Problem solving in small firms: an interpretive study

Problem solving in small firms

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Abstract

Purpose – The purpose of this research is to present the results of a recent interpretive study of 11 small Central Vancouver Island firms in British Columbia, Canada, which yield new interpretations of the nature of problem-solving processes within the wider context of managerial capability as a critical contributor to small business survival.

Design/methodology/approach - The methodological approach taken is positioned within an emergent body of research in the field of small business and entrepreneurship that applies an interpretive paradigm to uncover the complex facets of how individuals develop their capabilities and management practices with a particular emphasis on the small business owner-manager. More specifically, the critical incident technique method, along with an approach to data analysis and coding that draws from grounded theory, is combined and applied as a qualitative research strategy to yield new understandings of problem solving in small firms.

Findings – Research findings reveal the intuitive, improvised and non-linear nature of how problems are actually solved in the sample of small firms studied, in contrast with a number of well-known theoretical research frameworks that propose well-defined and delineated steps in the problem-solving

Research limitations/implications – The small sample size and the methods chosen to conduct the research do not allow for the generalization of findings to all firms, yet do allow for the emergence of themes among the businesses that participated in the study. Research could be expanded by applying a similar research design to small firms in other regions of Canada to determine whether significant differences or similarities exist and to identify the implications for research in the area of problem solving in small firms.

Originality/value - The identification of problems as critical incidents represents a primary focus of the research and provides a more explanatory account of problem solving from the perspective of small firm owner-managers involved in the process. The analysis of these highly subjective interpretations represents valuable research findings that provide a basis for the development of theory on problem solving in small firms.

Keywords Problem solving, Owner-managers, Small enterprises, Research, Canada

Paper type Research paper

Are there really any problems in life?! I have no problems! (laughs) (excerpt from an interview with Vanessa, a small business owner-manager).

Introduction

The ability to identify, analyze and solve organizational problems as they arise represents a core management skill that enables small business owner-managers to operate their businesses by effectively directing resources towards the accomplishment of organizational goals (Koontz Traverso, 2001; Hisrich, 2004; Cohen, 2006). A significant amount of research in the field of small business management has correlated small firm performance with the sophistication of overall © Emerald Group Publishing Limited management skills (see, for example, Gasse, 1997; Gadenne, 1998; Zinger et al., 2001;



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Balderson, 2003) and more particularly problem solving skills. Yet even though problem solving skills are at the core of the small business management process (Jennings and Beaver, 1997) there has been little research to date that has focused on understanding the actual approach small business owner-managers take to solve the problems they encounter through the application of an interpretive research design.

Accordingly, the purpose of this paper is to present the results of a recent interpretive study of 11 small Central Vancouver Island firms in British Columbia, Canada, which yield new interpretations of the nature of problem solving processes within the wider context of managerial capability as a critical contributor to small business survival. Research findings reveal the intuitive, improvised and non-linear nature of how problems are actually solved in these small firms, in contrast to a number of well-known theoretical research frameworks that propose well-defined and delineated steps in the problem solving process. The results of this study make a valuable contribution to building new theory in this area of inquiry by demonstrating how more dynamic processes occur in practice.

Problem solving and management capability in small firms

Conducting research on the distinctive aspects of problem solving practices in small businesses is a complex endeavour resulting from the intricate processes and organizational dynamics that are an integral part of the small enterprise. An erroneous assumption that is often made when studying the management process of small enterprises and that has received significant criticism is that the management principles that can be applied to large organizations can be applied in a scaled-down version to small organizations (Welsh and White, 1981; Curran and Blackburn, 2001). A significant amount of research in this area has clearly demonstrated how small businesses actually differ from larger organizations in their management style and processes (Delmar, 2000; Florén, 2006), their environmental context (Dean *et al.*, 1998) and their strategy-making processes (Birley and Norburn, 1985; O'Gorman, 2000).

