distinguished as two main types of marking; *identity-oriented and control-oriented, which includes defense* (Brown et al., 2005).

Identity-oriented marking

In line with the above, identity-oriented marking serves the purpose of communicating individual territory to others. The behavior occurs regarding organizational characteristics that individuals value. The behavior increases their feeling of attachment and individual commitment to an organization (Brown et al., 2005). Identity-marking as suggested by Brown et al. (ibid.) signify primarily territorial behavior intra-organizationally. Yet, organizational characteristics that individuals make visible can be 'best-seller' diplomas awarded by a company or idiosyncratic titles that underline profession and competence. Such items signal territoriality both internally and externally as part of identity creation in line with corporate values (Dutton, Dukerich, & Harquail, 1994; Kunda, 2006).

Transferred to a new venture context the initial integration of different individual competences can be imagined as uncertain and without much individual clarity of role or tasks. This contextual conditions would from a territorial perspective increase the individual need of identification and commitment when boundaries and tasks are to be formalized; in that sense it becomes a part of the collective identification (Wry, Lounsbury, & Glynn, 2011). Supporting this is that individuals are generally suggested to cultivate personal needs of distinguishing themselves in relation to other organizational members (Brown et al., 2005), or related to their perceptions about themselves (Naus et al, 2007). Hence, both contextual characteristics can be expected to be identifiable in new ventures.

Control-oriented marking

Differently, control-oriented marking goes beyond identity-oriented marking in claiming territory with the purpose of refraining others from accessing or using the territory. Since new ventures are expected to have a relatively low degree of formalization, it implies that

employees in new ventures would have many opportunities to claim territory for their own purposes, without the risk of being rebuked by anyone, on the contrary. In other words, the field is open for taking on responsibility and multiple roles. Such behavior belongs to the so called boundary creation challenge, which includes control of personal identity creation, in new ventures (Aldrich & Ruef, 2006). My application of organizational territoriality is distanced from psychological feelings regarding physical possessions and artifacts, such as office space or computers found in office facilities. Yet, the wide scope for individual claims in small and young ventures, is expected to have resulted in informally outlined structures, which confronted with new ones, provokes negative individual reactions.

Defending

The last central aspect related to marking is defending. It is a reaction that might have negative consequences, and refers to maintenance and restoring individually-based territories, or reacting on infringements. It becomes particularly apparent when disagreements arise due to differing interpretations, or perceived infringements (Brown et al., 2005). The authors define infringements as a perception between two individuals. It is expressed either as anticipatory⁴ or reactionary.

The reactionary aspect of territorial defense will be more likely to happen if the individual perceive intentionality, or if the infringer could have foreseen the consequence. Anticipatory defending could be with the purpose of accessing or use a perceived territory, without apparent rivalry from others. Related to intentional formalization these aspects of organizational territorial behavior are suggested as the most relevant for analyzing my empirical findings. In particular this last aspect of defending can be expected to be the most explicit in the intra-organizational interaction of employees.

Concluding regarding the theoretical background, early formalization in new ventures emerges through recent research as advantageous to entrepreneurial performance. The concept of organizational territoriality has somewhat differently for long been applied within different fields as an advantageous behavior, enabling individual identity creation in complex organizational context. High-tech venture contexts are for several reasons an uncertain and complex context, where the identity creation is to a large extent left to the individual. Based on empirical findings, formalization and organizational territoriality are applied analytically for a critical consideration of behavior that deviates from the expected positive outcome of the two phenomena.

METHOD

The findings in this paper emerged from empirically based thesis work including retrospect interviews with ten Swedish high tech ventures, see Appendix 1. They were selected from a high tech population study of 82 firms, representing different industries (Delmar and Sölvell 2005). When selected the ventures employed at least 10 employees and were younger than five years. With this size and age, the possibility of assessing the earliest formalization activities was estimated as feasible. An additional selection criterion was their intention to grow. Four of the ventures were studied in-depth through case studies pursued in vivo. The study period was one and a half years through a multi-method approach.

⁴ Anticipatory defense differs from control-oriented marking. The latter is explicitly communicated to prevent infringement. That can be an oral announcement of ownership to an idea preventing that someone else will claim the idea later on.

Multi-method approach and analysis of data

As presented the study was launched based on retrospect interviews with founders/current CEOs. Agreements were made with the four venture CEOs for recurrent interviews, observation on site and access to company documentation. The CEOs also opened for on-site interviews with all employees during the in all 17 observation days. The number of interviews resulted in 43 personal interviews, apart from desk talks with employees. Complementary methods of observations, and collection of first and secondary material were pursued in order to get an as encompassing as possible understanding of the formalization process. More details about the field work are to be found in the thesis of Sölvell (2008).

