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Uncertainty, Information Practices and Accounting in Small Firms

Erling Emsfors
Kristianstad University

Leif Holmberg
Kristianstad University

The question addressed is how small firms compensate for deficiencies in their accounting information systems and what other means they apply to handle uncertainty in their environments. Empirical data was gathered from six small firms representing two different branches of the service industry: craft and culture. A qualitative method was employed and data comes from in depth interviews with the managers and has been structured according to the framework of Simons (1995). Data indicates that most of the studied firms lack significant portions of a formal managing accounting information system. Instead, they rely upon external information, through strategic networks of competitors, customers, employees and branch organizations, to make pricing and development decisions. A practical as well as a theoretical implication is that management control frameworks need to explicitly take into account trust and trustworthiness both in relation to environment and to employees.

A way to handle and lessen uncertainty in the environment is through the use of accounting information systems. The primary aspects of a full formal accounting information system are external and internal accounting, budgeting, calculating, liquidity planning and periodic reporting. However, not all firms utilize the full system. In a comprehensive study of accounting information systems, Bergström and Lumsden (1995) assessed how these systems were used and what other factors influenced the economic decisions of firms. They found significant differences in the utilization of accounting information systems by firms of different sizes; more aspects of accounting information systems were used by large firms than by small firms. Other studies confirm that, in general, more aspects of the accounting information system are utilized by large businesses than by small companies (Laitinen, 2001). In their study of small firms, Johansson and Samuelson (1998) suggest that the primary reasons for this difference might be that small firms often lack traditions, time and knowledge. In fact, Collis and Jarvis (2002) found that small firms are often not particularly interested in traditional accounting. Instead, small firms appear to consider all-inclusive accounting information systems to be of limited value. Small firms primarily focus upon financial information that is directly related to the control of liquidity and cash flow. Sian and Roberts (2009) maintain that most small enterprise owners rely on their accountants to prepare their financial statements. Small firms seem to require other sources of information than the formal accounting. Information adapted to the individual needs of the firm and more clearly related to the uncertainty in its environment (Laitinen, 2009).

To compensate for their lacking use of accounting information, small firms seem to make heavy use of external information sources, in which social and business relationships are intermingled (Shaw, 2006; Hanna & Walsh, 2008). Generally, in situations with high levels of perceived task uncertainty, decision makers tend to seek external, non-financial information (Gul & Chia, 1994; Chong & Eggleton, 2003). Thus, the purpose of this study is to investigate how small firms compensate for deficiencies in their accounting information systems, and to determine what these firms actually do to handle uncertainty in their environment – and how they do it.

LITERATURE REVIEW

ENVIRONMENT UNCERTAINTY AND LEVERS OF CONTROL

According to Laitinen (2009) the primary factors creating uncertainty in the environment are changes in competition and/or changes in demand. Certain markets are mature and stable, whereas others are young and rather turbulent. However, over time conditions may change in any market. For instance, the entry of an entrepreneur into a stable market could produce sudden changes towards greater uncertainty. Similarly, shifts in market demand may abruptly occur due to a new fashion trend.

In principle, increased competition can be dealt with in two different ways. One method of addressing competition is to develop new products or explore new markets, whereas the other approach is to improve efficiency (and thereby lower costs). According to Simons (1995), strategic decisions related to changes in competition and/or demand tends to place new claims upon a firm's accounting information system. The introduction of strategic measurement systems like the Balanced Scorecard (Kaplan & Norton, 1996) and the Performance Pyramid (Cross & Lynch, 1988) are well-known attempts to address the issue of relation between strategy and management accounting systems.

SIMONS' FRAMEWORK

Another well-known framework for analysis of management control systems is the four levers of control proposed by Simons (1995). In this framework, he acknowledges the following four main control systems that work together: Belief systems (with core values), boundary systems (with behavioral constraints), diagnostic control systems (monitoring organizations) and interactive control systems (forward looking activities and devises).

The belief system is used to communicate the tenets of corporate culture to employees. It is 'the explicit set of organizational definitions that managers communicate formally and reinforces systematically to provide basic values, purpose and direction for the organization" (Simons, 1995, p. 34). For the beliefs systems to be an effective lever of control, employees must be able to see key values and ethics being upheld by those in executive positions.

The boundary system is based on the idea that it is easier and more effective to set the rules regarding what is inappropriate rather than what is appropriate and to allow employees to create and define new solutions and methods within defined constraints. The boundary system is meant to put some restraint on employees to advert too much risk – it "delineates the acceptable domain of strategic activity for organizational participants" (Simons, 1995, p. 39).

The diagnostic control system is essentially the same as the traditional formal accounting system with its financial performance measures. It can be very useful for detecting some kinds of problems, but performance measures might also induce people to behave unethically in order to meet some preset goal. The interactive system is thought to be forward looking through the use of non-financial performance measures and through analyzes of data from branch reports, internally generated productions reports, and professional journals.

Simons' framework specifies four important characteristics of this interactive control system. The focus should be on constantly changing strategic data and such data should warrants attention on a regular basis. Data should also stimulate regular discussions, and ought to be analyzed in personal meetings. The belief is that boundary, diagnostic and interactive control systems are interdependent in several ways. Both the boundary system and the diagnostic system act as constraints on employees' behaviour, while the belief system and the interactive system act in more innovative and expansive ways. Information and learning are generated by the interactive systems and can be embedded in the strategies and goals that are monitored by the diagnostic control systems. The interactive performance information also influences the diagnostic control systems to adjust to changes in strategy. In this way the four systems seem to work as an integrated wholeness, at least in theory.