Goffee and Scase (1995, p. xi), in their comparison of large and small firms, further elaborate on this central limitation of organizational research by demonstrating how traditional management thinking is based on overly rigid classifications of organizational structure that focus almost entirely on large organizations and that "fail because they underestimate if not entirely discount the people who inhabit and sustain them". Florén's (2006, p. 281) synthesis of observational studies describing the qualities of a small business manager's work affirms that "the working day of a top manager in small firms is unplanned, informal, hectic and fragmented. To manage a small firm is to be part of a flow of ad hoc unpremeditated activities". O'Gorman et al. (2005)), in their observational study of small growth-oriented businesses, attempt to establish the differences between owner-manager behaviour in small firms and manager behaviour in large firms by contrasting their results to existing research on managerial behaviour in large organizations. Their research asserts that owner-managers in small growth-oriented businesses are continually changing roles and functions on any given day and that there is more reliance on informal communication processes than in large organizations. They found that the main reason for this informality was the central role of the owner-manager and the overall absence of formal control systems in the small organizations studied, which enabled more flexibility in communicating across the organization. Indeed, the management process

in small firms is highly dynamic and its effectiveness is fundamentally linked to the expertise and management competencies of the small business owner-manager.

Even though external influences such as sudden economic downturns and increased competition have an impact on the failure of small firms in Canada, poor management skills and internal deficiencies founded in the lack of basic management competencies represent a fundamental cause of failure regardless of such external factors (Baldwin and Gellatly, 2003). Lack of management ability and experience remain key contributors to the failure of small Canadian firms according to a recent study of why more than half these firms exit the market within five years of start-up (Baldwin and Gellatly, 2003, p. 165). Further analysis of the management practices utilized by small business owner-managers to operate their business is required to gain a more complete understanding of the small firm management process.

The issue of what constitutes effective small business management practices and how they impact the performance and potential success of small firms is a significant one in the field of small business management research and has been the focus of a number of studies (see, for example, Shwenk and Shrader, 1993; Gadenne, 1998; Georgellis et al., 2000; Newton, 2001; Ibrahim and Soufani, 2002; Stokes and Blackburn, 2002; Sadler-Smith et al., 2003). These studies have a behavioral emphasis and have identified core skills and competencies that are essential to the effective management of a small business in order to ensure its survival, productivity, potential growth and overall economic contribution. This research also tends to categorize the management skills required to manage a small business into functional areas. Such a categorization is supported by the intrinsic belief that small businesses increase their chances of success when managers are competent in core functional areas such as strategic planning, marketing, finance, operations and human resource management (Balderson, 2003). Yet, because of their relatively small size and ownership structure, small firms have limited resources when compared to larger firms, which have more extensive management structures that enable a wide variety of individuals to fulfill specific functional roles. Indeed, owner-managers must have the ability to fulfill various functional roles in order to ensure the effective management of their business on any given day.

Despite criticisms of the approaches that attempt to define key small business management skills or competencies (Gibb, 2000), the necessity of ensuring adequate managerial competency is clearly reflected in a number of studies that identify the relationship between the level of managerial competency of the owner-manager and the success or failure of their firm. Hence, if we consider the importance of managerial skills in general as a critical component in preventing small business failure (Gasse, 1997; Gadenne, 1998; Monk, 2000; Newton, 2001) and more particularly the central importance of the small business owner-manager's problem solving skills, this particular area of inquiry requires further exploration. When looking at the small firm management process and the range of management skills utilized in operating their business, an underlying consideration is the fact that owner-managers must constantly deal with and solve problems related to every aspect of their business operations. The approaches adopted by owner-managers to solve problems encountered in their small businesses have a significant impact on the continued survival of their companies, regardless of the specific demands of the business environment in which they operate.

Process-oriented approaches to solving organizational problems, much of which relates specifically to implementing these approaches in large corporations (see, for example, Mitroff, 1998; Rasiel and Friga, 2002; Hood and Lowy, 2004) abound yet the relevance of these frameworks to the context of small firms is limited. These highly structured, process-oriented frameworks are founded on the application of specific principles that guide managers through the problem solving process from the initial identification of the problem through the development of the best solution that enables the problem solver to achieve desired outcomes. Such process-oriented approaches to problem solving, which tend to be rather prescriptive in nature and rely on inflexible methods, may not in fact be suited to the flexible management processes inherent to the small firm. There is, especially, a lack of investigation into how problem solving actually occurs in small businesses, where the relatively small size of the firm combined with the unpredictable nature of managing a small business increases the relative importance of the individual owner-manager's adequate response to internal and external problems as they arise.