The inductively derived findings were sorted and coded continuously based on the purpose of increasing our understanding about formalization in new ventures. Analytical work was conducted as a combination of deductive and bottom-up approaches (Shepherd & Sutcliffe, 2011). Reliance was set on an inductive model of coding the data and its interrelations, creating milestone results on the way with the support of literature (Sölvell, 2004a, b; Sölvell, 2005). Eventually evolved as a dual-actor process as the main conceptual characterization (Sölvell, 2008). This characterization of the process evolved from first order informants, merging to second order dimensions about the formalization process⁵. Having documented, coded and tentatively analyzed the material over time, the main dimensions characterizing the formalization process could be summarized.

However, as has been presented throughout this paper individual behavior, reactions against formal structures were encountered sporadically. These reactions dominated sometimes to an extent that they took away focus from meetings and discussions between employees. As such they were explicit, but from my theoretical framework at the time, they were also hard to pin down. As has been argued they here get their own dealing analytically. Hence, in this paper my theoretical sensitivity has been developed through renewed analysis, against a different theoretical background. It is delimited to developing one of the second-order dimensions, denominated ‘dashed organizational development’ (Sölvell, 2008), and the theoretical framework of organizational territoriality.

The four cases

Finally, when the empirical investigation was launched the four case studies could be characterized as illustrated below.

	Case for Life	Cell Case	The Interpretation Case	Top Security
Year of foundation	2001	2001	1999	2000
Venture idea	Attention deficit training method	Miniaturized cell-based screening products	Soft-ware based interpretation of handwriting	Secure software solutions
Origin	Karolinska Institute	Chalmers University of Technology	Lund Institute of Technology	Generated during consultancy work

⁵ The seven second-order dimensions underlying the results in Sölvell 2008, were ‘proceed with caution’, ‘self-generated’ formalization’, ‘to the best of employees’, ‘selective action’, ‘personal reassurance’, ‘dashed organizational development’ and ‘continued exploration’.

	Case for Life	Cell Case	The Interpretation Case	Top Security
Full-time employees in 2003⁶	4	19	19	14
Sales in 2003⁷	0.47 million SEK	1.2 million SEK	5 million SEK	10.8 million SEK
External capital in 2003⁸	6.5 million SEK (angel investments)	47.4 million SEK (VC-capital)	66.5 million SEK (VC-capital)	56.1 million SEK (VC-capital)
Number of patents⁹	3	31	20	28
International presence¹⁰	None	None	Sales representatives in China and Japan	Sales office in the US, development partners in US and Japan
Formal organizational characteristics¹¹	Customer database, customer interaction model, clinical test model, recurrent sub group meetings, division of roles among key initial employees	Customer database, functional division of key organizational roles, formal weekly information-sharing meetings, procedures for new projects, human resource policy	Informal weekly meetings, employment model, product development models, functional division of key organizational roles	Formal weekly information-sharing meetings, irregular brainstorming meetings and procedures for product development, an assigned employee working with mapping of bases for formalization

Table 1. The four ventures investigated at the launch of the study.

The ventures represent different industry segments. Apart from Case for Life the other three cases had published a substantial number of patents related to the average found in the entire high-technology population investigated (Delmar et al., 2005a). These were a mixture of individually and venture-owned patents. A peak number of publications were made during the first year of operation, indicating that organizing activities had started before the legal launch of the ventures.

The official average number of employees, presented in Table 1, was the most reliable number accessible. Yet, a substantial number of more individuals appeared to be engaged in the ventures, but no such reliable numbers were attainable. During the one and half years of investigation the ventures did not take off in growth terms, thus neither in number of employees nor increase of sales. On the contrary, formalization was increased to make more efficient use of resources and to refine operating procedures.

Regarding identifiable formal structures at the outset of the investigation, all the ventures but Case for Life had regular information-sharing meetings with all employees.¹² Functionally based organizational roles were assigned to key employees, without written details. Formalization related to product development and customer interaction seemed to have taken provisional forms in all the ventures. The status for each of the venture was still that they were mainly informally structured.

⁶ The most recent official number available from their annual reports on the average number of full-time employees when the investigation was launched. Case for Life did for tax reasons engage additional ten employees through consultant contracts.

⁷ From the annual report in 2003.

⁸ From the annual report in 2003.

⁹ From esp@cenet in 2003.

¹⁰ From the first interview with the venture CEOs.

¹¹ These issues were mentioned in the first interview with the venture CEOs answering the question about what formal characteristics had been created. They were later verified during the investigations.