However, the concept of the interactive system is, in reality not very well specified. For instance, Brisbe, Batista-Foguet, and Chenhall (2005) points out that Simons does not propose any operational definition of interactive control systems. In their studies on the interactive concept they found that most firms did not take into account features like information generation about strategic uncertainties or the frequent attention from operating managers, although those are features that Simons explicitly regards as necessary conditions. However, those "necessary conditions" might primarily have been just examples of what would be required because he also offers a much broader view. Simons makes it clear that the prime necessary feature of an interactive control system is that it collects and generates information that relates to the effects of strategic uncertainties that cannot be known in advance and emerge unexpectedly. Manifestations of this are the monitoring and making sense of changing conditions and the collection and communication of information about strategic uncertainties (Simons, 1995). This more general view is also in line with a study by Chapman (1998) who explores how differences in the degree of uncertainty affect accounting practices.

Simons' framework implies, that the choice of control system to be used depends on (or should depend on) the perceived uncertainty that the firm is facing, and on the strategy that the firm chooses to employ to counteract environmental changes. When there is a shift in demand, attempts to increase efficiency and lower prices may be a viable short-term strategy, and in that situation a diagnostic control system might be sufficient. However, the primary long-term response strategy typically involves the development of new products and/or the exploration of new markets, and the implementation of such a strategy would seem to require interactive control systems. Such a strategy may also be employed when changes in competition occur. Another feasible strategy might be to increase efficiency, a process that typically requires diagnostic control. It should be noted that these two control systems are theoretical ideals; in reality, a firm must find a balance between these two extremes (Simons, 1995). In fact, although formal accounting information systems are based on internal information, all information systems needs to be supplemented with external information to the degree which the external information is required will differ depending on a firm's strategic choices.

SIMONS' FRAMEWORK AS A META-CONCEPT

Chrisman, Chua, and Sharma (2005) maintains that, small firm research is best advanced by applying established mainstream management theories – and Simons' framework certainly can be perceived as mainstream. Therefore, in this article, Simons' framework is used as an analytic tool. This may seem an odd choice since small firms are known to use much less of the formal management accounting system than larger firms, less of what Simons refers to as the diagnostic control systems. However, although small firms seem not to require much besides the minimum of formal accounting needed to satisfy legal requirement, they need non-financial information from an interactive control system like data on supplier deliver reliability and customer satisfaction as well as information about customers' and competitors' future plans.

Hartmann and Maas (2011) adopt the view that budgetary control systems may play both a coercive role and an enabling role in organizations. Instead of the traditional view of budgeting as a mere technical tool to evaluate the outcomes of predefined action plans, budgeting might also serve to enhance flexibility and decision quality. Another mainstream concept is the 'balanced scorecard' of Kaplan and Norton (1996). This concept also provides a prescriptive framework for performance measures that covers four perspectives: the financial, the customer, internal business processes, and learning and growth. The financial perspective is similar to Simons' diagnostic control system, the learning and growth perspective and customer perspective are similar to Simons' interactive control system (where the customer is a major issue). The main differences between the concepts are in the internal business processes perspective. Small firms might be perceived as a direct continuation of an earlier system with masters and apprentices, and therefore, internal business processes would be directly supervised and, therefore, more formal devices are hardly needed. Furthermore, Simons maintains that an interactive control requires that it should be used by managers at all levels of the organization (Simons, 2000) and in small firms that requirement is usually met automatically since there is usually only one manager/owner. Simons' concept seems somewhat more appropriate for small firms as a kind of meta-concept, although there is actually no theoretical concept well suited as a framework for small firms, mainly because small firms usually minimize all kinds of formal control to reduce bureaucracy (Sharma & Irving, 2005).

SMALL BUSINESS CONTEXT

Research on management control systems has focused heavily on medium and large firms and there are few studies devoted to very small firms. One such study (Davila, 2005) is focusing on the transition point where a small firm is growing and starts to move from informal control to a full formal management control system. Davila (2005) studied 95 small young technology firms with 10 or more employees. He develops a frame of reference by identifying a few variables that tended to lead to the emergence of formal management control systems. These variables are the size of the firm, its age, CEO replacement, and outsider investors. About size he argues that in an early stage control and coordination is through frequent and informal interactions. As the firm grows, attention shifts to developing systems that anchor informal interaction into some formalized system. Size might mean increased complexity associated with new markets or new products. About age he argues that a certain number of years is needed to gain experience and to develop standard procedures. About the possible change of CEO he argues that a transition from founder and entrepreneur to manager of a steadily developing firm demands a more formalized management control system. In an early stage of a firm's development the entrepreneurial leadership charisma takes care of organizational culture but when that leadership eventually is replaced by some more traditional managing CEO there is need for some more formal system for control. Finally Davila (2005) argues that the introduction of venture capital might lead to demands from the (external) venture capitalist on the development of some more formal management control system. However, for very small firms Davila suggests that the cost of formalization might outweigh their benefits.