Grouping the obstacles faced by small businesses into categories of most commonly faced problems is another approach that characterizes much of the literature aimed at providing small business owners with guidance on resolving organizational problems. These varying categorizations of problems make a clear distinction between operational problems, which are concerned with the efficiency of business operations, and strategic problems, which are concerned with effectively running the business as it goes through different stages of evolution. Yet, if we consider the diversity of small business sectors, the influence of various owner-manager characteristics such as gender (Lee and Denslow, 2005) and the impact of the growth stage of the business (Harris and Gibson, 2006) for example, it is difficult to arrive at consistent categorizations: the problems encountered will vary greatly as a result of these different factors. Grouping problems into categories is useful for understanding the most problematic areas small businesses will potentially face. However, more research into the actual problems faced by owner-managers as they perceive them is required to provide new insights into the challenges faced by individuals running these businesses. By capturing owner-managers' interpretations of the problems they faced, using an interpretive research approach, this study addresses an important gap.

Research study

The small business sector is of vital importance to Canada's economy, but there is an extremely high failure rate of these businesses in the first five years of operation (Industry Canada, 2003; Chambers and Shaw, 2004). The purpose of this study is to investigate the problem solving approaches adopted by 11 small business owner-managers on Central Vancouver Island. The study examines from a holistic perspective the variables that characterize the problem solving processes in the sample of firms studied; it considers the interrelationships of the themes that emerged and generates new interpretations of the owner-managers' approaches to problem solving.

An interpretive approach to the study of problem solving

Intentional methodological choices must be made in order to analyze how the problem solving approaches of owner-managers influence their ability to overcome potential impediments to survival. Interpretive approaches to research have been increasingly



recognized as being important contributors to the production of new knowledge on a range of unexplored organizational and management issues (Sandberg, 2005; Prasad, 2005). The application of an interpretive mode of inquiry to gain a better understanding of the problem solving approaches that enable small business survival is particularly suited to meeting the aims of this study. Such an approach facilitates the interpretation of how small business owners attach meaning to their experiences and how this informs the choices they make as problems arise in the day-to-day functioning of their businesses. Applying a perspective that relies on the principles of interpretive research is valuable as small business owners' actions are based on their own distinctive understandings of the world; inquiring into the problem solving approach adopted by individuals can provide additional insights into how an individual's capacity to solve problems can impact the survival potential of small businesses. In order to achieve the aims of this study, an interpretive approach based on the application of the critical incident technique (Flanagan, 1954; Chell, 1999), which also draws on the core principles of grounded theory (Glaser and Strauss, 1967; Strauss and Corbin, 1998), was chosen as the most appropriate method.

Grounded theory

The utilization of a grounded theory approach to small business and entrepreneurship research has recently been proposed as a particularly valuable way for researchers to increase the intersection between existing theory and the actual reality of small business practice. Grounded theory encourages the development of theories that emerge from the real lived experiences of the small business owner as opposed to applying existing theories (often developed in large organizations) that often do not adequately reflect these experiences (Nkongolo-Bakenda *et al.*, 2005). Grounded theory is well suited to researching the complex aspects of small business management processes and provides opportunities for new interpretations that emerge from the data.

Grounded theory provides a general framework that guides the research process and allows for the development of theory through an iterative and inductive process of collecting and analyzing qualitative data. The term "grounded theory" was defined by Glaser (1992, p. 16) as "a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area". The methodological emphasis of grounded theory is congruent with interpretive assumptions regarding the need to capture the interpretations and perceptions of the subjects being studied. Consequently, the grounded theory process emphasizes the central tenet of emergence. The systematic analysis of data to code rich descriptions through the use of the constant comparative method allows for the emergence of new theories in the area being studied. In the constant comparative method, the researcher compares the contents of each interview with another in order to identify underlying themes that are then designated into categories that explain the phenomena being researched (Glaser and Strauss, 1967; Glaser, 1992). This inductive theory generation process allows for themes to emerge from the data rather than for data to be collected and analyzed through the application of an existing theoretical framework.