¹² Apart from an event once or twice a year that takes place in all the ventures.

EMPIRICAL FINDINGS

Second-order dimension of ‘dashed organizational development’ developed from first order informant

The findings presented below relate to issues that have been outlined as provisional structural characteristics, solved through informal approaches¹³, or issues that have not been paid any attention to earlier. Individual employees have been acting from their functional roles informally assigned. Yet their responsibilities remain to a large extent unclear, and so do apparently interaction processes. Taken together the issues illustrated relate to interaction processes between employees at different organizational levels.

The findings are derived from management meetings and dialogues occurring during observations. They reflect questioning and arguments that come up spontaneously during management meetings, and recurrent meetings between key employees focused on sales and marketing. The issues that are debated take over attention from the main discussions points on the agenda.

Questioning by employees

Who takes responsibility for what? [Employee] *We need to get information about individual responsibilities. I certainly know about the lab, but nothing about production or ISO 9000. We had to discontinue an agreement with X, despite the potential profit. ... this way of working feel totally pointless! You need to first take a decision and then delegate.* [Manager] *It is about what kind of responsibilities that individuals want to take.* [Employee] *But I talked to X; we need to be damned clear about different routines and structures. We need a strict discipline regarding our documentation. We cannot keep this mess. What if somebody has taken the documentation for a trip to the States when the customer comes here?! The guidelines need to take form. There are several people here that strive for new roles; it contributes to the mess....* [Manager] *I do not believe so you can work out this in so many different ways...*

Regarding responsibilities within the management group:

[Employee] *I wonder how we are going to execute the strategy that is taken.* [CEO] *That has not begun because the project update was not completed, but it should come automatically. The process of handling the project ought to become more simple* [Employee] *I think it has gone the other direction and it takes most of the time during management meetings* [CEO] *Project discussions will always take substantial time at the management meetings but the process is expected to become easier. The delays are symptoms of something. What is that? Two of the employees declared that there were accusations in the air related to that last statement.* [CEO] *There is a need to set limits which have not been done.*

Two different contexts are highlighted here, but both citations signal marking. In these cases it is very outspoken, and communicated to senior managers. In the first illustration the employee has got engaged in a formalization issue, delegated by management. However, her concern relates to her closest operational context. Engaged in one general and delegated issue, that is about to be implemented, she wants to mark her own competence and identity. Her will is to get clearer acceptance for her role, based on her earlier experiences, primary working area and tasks; which are apparently an ongoing strive among other employees as well. She calls attention to a need for individual identity creation aligned with corporate values (Dutton et al., 1994; Kunda, 2006). Her reactions emerge when she takes initiatives that intend to be communicated and applied by all in the venture, and she takes this opportunity to put forward her own needs and territories.

¹³ This means that different employees have handled them individually according to their own judgments.

In the case of responsibilities within the management group, they have been drafted through a new strategy, which has been outlined through a formalized process initiated by a new CEO. When implemented, members of the management team question it, whereas the CEO assumes that implementation is self-evident. The members hold on to their earlier way of working by silently neglecting the new strategy, including new roles among them. When the CEO is running the meeting as if the implementation is already achieved, the management group members respond by questioning the the strategy and its implementation. In particular, the consequences seem to discourage, because it means implementation of totally new working processes; which in turn reduce the power of the management group members. They have hitherto acted as an informal management group without much involvement or insight by the former CEO.

Questioning between employees

Regarding formalized screening of potential customers: [Head of sales] *We have to learn from our mistakes. We had done all the screening through telephone interviews, but we might need more control questions...* [Researcher] *It is not only about this last visit. We have a short perspective of achieving budget goals. The coming visits are vital.* [Head of sales] *In another case the information about the customer evolved gradually. At a certain point we cancelled that.* [Employee] *Yes but also in this last case when it went wrong you knew beforehand that he was not interested in purchasing our products in the short perspective.* [Founder] *The problem is that we have spent our time with the wrong potential customers at several occasions.* [CEO] *No, that...* [Head of sales] *That is another perspective on this problem; that is where we are and where we travel. You happened to be on the West Coast, and X is a present client that was interested in placing more orders. We thought that he would be interested in getting direct contact with you researchers...If you think it is a complete waste of time you need to talk with me beforehand.* [CEO] *The question remains about how we qualify potential customers for a visit.* [Employees] *Exactly!* [Head of sales] *I would appreciate if we could have discussions about priorities every week to plan customer visits because it is a very difficult and time consuming contact process.* [CEO] *You need to present planned visits on the intranet too...*