Dekker (2004) makes a further contribution to the accounting literature by stressing the importance of substituting formal control mechanisms in small firms by trust and the selection of trustworthy associates. He argues that the coordination of interdependent tasks might influence the structure. Although designing formal control mechanisms might be important, the selecting of "good" partner reduces the need for control. By "good" partners he means trustworthy partners as that reduces the control problem. A trusting relationship is built up over a long period so the age of the firm or the trustworthy relation becomes important as is pointed out by Davila (2005).

Dekker (2004) suggests a model where coordination requirements and trust should contribute to explaining structure. Although he primarily refers to alliances it is evident that he also means networks of very small firms in close cooperation and with a great variety of formal and informal control mechanisms depending on the size of the network. One of the main control components is the financial incentive system that must be designed to interest and motivate adequate performance (i.e. giving fair rewards). Another component is to reduce information asymmetry by regular information sharing, pre-action reviews, joint decisions making and joint problem solving. A third component is the coordination of the tasks and he distinguishes between two different types of tasks: supply task and innovative task related to different degrees of uncertainty. Supply task focuses on the delivery and is characterized by sequential interdependence and limited uncertainty. Innovation task is related to joint innovation and partners' pooled resources and is characterised by reciprocal interdependence and uncertainty. Because of the degree of uncertainty in the tasks they need to be handled differently.

ENVIRONMENTAL UNCERTAINTY AND EXTERNAL INFORMATION

A dominant source of external information is personal networks (Shaw, 2006; Hanna & Walsh, 2008). The salient features of networks are that the population of engaged actors is not fixed, and that the actors within the network freely improvise to create new relationships. Reliability is one of the foremost expectations within these networks, but as reliability is seldom possible to test, trust among the actors becomes vital. The ability to trust the information received from network sources is crucial, and this ability is normally based on feelings that develop over time. Trust is formally defined as the willingness of a person to rely on someone else in a manner that involves the trusting person's acceptance of a certain level of risk or vulnerability (Williams, 2001). Gradually developed trust is the primary factor in the establishment of personal networks because it tends to diminish uncertainty (Meyerson, Weick & Kramer, 1996). Trust also involves maintaining a degree of optimism regarding the trusted person, despite the risk of being fooled (Jones, 1996). The presence of trust vastly increases the opportunities for co-operation but such gradually developed personal trust it is also very vulnerable because it often just takes one minor disappointment to break it. Institutional trust is much more when you trust an unknown clerk at the bank with your money without questions; you do not need to trust the clerk because you trust the bank he represents (Hardin, 2002).

Information concerning the future will always be uncertain, but information that is provided by a generally trustworthy person tends to significantly decrease uncertainty (Möller & Svahn, 2006). Although networks might provide vital information, the implications of this information are typically not immediately obvious. Instead they need to be interpreted to make sense (Weick, 1995). This sense-making, or the creation of meaning from data, further reduces uncertainty and is an activity that most people primarily do through casual conversations with colleagues and friends. It is mainly through discussions with others, that intelligibility and meaningfulness are generated from data. Formal information is interpreted, reconstructed and often heavily modified to fit in with everyday reality. As a result of these interpretive processes, uncertainty is diminished (Stacey, 2001).

Sense-making is primarily personal. It is impacted by an individual's personal network; thus, a group of people might mutually influence each other (Stacey, 2001). Sense-making may, therefore, be perceived as both an individual and a social activity in which people enact their environment through storytelling and small talk. Through these interactions, participants may acquire knowledge (Tsoukas, 1997). Through sense-making processes, uncertain information is transformed into "certain facts." These constructed "facts" are often compared with ideas of what reality should be like. These ideas of reality are often not clearly thought out as conscious intentions; instead, they are often merely vague (tacit) ideas based upon gut feelings and intuition (Beach, 1998). Hence, uncertain information regarding the future might (through small talk and sense-making within networks) be transformed into something that passes for trustworthy information regarding the future.

METHODS

The above mentioned earlier studies demonstrate that networks of colleagues and social contacts appear to play a significant role in the acquisition of external information, particularly in situations involving high levels of environmental uncertainty (Gul & Shia, 1994; Shaw, 2006; Hanna & Walsh, 2008). In these situations, accounting information that considers historical data is supposed to be of little use. To find out what actually is used in reality a pilot study was conducted of small firms in the service sector where quantitative data was gathered (Emsfors & Nilsson, 2007). Based on those data the firms were classified into different groups according to value judgements. There were the "stars" who had all or almost all the instruments related to a full management information system (MIS) and there were those who were "careless" and had almost no parts of a formal MIS (just some simple form of cash-flow monitoring). In spite of this flaw the firms seemed to thrive and prosper and that gave the question of why they did not follow the common wisdom taught at every business school. A qualitative study was undertaken to uncover rich data as to better understand this complex environment.

THE PRESENT STUDY

The initial idea was to study small firms' use of financial information. Four of the primary business sectors include agriculture, production, trading, and service. Research on the use of economic information has been less extensive in service than in the other branches and service is often produced on a small scale, so it seemed to be the natural choice. Service might be further divided into craft and culture and to be regarded as small firms they would have to have no more than 50 employees.

In an initial quantitative pilot study a questionnaire was sent to all small firms within a community. The pilot study indicated that a further study was to be qualitative because it primarily involved some social interaction it seemed to require a qualitative methodology; in particular, personal interviews had to be conducted to obtain reasonably rich data regarding social information gathering. This approach meant that the number of studied firms would have to be limited to a few firms. A case study approach was employed to identify key factors (Strauss & Corbin, 1998).