The flexibility inherent in the grounded theory approach also allows it to be combined with the critical incident technique (CIT), another quantitative approach, in



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order to meet the aims of the research. The application of various interpretive methods such as grounded theory and the CIT is supported by the defining characteristics of qualitative research:

Qualitative research involves the studied use of a collection of a variety of empirical materials – case study; personal experience; introspection; life story; interview; artefacts; cultural texts and productions; observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals' lives. Accordingly, qualitative researchers deploy a wide range of interconnected interpretive practices hoping always to get a better understanding of the subject matter at hand. It is understood, however, that each practice makes the world visible in a different way. Hence there is frequently a commitment to using more than one interpretive practice in any study (Denzin and Lincoln, 2005, p. 4).

Indeed, given the importance of the context in which small business owner-managers operate, the qualitative, inductive approach that is the foundation of grounded theory provides the flexibility required to enable the in-depth exploration of problem-solving approaches in small firms.

The critical incident technique

The CIT has been used in a number of entrepreneurial and business studies and has gained acceptance as a qualitative method in the field of small business research (Chell and Allman, 2003; Perren and Ram, 2004). The CIT relies on data collection through interviews and can be used effectively as part of an interpretive research methodology (Chell, 1999). This method permits an examination of events from the owner-manager's perspective. The CIT was developed by Flanagan (1954) to collect behavioural data on observable human activity through the identification of critical incidents that are systematically analyzed to identify precise relationship(s) among variables. Through the application of this approach, respondents are able to convey their unique interpretations of the events under study.

For this study, the CIT is defined as follows:

... a qualitative interview procedure which facilitates the investigation of significant occurrences (events, incidents, processes or issues) identified by the respondent, the way they are managed, and the outcomes in terms of perceived effects. The objective is to gain an understanding of the incident from the perspective of the individual, taking into account the cognitive, affect and behavioural elements (Chell, 1999, p. 56).

The identification of critical incidents is based on observable human activity that is complete enough in itself to permit inferences about the person acting in response to a specified situation.

The CIT method assumes an interpretive approach (Chell, 1999) that explores the owner-managers' perceptions of their unique reality and how they attribute meaning to the world in which they function. In addition to the CIT method, an inductive approach, which draws on the analytic process contained in grounded theory, was used to code and analyze data obtained during the interviews. This allowed for the emergence of patterns in the problem-solving process as data collected from interviews was analyzed and categorized according to the principles of grounded theory.

Research participants

A series of semi-structured in-depth interviews with 11 small business owner-managers on Central Vancouver Island were conducted using the CIT framework as the primary method of data collection. In the context of this study, critical incidents were defined as specific problems owner-managers were faced with, which they identified as having a critical impact on the functioning of their business. Respondents were asked to recall critical problems they had encountered in the history of their small business and the approach they had taken to solve these problems. Incidents were derived from eliciting answers to the following questions:

- (1) Tell me about the critical problems you have encountered since the start-up of your business (critical incident).
- (2) How did you deal with each problem? (behaviour/action)
- (3) How did it turn out? What was the result of your actions? How did this influence the development/performance of your business? How did you know your approach to solving the problem was successful/effective? (outcome)

Businesses were from varied sectors, including food services and accommodation, business services, specialty retail, automotive, and construction. Small businesses were defined as those independently owned and managed by their owner and with at least one but fewer than 50 employees. Interviews were conducted with the primary aim of exploring the approaches owner-managers take to solving problems and the perceived impact of these approaches on the development of their business.

Two out of three new businesses in Canada do not survive to their fifth year of existence (Statistics Canada, 2006, p. 9) and in order to take this extremely high failure rate into consideration, only businesses, which had been in existence for a minimum of five-years were chosen to participate in the study. By interviewing owner-managers whose businesses had survived past this first crucial five-year period, the study attempted to identify ways in which owner-managers solved the problems that they considered to be most critical and what, if anything characterized this approach to problem solving that enabled them to survive beyond the first five years of operation.