Regarding venture marketing: [Head of sales] *We have succeeded in booking the coming sales meetings in the US within a week. My sales assistant will go with one of the researchers.* [Founder] *The problem is that you have no personnel that can make those visits.* [Head of sales] *I am prepared to join if that is judged as the right use of resources...* [Founder] *there are two things in this. First, the researcher has never done any sales and he feels very uncomfortable about it...and the sales assistant has no chance to discuss the subject, then trust will go down the drains.* [Head of sales] *I said I am prepared to join.* [Founder] *Do you believe you have enough competence to discuss the subject?* [Head of sales] *I do not need to discuss or solve the problems related to the subject, but I have 20 years of experience from sales and consider that I am prepared to meet the customer.* [Founder] *It is quite alright that you believe that, but the problem remains that you put confidence in a person that feels extremely unprepared and uncomfortable..* [CEO] *With this set up the researcher does not need to do any sales talk.* [Employee] *But who will do that?*

The above is taken from the same company and the context of recurrent and scheduled sales meetings. At both occasions the questioning is directed against an externally recruited co-worker, who has outlined and implemented a formal sales process, including several subsequent steps. The intention is that she handles the screening and qualifying process, together with two co-workers, whereas the booked sales meetings are to be taken over by the more knowledgeable researchers. Before the formal sales process existed the researchers have planned their meetings on their own. Now, the whole process, including the booked meetings, the role of the head of sales, and the competence of her closest co-workers, is questioned. It transforms into individual arguments about competencies. An argumentation about who is most suitable for what permeates a discontent among employees who have been detached from the formalization and application of the formalization of the sales process. Especially the founder raises his voice against the new formal approach to potential customers.

An argument between the CEO and the president in the US about renewed contacts: [US President] *We can take this in a separate discussion afterwards. Even if I agree that we have to find out the underlying reasons to why they do not answer, I am not convinced that to ask another time is the best approach".* [CEO] *I do not think we need a separate discussion about how to treat customers. I think it is time to take a new contact because it is more than 3 weeks ago since the last one."*

The third citation illustrates similar reactions; but in this case there is no formal procedure outlined for the sales process. Yet it is apparent that the CEO/founder has his own image set in his mind about the sales process and its execution.

Questioning by founder

An argument about financial priorities: [Founder] *It is a matter of deciding what the key operation is. It is a relatively small amount of money. It is less than we spend on a consultant that will spend days on mapping individual satisfaction. This is a non-issue if we are in the high-technology business then we have to spend our money on patenting and no other trivial issues.*

Regarding responsibility for corporate communication:

[CEO] *Then we have the PR draft but we cannot decide on it because it is only a draft.* [President] *Our assistant was to send it for print today.* [CEO] *It is really good but it is not even close to be printed* [President] *Ok I must have misunderstood something but we sent out a final draft the other day* [CEO] *I guess we are back to the problems we have with our administrative assistance, she does not grab things right. You have to send it out to get proof reading, and then we can take a decision, but this is far from ready. Has she talked to our business angel too?* [President] *Yes he has got it and he has said ok.* [CEO] *look at this, and this.. the writing is not even completed ...*

About a new release: [Founders] *We did not get the point of it.* [US President] *it is about how we work with third part contractors.* [CEO] *Yes but what is the news?* [US President] *Most of our news are no news and we did not know where to make the pitch.....*[CEO] *Ok, I do not say no but content is more important than just to deliver something. You should not feel pressed that you have to make a release.* [president] *then we have a shared opinion because it was a hard challenge to create a story [that we did not have]* [US President] *The thought was that we tell about an established routine we have* [CEO] *Ok, ok... all I say is that we have to anchor releases in the management group.*

Regarding the first citation above there is an accepted continuity of working on patenting the R & D work. This informally accepted task by the researchers confronts a management decision to have an ongoing mapping of employee satisfaction, performed by external consultants. The reaction comes from one of the founders with the self-imposed task of patenting; whereas it has been formally decided to outsource other task to experts on a continued basis.

The other two citations elucidate questioning occurring regarding corporate communication. The employees taking on the tasks through delegation, they have to a large extent simultaneously outlined the formal procedure for the tasks. In these cases it is the CEO who is questioning the procedure, using content issues to mark who knows best.

DISCUSSION

A renewed analysis of the findings elucidate how marking-related arguments occur among employees. These expressions are traced in venture contexts where formalization is increasing. They occur both as identity-oriented marking, and direct conflicts of defending.