The pilot study further indicated that the service industry would include small firms with varying degrees of perceived uncertainty. In accordance with the essence method (Enroth, 1984), six firms were chosen that represented two different branches of the service industry, namely craft and culture. Within each group, three firms from the craft sector and three from the culture sector were selected that were regarded to represent high, medium and low degrees of perceived uncertainty.

The chosen craft firms were a construction firm, a painting firm and an electric installation firm. The chosen cultural firms were an art exhibitions organizer, an orchestra and a theatre company. The number of employees within each firm varied between 5 and 49. The individual firms were chosen according to the essence method (Eneroth, 1984) meaning that they were likely to differ in as many (relevant) aspects as possible. At that time the six firms were not dominating or leading even in their local market – they simply had found a niche that was not taken – and they had been around for several years and had been relatively prosperous. From the questionnaire it seemed plausible that they would differ in their use of (at least) formal information systems and they were chosen on the basis of their perceived view about the degree of uncertainty in their environment. Of course, it later turned out that the firms had somewhat exaggerated their answers and, in fact, had quite small differences in their information gathering. Only one of the firms used all parts of a formal accounting information system (although somewhat superficially). The other five firms did not conduct internal accounting, and two of these firms had no budgets. Thus, all of these five companies lacked essential aspects of a traditional management information system. Eventually, it also became apparent that the firms also were very similar in their degree of environmental uncertainty.

Data was obtained from the firms' accounting information systems and through interviews with the managers/owners, as well as observations of behavior. A checklist of questions was used to guide the interviews with the managers. The checklist of questions was very detailed (5 pages) and not only account for the degree of perceived uncertainty but also the time horizon for relative certainty. There were general questions related to the degree of uncertainty in the immediate local environment such as relation to competitors and the probability for increased competition, the foreseeable planning horizon and uncertainty in the task or technology (including future new technology). Then there were the main questions about budgeting procedures (if any) in detail and when and why they actually made calculations and in what situations it was done (if ever) as well as about internal accounting models and measures. They were asked for a detailed account for how they performed liquidity planning and how they acquired information about the future and finally about the control process. There were also questions about the use of periodic reports (if any) and how information about possible future events were gathered. The managers were also asked to make a self-evaluation in relation to perceived competitors and strategic decisions about, for instance, new technology, new markets and new products as well as cost reductions. There were also questions about what financial information might be found in the manager's head and, of course, questions about their hopes and fears.

The small firms analysed included three craft firms and three cultural firms. The craft firms are in business to make money, whereas the cultural firms do not have profit as their primary goal. To cultural firms, money is merely the means to accomplish cultural projects. Even if ticket sales are essential, this income is seldom enough. The productions or projects generally also require additional sponsor financing.

THE CRAFT SECTOR

Paintura is a firm in the painting business with 25 employees and an annual turnover of 19 million Swedish crowns. The firm does all kinds of paint jobs, except on churches and castles because they lack the necessary competence and the risks involved are too high. They also have a shop that sells paint and wallpaper. There has been a moderate growth in the turnover and the number of employees during the last five years. The customers are mainly larger construction firms since Paintura has too much overhead costs to be competitive on small scale jobs. The chartered accountant is not consulted about the ordinary activities in the firm.

Constructa is a small firm in the construction business with five employees and an annual turnover of 3 million Swedish crowns. The firm mainly builds houses and does maintenance work. The work force is regarded as highly competent and all tasks are well specified in a manual put together by the branch organization. There is little variation in the utilised material or work methods, and little development in the branch (and in the firm). Customer complaints are taken seriously, and the firm puts great emphasis on the quality of its workmanship because work quality and customer satisfaction are regarded as the main competitive advantages for the firm. Employee satisfaction is not formally measured, but informally assessed because of the close work relations and small number of employees. The firm's chartered accountant is not used for counselling, but sometimes the bank is contacted as an advisor.

Electra is a small firm that supplies construction firms with electric installations. The firm has five employees and an annual turnover of 3 million Swedish crowns. Having five employees is considered the minimum that allows a full time administrator/manager. Work is primarily about repairs and maintenance on electric installations. The largest customer is the community and two large companies. There are also a number of temporary customers. The demands on the firm's services are great, but there is no intention to expand the business. Investments are discussed with the bank, but the firm's chartered accountant is never involved in discussions about the firm's future.

Table 1. *Summary of Management Control Systems for Craft Firms*

Firm	Paintura	Constructa	Electra
Competition	Moderate to low	Moderate to low	Low
Planning Horizon Task Uncertainty	A few weeks Low	3- 4 weeks Low	1 year Low
Calculation	Yes?	Only direct costs Target costing	Only direct costs Only after each project
Budgeting	Yes	No	No
Internal Accounting	Yes?	No	No
Liquidity Planning	Yes	Yes	Yes
Periodic Reports	Yes	Yes 3 - 4/year	Yes every month
Future Information Formal/Informal	Yes	Official documents Customers	Customer plans
Control Process	Diagnostic with some interactive control, experience	Mainly diagnostic control, experience	Diagnostic control. Memory, experience

Of the craft firms, Electra is in a situation with little competition and stable technology. The firm uses diagnostic control, as would have been expected given its perceived stable environment. Both Paintura and Constructa have stable technology and utilise diagnostic controls that focus on cost control and efficiency. In addition to general cost control, Paintura makes a plan for each order based on the manager's long experience in the industry, and for certain crucial orders, these plans are followed up by calculations based upon accounting data. There is generally no need for more formal planning procedures. The firm is quite small, and it is possible for the manager to keep the planning details in his head. Although Paintura and Constructa were in competitive markets and initially were classified as possessing fairly high environmental uncertainty. However, that the firms' managers perceived that uncertainty in reality is relatively low because of their position and reputation in the local market. They have established some kind of monopoly on the local market by reputation of trustworthiness and local social anchorage (Dekker, 2004). Peintura with its 25 employees is well established and markedly larger than the other small firm. It has come over the transition point (Davila, 2005) and now applies most of the tools used in a formal management control system.