Organizing and coding data to generate themes and categories

Once the data were collected through digitally recorded interviews with 11 small business owner-managers, the results were transcribed, coded and analyzed using the CIT framework combined with a grounded theory approach to identify emerging categories and subsequent themes.

The first step in the data analysis process was to utilize the CIT framework to explore how the behaviours exhibited by each participant when resolving the problems encountered contributed to perceived outcomes for their firm and to identify what characterized their approach to problem solving. To apply the CIT framework, verbatim elements of each printed transcript were highlighted to identify what were perceived to be critical incidents, the actions taken to address the incident, and the perceived outcomes of these actions for each owner-manager. The next step in analyzing the data was to compare all the recorded critical incidents, actions, and outcomes until categories emerged that constituted a pattern significant to the respondents. In this phase of analysis, raw data from the interview transcripts combined with the analysis resulting from the CIT were organized through open



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emerged.

Quality of data

Criticisms of qualitative techniques for data collection and analysis, such as the CIT approach and grounded theory, focus on the lack of generalizability of the findings due to the small research samples. Indeed, Curran and Blackburn (2001, p. 117) highlight the fact that qualitative interpretations in small business research are often unfairly criticized as being "little more than superficial, literary accounts rather than, 'proper' research". Yet Chell (1999) demonstrates how increasingly this view is being increasingly challenged by qualitative researchers who maintain that there is significant value in focusing on smaller samples to gain more in-depth understanding of the workings of various business organizations.

coding by comparing the multiple critical incidents identified by each participant

(Glaser, 1992, p. 39) until core attributes characterizing the problem solving process

In keeping with the interpretive paradigm discussed earlier, the interpretations that emerged from this process reflect Denzin and Lincoln's (2005, p. 26) assertion with regard to interpretation and evaluation when conducting research: "qualitative research is endlessly creative and interpretive . . . There is no single interpretive truth". As such, the analysis of research findings that resulted from the process of interpretation outlined in the following section reflects the author's own "creative" attempt to make sense of the data collected in the course of this study.

Results

An analysis of the interview transcripts demonstrated that distinct attributes characterized the problem-solving process in the firms studied. A number of the themes that emerged from this analysis have been overlooked, for the most part, by prior research in the area of problem solving in small firms. The findings presented in this study suggest that problem solving in these small firms is an intuitive, often emotional process that is not characterized by the objective conceptualizations of problems that leads to rational solutions.

Intuition

Owner-managers tended to use their intuition to solve critical problems as they occurred. Indeed, in none of the cases studied were distinct steps to problem solving identified. Instead, owner-managers recounted how they took actions to solve problems intuitively, without taking the time to think about a rational solution to the problem.

Amal, the owner-manager of a successful independent hotel, reflected on this absence of a rational, formally planned approach to solving problems by stating:

You don't even take the time to think about problems. If you think about every problem as a problem, you just can't deal.

Julie expressed a similar perception when asked how she actually went about solving problems in the daily operations of her notary firm:

So whatever problems come along, any day, I deal with it that day and then get on to the next day because you don't have a lot of time. I mean, if you took time to think about it, the problem would be an awful problem by then. Like it could balloon into something you really don't want, especially in this business.



These approaches differ from a number of theoretical research frameworks on problem solving that propose that well-defined and delineated steps are the best method for solving problems (see, for example, Mitroff, 1998; Rasiel and Friga, 2002; and Hood and Lowy, 2004). The participant comments suggest that more dynamic processes occur in practice. The role of intuition has been extensively researched with regard to decision-making processes in large firms (see, for example, Kathri and Ng, 2000; Patton, 2003; Korthagen, 2005) yet has not been explored in the unique context of small firms. The results of this study uncover an unexplored dimension of intuitive organizational processes – the importance of intuition with regard to problem solving capability in small firms.