Identity-oriented marking

Questioning by employees refers to typical behaviors by employees when reacting against formalization. One is the call of management attention towards practical consequences of increased formalization, or neglect to do it. The employees mark individual identity concerning organizational roles and responsibilities (Dutton et al., 1994), in the organizational context that is characterized by emerging boundaries and structures. The fundamentals so far, or rather functionally appointed roles that individuals have formed, are deranged in the eyes of

the employees when some new procedures are formally declared for implementation. This seems to happen even if there is no increase in number of employees, which could be expected to be the condition in new ventures (Aldrich and Langton 1998). These findings add new knowledge about employee behavior related to formalization that have a capacity of overarching guidance (Hannan et al., 2006; Hannan et al., 1996). The overarching guidance is on a collective and organizational level that enables the recruitment of people, and helps them to identify with the formal models of employment. In that sense employee models can reflect the strategy and vision of the venture, which guides work behavior generally toward mutual aims, and coordinate employees. However, the ventures investigated were not found to have any clear employment models (Sölvell, 2008).

The findings analyzed raise differently the employee identification on an individual level in the perspective of individual roles, tasks, and responsibilities. The CEOs' general hesitance towards formalization on both organizational and individual level impedes the identity oriented behavior that employees would like to develop related to their individual work contribution and career. This perspective of marking addresses identity orientation that would have a potential to come out on the positive side. If employees find ways to identify with the ventures, gains in efficiency could be expected, and less frustration would occur. However the findings highlight that individuals have a concern for and identification with the mutual challenge of the venture, i.e. the success of the venture, but they are disoriented regarding their own responsibilities and working roles. Their marking is therefore possible to trace both to the identity they have informally created, and clearer organizational identities that they have had in earlier professional occupations.

It also reflected in the findings that employees seem to have an increasing need over time to get recognition for their working roles, and task responsibilities. In that sense their reactions can be interpreted as a need for clearer career paths and identity development. Indirectly the marking which signals identity-oriented marking, can in the context of new ventures also be called for when external interaction increases over time, as it appears in the second citation. With a move in the ventures regarding increased formality, the individual reactions appear related to the organizational roles, which are of closest interest to individuals and their identity creation. The result is that the mutual strive of increased formality on a corporate level, which is pursued either by management or scattered employees, tend to concern issues like e.g. corporate communication, which are distanced to the organizational roles and therefore arouse marking behavior.

Further, employees have taken responsibilities that go against the increased formalized procedures that the CEOs and founders have the intention to implement. Apparently the earlier ways of doing things are changed, but what is actually expected from management in terms of responsible behavior remains unclear to the employees. Arguments arise and several operating issues are stalled. The citations referred to as release of new product, customer contacts, financial priorities and corporate communication, are important issues to all companies, and to new ventures they are most vital in the organizational development. The key employees are aware of that since they are working in a relative small community, generally being equally informed as the CEO. Yet diverse opinions become apparent when it comes to perceptions about how these issues are actually best handled. The result is that also in the close management group there are individual marking going on, intermingled with issues that are to be formalized to the benefit of increased professional administration. Employees have created their own organizational territories, which have not been communicated.

Concluding about identity marking, it is both implicit and explicit. Implicitly individuals seem to continuously create their own territories in the emerging organizational context. This belongs to the informal way of getting acceptance for formal ways of acting. More explicitly individuals mark their territories with the intention of manifesting their control of it, but also to declare their organizational identities and delimit their organizational roles.

Marking – communicated and defended

The future is still unclear and uncertain in the not yet established ventures. As introduced regarding the context informality is prevailing. Nonetheless, informally repeated behavior has become accepted as the formal way of behaving (Eisenhardt and Schoonhoven 1990). This emerges as identity-based communication and defense. Apparently, from the launch of the venture the first employees have to a large extent developed their own identities. That means that the prevailing informality has allowed for individual employees to create their own territories, in terms of tasks, responsibilities, or different ways of operating. The scope being wide, each employee has constructed her own organizational role.

All the illustrations reflect defending emerges through oral communication that turn into heated discussions. It occurs in varying situations, but is clearly directed towards particular co-workers. The interpretation of it as defense, is strengthened because the communication comes up whenever the targeted employee is accessible. In that sense the territorial defense is blunt in relation to other co-workers. The defense takes away attention from the actual reason for interaction, independent of if it is at a decision meeting, an information meeting or during social interaction in the office space.

The questioning presented under the headline of ‘questioning between employees’ were the most explicit and affectionate defending markings. In that sense they were the strongest and most deranging too. The operational issues that cause the argumentations refer to shift in roles and activities, or priorities in resource deployment. The territorial behavior came out as individual accusations and doubts about co-workers capacity and skills. The behavior was possible to trace related to formal new procedures that were applied by some, who saw them as advantageous and a professionalized way of working, while others reacted against them. The reactions were grounded in their informally habituated way of working in the venture. The argumentations were of a conflicting and accusing character.