THE CULTURAL SECTOR

Exhibita organises artistic exhibitions and installations. It is a non-profit foundation with the purpose to promote artistic and cultural ventures. It has started to develop its work to also be of interest to young people. It has nine employees and an annual turnover of 7 million Swedish crowns. Approximately 75% of the firm's revenue comes from sponsors. The ambition is to grow and get an international recognition for their exhibitions so there is a constant search for new ideas and new ventures. There is no profit motive. Efficiency is measured by the number of successful exhibitions and in the long run survival. Its chartered accountant simply supervises the accounts and has no advisory role.

Musica is a chamber orchestra that supplies concerts on demand. The firm has twenty-five employees and an annual turnover of 12 million Swedish crowns. Approximately 85% of its revenue consists of contributions from sponsors. If target revenue is not met, certain performances of the orchestra are cancelled to lower costs. Contacts play a significant role for this firm, and vital information is gathered through the networks of the firm's members. Musica judges their performance and success by how well they have achieved their artistic goal in chamber music. There is no profit goal, but an aim to be acknowledged as the "foremost chamber music orchestra in the Nordic countries". Daily accounting is done by an accounting firm, and the annual report is supervised by a very large firm of charted accountants (KPMG). The chartered accountant simply supervises the accounts and is not used in any advisory capacity.

Thalia is a theatre company with nine employees and an annual turnover of 5 million Swedish crowns. Approximately 85% of its revenue consists of contributions from its sponsors. The performances are mainly for children and youngsters. The aim is to give successful performances, and there is no profit motive (except earning enough for long time survival and a decent salary). There is a wish to develop new products (plays) and to expand to new markets (adults). The chartered accountant is consulted frequently, but his lack of knowledge about the prerequisites in the culture sector is perceived as a problem. The manager feels a need for an advisor with both economic and culture-related knowledge.

Table 2. *Summary of Management Control Systems for Cultural Firms*

Firm	Exhibita	Musica	Thalia
Competition	Few direct competitors, but high competition from other activities.	Few direct competi-tors, but high competition from other activities.	Few direct competitors, but high competition from other activities.
Planning Horizon Task Uncertainty	1 year or more, depending on sponsors High	1 year, depending on sponsors High	1 year, depending on sponsors High
Calculation	Partly	Target costing Only after a project	No, (but branch organization does)

Budgeting	Only liquidity	Yes	Yes (3+1 year)
Internal Accounting	No	No	No
Liquidity Planning	Yes	Yes (weekly)	Yes (weekly)
Periodic Reports	Partly (every exhibition)	2 a year	Every month
Future Information Formal/ Informal	Competitors advertising Social network Serendipity	Social networks and competitors Personal contacts of all employees	Branch organization Social network in close contacts with sponsors and competitors
Control Process	Interactive, Intuition and Experience	Interactive with some diagnostic control; Intuition and Experience	Interactive and diagnostic control; Intuition and Experience

The managers of these culture firms perceived their environments as constantly changing and uncertain and, thus, information from their personal networks is regarded as vital to the decision-making processes. Primarily, interactive control is used by all of the cultural firms investigated in this study, and their managers all perceived the uncertainty (related to competition) to be low in their own branch. However, they all regarded the competition to be high from various other branches of leisure activities. Exhibita primarily uses a vast social network to obtain information regarding strategic issues in the environment and uses interactive control to stimulate new ideas. Musica uses interactive control as well, although this firm's network is not as well-developed as the networks of the other two studied culture firms. Both Musica and Thalia utilise some (minimum) of the diagnostic control besides what is legally required. However, in each case, the calculations rely more upon external sources than upon formalised methods of control. Although the firms in the cultural sector employ quite a few people they do not use much of formal management control systems. Besides the number of employees (Davila, 2005) there are other factors deciding when formal management control systems might be needed. One such factor might be that production is intermittent and project based with high task uncertainty.

RESULTS

THE CRAFT SECTOR

Electra has weak competition and stable technology. This firm employs diagnostic control, as would be expected given its stable environment. Paintura and Constructa have fairly stable markets and technology and primarily use diagnostic control, although one of these firms (Paintura) also features aspects of interactive control. On the whole, however, the studied firms in the craft sector seem to primarily employ diagnostic control, and that appears to be reasonably consistent with the suggestions of Simons (1995). Customers and branch organizations appear to be of greater importance to the craft firms than to the cultural firms. Regarding the belief system (or culture), Electra and Constructa are very small firms and they are organized in the manner of the guild system with a master and his apprentices with direct and close supervision of subordinates. Although Paintura is a much larger firm it still has the same type of belief system but there is for obvious reasons not the same amount of close supervision. Still the manager is directly monitoring the work at the various work sights. The style of organizing the boundary system gives little room for discretion and the direct monitoring means that every initiative or move is communicated to the manager.