Learning

The research also points to an essential relationship between an owner-manager's ability to reflect on past mistakes and their ability to apply their learning in subsequent problem situations. Critical problems represented powerful learning events for many participants. Seeing the results of their actions enabled them to come to the realization that fundamental changes had to be implemented in how they operate their businesses. Mark described how difficult the learning process could be with regard to running business operations in an expanding hair salon:

It's hard. You have to sooner or later figure out that you've got to run the business, the business can't run you. When you learn that, it's the biggest step for an owner or hairdresser to step away from the chair and start running the business. Especially at this point, we're a pretty big salon right now.

This learning was critical in helping Mark distinguish between the requirements of operating a business and those of being immersed in the work and not taking a general view of operations. As a result, he was able to focus more on putting mechanisms in place such as training from within, which resulted in increased employee retention. Employee turnover had represented an ongoing problem for his business and was subsequently resolved.

Other participants were emphatic about "how much there is to learn" with regard to solving business problems as they occur. Doug, the owner-manager of a building design and construction firm, recalled the learning curve he experienced as he dealt with problems at start-up:

So when I built the first house I thought, well, I can save some money by doing this and I can save money by doing that and what was interesting is that what I found, at the end of the first year I had built one house and had put a whole lot of labour in it and at the end of the year, I'd lost money. Because being new in business I didn't really account accurately for my overhead, which I think a lot of people do. They have a very poor understanding of what overhead really consumes. By the time I included all our truck costs and tool costs and accounting and legal and all the other gamut of stuff that goes with it, I had actually lost money. So that was a bit of a wake up call at the end of the first year . . . I learned fairly quickly but that first year or two [pause] I stumbled along.

As a result of this learning, Doug was able to adjust his bidding and pricing structure to reflect costs more accurately. Once he made these adjustments, he generated income that made his business sustainable and even profitable.



Gibb (1995, p. 15) defines learning in the context of small firms as "the human processes by which skills, knowledge, habit and attitudes are acquired and altered in such a way as behaviour is modified". This definition emphasizes how important both skills and knowledge, in addition to the owner-manager's attitude are in leading to the modification of behaviours. The results of this study demonstrate that participants' abilities to learn from previous experiences and the resulting accumulation of knowledge and experience enabled them to adapt their problem solving behaviour, thus making a critical contribution to their survival beyond the crucial five-year mark. The fact of their survival could potentially be linked to the owner-managers' abilities to solve critical problems, though more research on this specific theme would be required to support this. It is important to research small firms that survive beyond the critical five-year mark in order to generate new understandings of the factors that contribute to this survival. As reflected in the results of the present research study, a significant amount of expertise and know-how resides in the lived experiences of the individuals responsible for such longevity and their accounts of these experiences should be captured to add to the existing body of knowledge on effective small firm management practices.

The ability to learn is critical to the survival and potential growth of small firms as owner-managers improve their ability to solve organizational problems through learning. The question of how and if owner-managers actually learn as a result of solving problems throughout the evolution of their business requires further exploration. To what extent does the owner-manager's learning impact their ability to resolve problems encountered by their firm? This study addresses the need highlighted by Chaston *et al.* (2001) to expand research on learning in small firms by using such alternatives to the highly structured, positivist approaches as grounded theory and in-depth case studies in order to uncover actual owner-manager experiences of learning. Qualitative approaches to researching how owner-manager learning actually takes place have been suggested as a way to take into consideration the fact that learning is context-specific and dependent on the individual's perception of various events and the meanings they attribute to these (Down, 1999).

Emotions

The emotions that surfaced when encountering problems represent another critical influence on the ways in which owner-managers dealt with problems. The following statements suggest that emotions play an important role in shaping how each person perceives, approaches, and solves a problem:

No one really knows what the hell you go through. They ask me, "How do you keep a smile on your face?" You just do it or get out of this business!

You can guarantee that you're going to have a human resource issue every day. And there are days when you get slammed with three of these issues and weathering that and actually seeing what can get you through is a challenge.

Because in this industry, it's so intense and if you get emotionally attached to a negative, you can sink into that.

It's those little challenges that are thrown at you. You talk about what's here in your heart and you wonder, "Am I tapped? I have nothing more to give".