What is defended relates primarily to individual competences and tasks that have been taken on through individual initiatives. The reactions are in defense of how a task has earlier been executed, or contrarily reactions against new formal procedures accepted and performed by some employees but not all. From a territorial perspective this finding illustrates the scope of organizational territoriality that has theoretically been depicted as ranging from physical objects to abstract ideas (Brown, Lawrence, & Robinson, 2005). Thus what is defended, ranges from informally accepted behavior, to new formal structures, and new issues that have not been present before. What individuals defends could therefore belong to individual tasks as well as organizational tasks that somebody takes on informally.

Additional provoking reasons for marking through defense can be identified as occurring when alterations in strategies are made, and with the entrance of new organizational members. As all employees have initially been left much in freedom to create their own organizational identities, formalization attempts encounter resistance when implemented. Hence, the

strongest marking defense seem to be related to retention of intentional formalization, which result in open conflicts and defense of territory from those who have created their own organizational roles by informal acceptance. The results clarify the division between employees that takes initiatives to increase formalization, based on operation, and employees that defend and restore their initially created identities. The results extend earlier knowledge about identity creation as closely related to initial formal structures (Baron 2004), by identifying them as reasons for conflict.

CONCLUSIONS

As has been presented based on earlier research, the abstraction process entails several conditional dimensions (Stinchcombe, 2001). Through these findings the abstraction process is empirically unravelled, adding knowledge about the consequences of not exposing new formalization attempts for debate and revisioning. If this step is skipped, the debate and revision appears unexpectedly.

The results can be characterized as a continuous individual marking of organizational territory in new ventures, where the initiatives to formalization of organizational structures and processes are disparate and pursued rather on an individual basis than clearly communicated to all employees by management. This reflects a flat structure with emerging challenges. In addition it reflects a poorly coordinated formalization process, and lack of continuity and attention to the organizational development. Depending on how strongly individual employees identify with the corporate strategies, their tasks and their fellow employees, they have become differently related to the formalization process.

Those that identify strongly with the corporate values reinforce their identities by actively taking new initiatives to increase formalization. They use accumulated operation-based knowledge to anchor the new initiatives, which is recognizable among fellow employees and more easily accepted. Others takes initiatives mainly based on their prior knowledge. Employees passive to the process give rise to questioning and the unexpected resistance as has been presented and discussed.

Apparently strong individual identity marking occurs in the primarily informal context of these ventures. Informally developed identities bring about unexpected resistance to formalization. In particular it causes conflicts when increased formality is implemented.

The results expose the dynamics of the two phenomena of formalization and territoriality. They are revealed as closely related, and as having unexpected negative consequences, as opposed to the positive outcomes that are expected based on our earlier understanding (Brown, Lawrence, & Robinson, 2005) (Hannan, Pólos, & Carrol, 2002). As such formalization is a process that encompasses formality at different stages of refinement and with different applicability, but are integrated in a destabilizing way when changes occur (Hannan et al., 2006). This paper illustrates the contextual complexity of increasing formalization, and reveal negative dimensions to the development.

IMPLICATIONS FOR PRACTICE

“There has been so much waste of resources in this venture due to misjudgments regarding organizational issues. That has impeded a breakthrough with our products” (Founder in one of the ventures investigated)

The unraveled dimensions in this paper have several practical implications. One is that management has a potential gain in including employees in formalization. As it appears, it is a process that is fraught with dynamics and requires continuous attention. Engaging employees facilitates the continuity of abstracting knowledge from operations.

Another implication is that the engagement of employees could be extended from identifying operational foundations for formalization, to debating and giving suggestions revised before they are implemented. That would probably enable the implementation of increased formality.

In addition, formalization in general seems to evoke strong individual feelings. Also, the CEOs were in my earlier study instinctively hesitant to formalization (Sölvell, 2008). However, the results reinforce emergent knowledge about the importance of formalization in new ventures, because it occurs informally any way and because it can be used as mediator for venture development if it is given continuous attention.

Last but not the least, the organizational identity creation of individuals, and their concern about career development could be enabled with measurements for avoiding marking of the kind treated in this paper.