THE CULTURAL SECTOR

Exhibita and Musica appear to comply reasonably well with the suggestions of Simons (1995), as these two firms primarily utilize interactive control; although they both appear to lack explicit prognoses for their futures. Exhibita is somewhat extreme because it almost entirely lacks diagnostic control, whereas Musica utilises certain aspects of diagnostic control, while Thalia uses both interactive and (some) diagnostic control processes. The interviews revealed that for the cultural firms, external information was a much more important aspect of the control system than was initially anticipated. External information is used as a basis for planning, pricing and making decisions regarding developments, as well as for obtaining advance notice of changes in subsidiaries. The most useful external information is gained from carefully administrated personal networks. Formal competitors and rivals are the most vital members of these co-operative networks. The belief system in the culture sector is quite different from craft sector. Musica and Thalia are organizations with many participants and the internal culture allows for personal initiatives as co-workers instead of subordinates. The manager is not regarded as "the boss" but more like "the first among equals". Regarding the boundary system, the members of these organizations are regarded as experts and expected to use their own initiative and discretion. Although this might also be a valid description of Exhibita there is a difference in that Exhibita is very much driven by one person as an entrepreneur and each exhibition project is organized as an ad hoc network assembly.

The firms were originally chosen for their varying degree of environmental uncertainty and degree of assumed competition. However, the expected uncertainties did not coincide with the actual perspectives of the interviewed managers. Instead, when these managers expressed their views of perceived uncertainty, these views appeared to be related to the general conditions in the branch of the service industry in which their firms operated. The managers of the craft firms actually perceived the uncertainty in relation to their own firms to be relatively low, despite the high degree of competitors found within the craft sector in general. On the other hand, the managers of the cultural firms appeared to perceive relatively high competition and high uncertainty, even though there were few immediate competitors to the firms in the cultural sector.

FINDINGS IN RELATION TO SIMONS' FRAMEWORK

In this study, the framework of Simons (1995) was used as a starting point. Therefore, the main components in his model will be commented on in relation to the results related to the findings. Simons (1995) emphasises the role of the belief system and the importance to convey it to subordinates. However, Simons' framework is apparently designed for large firms with many employees that need monitoring. In the small firms studied, survival seemed to be the paramount and constantly expressed goal, and there seems to be little need for conveying that to the employees. The managers thought they could easily inform employees during social breaks (where work quality was often discussed), so there were no thoughts of introducing any formal information devices. At a more general level the organizational culture is obviously also relevant for small firms as there was a marked difference between craft and culture firms. The craft firms upholds the traditions from the guild with master and apprentices as subordinates. The culture firms have a much more democratic approach where the manager is regarded as the first among equals and co-workers are regarded as knowledgeable experts.

In Simons' framework, the boundary system is primarily a system to keep subordinates in order and help them refrain from partaking in activities that are too adventurous. All the craft firms are actually of the old fashioned type with masters and apprentices where the master runs his company according to his own ideas, and apprentices are not expected to take any initiative. In the cultural firms there are more of equality between members and although the appointed administrative person is coordinating the efforts all members might take some own initiative. In any case there is little need for any formal control systems, except the need for the monitoring of liquidity. So, the boundary system is in reality limited to the financial restrictions of the cash-flow, and that limitation is well known to all the co-workers.

The studied small firms do not generally seem to employ their formal accounting systems in their decision-making, as they often regard this type of accounting as a necessary evil only undertaken to appease external interest groups. In uncertain situations, the decision makers therefore tend to rely more upon visions and experiences rather than upon formal accounting information. There may be a good rationale for this tendency since most of the firms have little control of their environment, they have little need for either long-range planning or internal historical accounting data. To survive, these firms primarily need mechanisms to make sense of their environment as part of their struggle to find and fill the gaps left by other, larger companies that generally tend to dominate the business environment.

In their study of small craft firms, Bumgardner, Buehlmann, Schuler, and Crissey (2011) found that competitive small craft firms typically appeared to survive by working closely with customers. Thus, the craft firms' networking efforts not only promote increased business transactions, but also concurrently promote multiple forms of social values. Managing a small firm may be regarded as not only an economic task, but also a social phenomenon. The social interactions between the craft firms and their customers might eventually result in trust and loyalty to the firms and thereby reduce future uncertainty (Korsgaard & Anderson, 2000). However, the culture firms do not have such close relations to the customers and they also seem to regard their immediate environment as much more uncertain.

DISCUSSION

This study is based on six cases and although case studies are not supposed to allow for generalization they can offer tendencies worthy of further investigation. A salient feature is that there seems to be differences in what systems or devises are appropriate as management tools, depending mainly on the perceived degree of uncertainty in the firms' main undertakings. When the environment is perceived as uncertain and unstable, these small firms primarily utilize interactive control and rely heavily on the personal social networks of competitors and colleagues to obtain and interpret external information. Control through the formal accounting information system appears to be largely replaced by co-operation and the co-ordination of information through the exchange of experience with trusted competitors. Mutual sense-making processes may constitute the core of this network activity. It is not merely the information itself, but also the significance of the information in question that must be interpreted. These interpretations seems best be accomplished through small talk with others in similar circumstances.

In the studied culture firms, the respondents made frequent references to their need to make decisions on information that is only loose rumors acquired through informal social channels. In these decision-making situations, the managers had few facts to go on and they pointed out that they had to rely only on themselves and their "gut feelings" and an inner conviction regarding what seemed to "feel right." Although the managers did not specifically reference intuition, in reality their actions seemed to be based on scanty information that might as well be thought of as intuition guided by the construction of vague images of a preferred future situation (Beach, 1998).

When the environment is perceived as relatively certain and stable, these small firms utilized aspects of diagnostic control, but they also relied upon external information obtained primarily from customers. The managers also heavily relied on their own competence and tacit knowledge. The prime reason for the perceived stability (in the craft sector) seemed to be, that the core of the work competence provided by these firms is in the manual labour that they supply. The respondents seldom referred to other firms as formal competitors. It appears that other firms are not actually perceived as true competitors. A reason for this perspective might be, that firms in the craft sector typically have (or believe they have) a relative monopoly in the local market due to proximity and reputation. With time these firms expand their local market through their trust-based networks.

The managers of the studied craft firms frequently emphasized the value of trust and the security of being known and respected in their local community. However, they did not talk about any “gut feeling,” thus intuition did not appear to be an issue. Instead, the respondents spoke of hard facts, such as competence, long experience and the knowledge of just ‘how to do’ tasks, which made them able to handle any work issue they encountered. Their external information largely appeared to originate from customers and potential customers in the form of facts and opinions. This finding also indicates that actions were not only based on explicit knowledge, but also required tacit knowledge (Polanyi, 1966). The idea that interactive use of non-financial measures might lead to the discovering of tacit knowledge, and thereby also make it explicit, has earlier been noted by Vaivio (2004) and its vital role as a resource is stressed by Seidler-de Alwis and Hartman (2008).

Trustworthiness and anchoring in the local community seem to be the mechanisms by which the firms in the craft sector survive. Any firm is (in a technical sense) just one in the crowd of competitors and might be exposed to intense competition. However, the craft firm managers did not experience their situation as particularly vulnerable because the firm enjoyed trust and anchorage in the surrounding local community and this trust and anchoring becomes the unique resources that enable long-term survival. This would be noted in the accounting records as goodwill assets.

Culture firms seem to be somewhat different because they seem primarily strive to build an institution around its business. However, to overcome competition from other recreational events culture firms also need some robust anchoring in the society.

IMPLICATIONS

The starting point was the main question about how uncertainty in the environment is handled in small firms with little or no formal management information systems to rely on. It was also stated that management information system always needs to be supplemented by some external information, especially related to the market and possible competition. It seems that besides the usual strategies to counteract competition there is also a strategy to avoid the uncertainty of competition as such.

In the theory section is stated that uncertainty in environment might be counteracted primarily by cutting costs or by the development of new products and/or by exploring new markets. A large corporation might have those options. It might have the financial means to develop new products or exploring new markets, but at a cost, and at the risk of financial loss. As the respondents pointed out, small firms do not have many options. At least firms in the craft trade can seldom influence the often heavily regulated market on their own accord and have generally too narrow competence and resources to find new markets. They might, however, be able to cut costs in the short run, but that would mainly mean that they would lower their standard of living. However, there is the option of still another market strategy. What these small firms actually can do is to anchor themselves and their firm thoroughly in the local society. By being active members of community organizations they establish some kind of local monopoly building on trust, or what might sometimes even be referred to as “friendship corruption“.

It seemed evident from the interviews that local anchoring through gradually gaining personal trust was the foremost long term survival goal for the craft firm managers. They all talked very much about delivering quality as the main means for this anchoring but at the same time they had difficulties to express exactly what they meant by quality. Actually, through their examples it seemed that they tried to cut corners whenever they could just like any other firm and had no special ways to access quality. Eventually, it became clear that what they actually meant was that they would go to almost any length to take care of complaints from customers and then to compensate for unsatisfactory work. The conclusion is that outstanding quality in the handling of complaints seemed to be their main means to gain gradual personal trust as a competitive advantage in the craft firms’ main strategy for the anchoring in the local society.

The culture firms did not express the same ideas on quality of handling complaints. The respondents pointed out that they could hardly mask bad performance by taking good care of complaints. They had to rehearse and to give quality in their initial performance. Of course, all the culture firms regarded sponsoring as their prime income and as necessary to diminish the financial risk involved in the production of a performance, but it was also clearly stated that the main idea behind the sponsorship or patronage was to create commitment to the firm and thereby contribute to the long term effect on the institutionalizing of the firm. Some even mentioned as a goal that they would wish for the same type of commitment that is felt for the local football club.

The culture firms' main strategy seems to be aiming at an institutionalization of their performances into the society by yearly or bi-monthly repeating events. They tried to acquire sponsors but also some more general patronage from influential persons in the local society. Managers of small firms were among the prime targets for patronage because of their vast personal networks. The conclusion is that the culture firms, besides the financial need for sponsoring the acquisition of sponsors or patrons, seemed to aim at acquiring some institutionalized trust in their performance events as a main strategy in the process of anchoring in the local society.