REFERENCES

- Aldrich, H., E., & Ruef, M. 2006. *Organizations evolving* (2nd ed.). London: SAGE Publications Ltd.
- Aldrich, H. E. 1999. *Organizations evolving*. London, Thousands Oak, New Delhi: SAGE Publications.
- Audretsch, D., B., & Lehmann, E. 2006. Entrepreneurial access and absorption of knowledge spillovers: Strategic board and managerial composition for competitive advantage. *Journal of Small Business Management*, 44(2): 155-166.
- Baron, J., M., & Hannan, M., T. 2002. Organizational blueprints for success in high-tech start-ups: Lessons from the Stanford Project on Emerging Companies. *California Management Review*, 44(3): 8-36.
- Baron, J. N. 2004. Employing identities in organizational ecology. *Industrial and Corporate Change*, 13(1): 3.
- Bouwen, R., & Steyaert, C. 1990. Construing organizational texture in young entrepreneurial firms. *Journal of Management Studies*, 27(6): 637-649.
- Brown, G. 2006. Territoriality: Instrument development and validation: 1-43. Singapore.
- Brown, G., Lawrence, T., B., & Robinson, S., L. 2005. Territoriality in organizations. *Academy of Management Review*, 30(3): 577-594.
- Brown, G., & Robinson, S. L. 2007. The dysfunction of territoriality in organizations. In J. Langan-Fox, C. Cooper, L., & R. Klimoski (Eds.), *Research companion to the dysfunctional workplace: Management challenges and symptoms*: 252-268. Cheltenham, UK: Edward Elgar.
- Brytting, T. 1991. *Organizing in the small growing firm*. Unpublished Monography, Stockholm School of Economics, Stockholm.
- Burton, M., Diane. 2001. The company they keep: Founders' models for organizing new firms. In C. Bird Schonhooven, & E. Romanelli (Eds.), *The entrepreneurship dynamic - Origins of entrepreneurship and the evolution of industries*: 13-39. Stanford, California: Stanford University Press.

- Das, G. 1993. Local memoirs of a global manager. *Harvard Business Review*, 71(2): 38-47.
- Delmar, F., & Sölvell, I. 2005a. The development of growth oriented high technology firms in Sweden: 1-59. Stockholm: Center for Entrepreneurship and Business Creation, Stockholm School of Economics.
- Delmar, F., & Sölvell, I. (Eds.). 2005b. *Understanding firm development in highly innovative ventures: The difference between academic and commercial spin-offs* (2005 ed.). Wellesley, MA: Arthur M. Blank Center for Entrepreneurship.
- Dutton, J., E., Dukerich, J., M., & Harquail, C., V. 1994. Organizational images and member identification. *Administrative Science Quarterly*, 39(2): 239-263.
- Eisenhardt, K. M., & Schoonhoven, C. B. 1990. Organizational growth - Linking founding team, strategy, environment, and growth among United-States semiconductor ventures, 1978-1988. *Administrative Science Quarterly*, 35(3): 504-529.
- Eisenhardt, K. M., & Tabrizi, B. N. 1995. *Accelerating adaptive processes - Product innovation in the global computer industry*.
- Hanks, S., H., Watson, C., J., Jansen, E., & Chandler, G., N. 1993. Tightening the life-cycle construct: A taxonomic study of growth stage configurations in high-technology organizations. *Entrepreneurship Theory and Practice*, 18(2): 5-30.
- Hannan, M., T., Baron, J. M., Hsu, J. M. G., & Kocak, O. 2000. *Staying the course: Early organization building and the success of high-technology firms*. Paper presented at the The Entrepreneurial Process - Research Perspectives, Harvard Business School.
- Hannan, M., T., Baron, J., M., Hsu, G., & Kocak, Ö. 2006. Organizational identities and the hazard of change. *Industrial and Corporate Change*, 15(5): 755-784.
- Hannan, M., T., Burton, D., & Baron, J. N. 1996. Inertia and change in the early years: Employment relations in young, high technology firms. *Industrial and Corporate Change*, 5(2): 503-535.
- Hannan, M., T., & Freeman, J. 1984. Structural inertia and organizational change. *American Sociological Review*, 49(April): 149-164.
- Hannan, M., T., Pólos, L., & Carrol, G., R. 2002. Structural inertia and organization change revisited: The evolution of organizational inertia: 1-27. Stanford: Graduate School of Business, Stanford University.
- Kunda, G. 2006. *Engineering culture*. Philadelphia: Temple University Press.
- Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2): 340-363.
- Mintzberg, H. 1979. *The structuring of organizations*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Mintzberg, H. 1983. *Structure in fives: Designing effective organizations*: Prentice Hall International Editions, Inc.
- Mohrman, S. A., & von Glinow, M. A. 1990. High technology organizations: An introduction. In M. A. von Glinow, & S. A. Mohrman (Eds.), *Managing complexity in high technology organizations*: 3-14. Oxford: Oxford University Press.
- Pugh, D. S., Hickson, D. J., Hinings, C. R., MacDonald, K. M., Turner, C., & Lupton, T. 1963. A conceptual scheme for organizational analysis. *Administrative Science Quarterly*, 8(3): 289-315.
- Pugh, D. S., Hickson, D. J., Hinings, C. R., & Turner, C. 1968. Dimensions of organization structure. *Administrative Science Quarterly*, 13(1): 65-105.
- Shepherd, D. A., & Sutcliffe, K., M. 2011. Inductive top-down theorizing: A source of new theories of organization. *Academy of Management Review*, 36(2): 361-380.
- Sine, W. D., Mitsuhashi, H., & Kirsch, D. A. 2006. Revisiting Burns and Stalker: formal structure and new venture performance in emerging economic sectors. *Academy of Management Journal*, 49(1): 121.

- Stinchcombe, A. 1965. Social structure and organizations. In J. March (Ed.), *Handbook of organizations*: 142-193. Chicago, IL: Rand McNally.
- Stinchcombe, A., L. 2001. *When formality works - Authority and abstraction in law and organizations*: The University of Chicago Press.
- Sölvell, I. 2004a. *Beyond human capital - The application of human capital in new venture development*. Paper presented at the RENT XVIII, Copenhagen, Denmark.
- Sölvell, I. 2004b. *The dynamics of organizational formalization*. Paper presented at the EURAM, 4th annual conference, St Andrews, Scotland.
- Sölvell, I. 2005. *Organizational formality in new ventures - How come?* Paper presented at the RENT XIX, Naples, Italy.
- Sölvell, I. 2008. *Formalization in high-technology ventures*. Stockholm School of Economics, Stockholm.
- Sölvell, I. 2009. "Grus i Maskineriet". In C. Holmquist (Ed.), *Entreprenörskap på riktigt: Teoretiska och praktiska perspektiv*. Lund: Studentlitteratur.
- Vergne, J.-P., & Durand, R. 2011. The path of most persistence: An evolutionary perspective on path dependence and dynamic capabilities. *Organization Studies*, 32(3): 365-382.
- Vlaar, P., W.L., Van den Bosch, F., A.J., & Volberda, h., W. 2006. Coping with problems of understanding in interorganizational relationships: Using formalization as a means to make sense. *Organization Studies*, 27(11): 1617-1638.
- Wry, T., Lounsbury, M., & Glynn, M. A. 2011. Legitimizing nascent collective identities: Coordinating cultural entrepreneurship. *Organization Science*, 22(2): 449-463.

Venture	Date of founding	Age at date of interview	No of employees at date of interview ¹⁴	Interviewee
Alligator Bioscience	13/9/00	3 yrs+ (3 months)	17	CEO (industrially experienced) Niels Siegbahn
Anoto	?/04/00	4 yrs- (3 months)	120	1 st CEO/founder Christer Fåhréus ¹⁵
Global Genomics	11/09/00	4 yrs- (8 months)	35	CEO (experience from start-ups and established firms) Ulf Boberg
Packetfront	25/07/01	3 yrs- (6 months)	45 ¹⁶	CEO/co-founder (with industrial experience), Martin Thunman
Raysearch Laboratories	17/05/00	4 yrs- (4 months)	20	CEO/co-founder Johan Löf
Spirea	08/09/99 ¹⁷	5 yrs- (8 months)	34-35	CEO (since August 16, 2001 with industrial experience) Johnny Johansson, <u>and</u> academic founder/ 1 st CEO
Case for Life	20/04/01	2 yrs+ (7 months)	17 ¹⁸	CEO (experience from other start-ups)
Cell Case	13/12/00	3 yrs- (1 month)	30	CEO/co-founder

¹⁴ The number of employees in my four case studies differ from the numbers indicated in table 9. These numbers represent the interviewees' answers and are not verified. There is neither made any distinction about full- or part-time employees.

¹⁵ At the time of the interview the founder/1st CEO had left the managing position. He wanted to respond to a retrospect description of the venture as member of the board.

¹⁶ Intend to expand to 61 before end of the year

¹⁷ 1999-03-23 according to one of the academic founders.

¹⁸ Includes all contracted to work with the venture but only two full-time employees.

Interpretation Case	26/10/99	4 yrs+ (2 months)	19 ¹⁹	CEO (1 st replacement of founder, with experience from other start-ups, <u>and</u> 2 nd CEO has start-up experience)
Top Security	16/05/00	3 yrs+ (7 months)	20	CEO/co-founder (experience from another start-up)

Appendix 1.

¹⁹ Includes one of the founders working less than 10%.