Simons' model does seem to give a fairly valid picture even of small firms. There is, however, an apparent shortcoming in the model – and that is the crucial importance of trust. Large and old organizations might have gained institutional trust (as e.g. banks) so the importance of trust might have been taken for granted in studies of such organizations. Still, all organizations (both large and small) have need for external trust and it has to be gained through gradual systematic work. All organizations also need internal trust. Not as a substitute to formal control as suggested by Dekker (2004), but as a necessary prerequisite to handle all those actions that cannot be anticipated or incorporated in any kind of formal system. When trust between members is lacking in large organizations things might go seriously wrong as is amply demonstrated by Jackall (1988). Although the boundary system (in Simons' model) is supposed to catch unethical or harmful actions it cannot handle deceit and fraudulent behaviour.

In the studied small firms internal trust might be easier to assess but it is still an important issue. In the local society a firm is judged not only by its formal actions, but also by the actions of its individual members. So, it seems that the issue of trust, both external and internal, must be a vital part of any management control system. So far it has mainly been regarded as a minor side effect in the design of management control systems.

This study indicates that research addressing small firms needs to be more focused on issues related to the exchange of experience and the process of gathering and interpreting external information. There is also a need for a better understanding of informal information systems and how these systems might be developed to make them an integrated part of an accounting information system. Furthermore, the perception and handling of various types of uncertainty and the role of trust seem to be ill understood.

Textbooks on accounting usually deal with the problem of controlling large industry firms and they also usually start out from a theoretical perspective. Those textbook recipes for control might need to be complemented with the reality experienced in very small firms. The widespread and popular MBA degree means that in most societies (even among self-made businessmen) there are "educated" people with firm expectations on what ought to be done if a firm should be considered as "well run". To implement a wide range of routines to monitor the activities is more or less generally expected and if they are omitted the manager would have to defend the view or facing accusations for being careless and sloppy for not living up to the general expectations of the business community. In fact, from the textbook literature, students of business administration often seem to get the impression that small firms are similar to large ones, only smaller.

Most ordinary large trading or manufacturing firms are fiercely competing for shares of the market with fairly similar commodities and textbooks often describe the market as a war between competing firms trying to outwit one another and behaving like predators. Of course, that is a valid description for such firms that try to expend beyond what a certain market can handle or if there are too many competitors. That is a strategy of survival of the fittest and an empire builder strategy. Managers of small service firms are generally in an altogether different situation. They are no empire builders and they do not fear competition as such, but they fear the predatorily empire builders and are constantly looking out for them. Their competitive advantage is to stay small and dig into the local niche, and let the larger firms fight over the market shares. Such firms might be called "marginal firms" because they have to survive on the crumbs left over by the larger predator firms. They are not about expansion and pursuing daring goals, but about avoidance of uncertainty. And they do it by staying small and dig in deep in the local society.

LIMITATIONS

One disadvantage of this methodology is that a case study provides little basis for generalization. However, the purpose of this study is not to prove anything, but rather to discover how uncertainty in the environment is handled in small firms. An alternative approach would have been to conduct a broad survey by sending questionnaires to a reasonably large number of firms. However, such an approach was not adopted because it would not provide sufficiently rich answers unless accompanied by personal interviews. The answers in the pilot study questionnaire also indicate that they might not be quite truthful but rather reflect the managers' guesses at what answers might be expected from them.

This study is based on six case studies of small firms. In all literature on method there is ample warning about trying to generalize from such material. However, when some kind of pattern seems to emerge from data those patterns might be clues to tentative hypotheses that can be tested by empirical data.

CONCLUSION

The initial question was to find out what small firms do to reduce uncertainty. Since they do not use much of formal management information systems they have to rely on other means and a number of studies demonstrate that personal networks play an important role (Laitinen, 2009; Shaw, 2006; Hanna & Walsh, 2008) as well as non-financial information (Gul & Chia, 1994; Chong & Eggleton, 2003). Such behavior is also confirmed in this study. But the study further shows that the firms use quite different sources depending on their perception of their relative degree of uncertainty related to competition. Actually, the main differences are that with low perceived uncertainty there is a tendency to rely on a network of mainly competitors while when there is high uncertainty they rely mainly on networks of (potential) customers. However, in both cases they tend to neutralize competition by trying to anchor the firm onto the local society and they do it mainly by creating trust. Managers in the craft firms are mainly "a one man show" and that implies an urge to create gradual personal trust while culture firms engage all its members to find sponsors and supporters to instigate some institutional trust into their performances.

In reality, small firms seem to have very few strategic options when it comes to counteract competition. Exploring new markets or developing new products means risk and financial commitment that might be unobtainable and adds to the uncertainty. Cost cutting in production in those mainly labour intensive firms might primarily mean a lowering of the standard of living. Anchoring processes and the creation of trust seem to be one of the very strategic few options available for small firms and this seems not thoroughly studied.

This study highlights what might be described as a conscious (or unconscious) but very clear strategy of anchoring to avoid the uncertainty from environment and especially to avoid predator competitors. To do that, they need to acquire trust. In the craft sector that primarily means to gradually acquire personal trust through quality, especially quality in their handling of complaints. That means that they need to be regarded as small, nice and friendly in the eyes of the local society and to be regarded as “one of us.”

In the culture sector this strategy would not be very effective. Instead in the cultural sector there are expectations on impeccable performance and true professionalism. They are primarily collective organizations and although the manager/conductor might acquire gradual trust that is not their intended strategy. Instead they strive to acquire institutional trust in their performances. Of course, they need to obtain financial support through sponsors, but they also need to establish commitment in order to gain institutional trust. They have little use of being regarded as nice and friendly and certainly not as “one of us”. Instead they need reputation and preferably some kind of international recognition to inspire local support.

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