Once again, the significant influence of emotion on the actions taken to solve major organizational problems indicates the lack of a rational, objective approach to problem solving in most of the firms studied. The role emotions play in the effective management of small firms has had limited consideration in the field of small business research. This omission is perhaps a result of the inherently complex and ambiguous nature of the concept of "emotions", which is less likely to be objectively captured through the application of the functionalist paradigm that still dominates the field of small business management (Grant and Perren, 2002).

Although the examination of how emotions impact behaviour in organizations has gained increased attention (see, for example, Hartel *et al.*, 2005; and Fineman, 2003), the impact of emotions as it relates to entrepreneurial behaviour (Goss, 2005), or to behaviour in small businesses (Dexter and Behan, 1999), requires further exploration, particularly as it relates to problem-solving capabilities in small firms. Another consideration is that, for the most part, the existing research on emotions takes a functionalist and not an interpretive perspective of organizations (Hartel *et al.*, 2005). The results of this provide new insights that demonstrate the importance of emotionality in explaining how owner-managers react to the problems they encounter in the specific context of the small firm.

Luck and destiny

While most owner-managers were guided by the determination to succeed when faced with problems in their firms, there was also evidence that they sometimes attributed their ability to successfully deal with problems to luck and destiny. A number of respondents, when recounting the actions they took to resolve critical problems hindering their businesses, used words such as "luck" and "destiny" to describe the situation.

Doug emphatically affirmed this with regards to a risky business investment in a bad economic downturn:

The economy couldn't get any worse so we sort of knew where the bottom was. There was a risk and we could have lost a lot but we got lucky. So you know, you take the risks and sometimes it works, sometimes it doesn't.

Although Doug acknowledges that embarking on a new project despite the enormous impact of an economic slowdown was a risky endeavour, he clearly attributes his success in the venture to luck, as opposed to any other factor.

When explaining why business in his truck/auto repair and paint shop is booming beyond his highest expectations, Gary stated:

It's just luck. I work my ass off but it's still luck. I wouldn't want to put it to anything else (laughs).

Gary's perception here is that the success of his business can be attributed to "luck" rather than his own actions or skills.

These excerpts illustrate how some participants in the study seem to have an external *locus* of control when describing the resolution of critical problems; yet, they still expressed satisfaction with the outcomes, including the continued survival of their businesses, which they ascribe to the "external" events that occurred. Research in this area has demonstrated that individuals with an external *locus* of control, that is, those who generally believe that fate and luck and other external forces play a powerful role



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in determining the outcomes of their life, tend not to be as successful in management roles as those with an internal *locus* of control (Spector, 1982). Indeed, Spector's (1982) research establishes that small firms are less likely to fail when led by managers with an internal *locus* of control. While his research has made a positive association between internal *locus* of control and individual and organizational success, the findings of this study demonstrate that possessing an external *locus* of control does not necessarily preclude owner-managers from finding appropriate solutions to the problems they face. It is interesting to note that these findings also reflect the results of a survey conducted by Statistics Canada of 1,505 small businesses with one to four employees in 1995 and still in operation four years later. Of the participants surveyed, 51 per cent identified "luck" as a key determinant of the firm's survival and success (Industry Canada, 2001, p. 26).

Self-efficacy and determination

Though many participants expressed an external locus of control by making attributions to "luck" and "destiny" when explaining their ability to solve problems, a contrasting theme that emerged in other participant accounts was a sense of determination and an underlying belief in their own ability to achieve the outcomes they set out to accomplish for their business. It is interesting to note that participants either attributed their ability to solve problems to external manifestations beyond their control or clearly thought they had control over the events that occurred.

Amal's determination is reflected in her ability to acknowledge how difficult running a business can be at times, but her desire to see the positive results of her work has made all the difference:

I keep wondering if others have standards like we do. Are we crazy to have such high standards?! ... I hate failure [emphatic]. I can't fail. I've never failed my whole life. We feel responsible for our people here. We come from a different generation where loyalty and responsibility are so important.

Amal is unwavering in her belief that it is her need to be successful and not to fail that has pushed her to work as hard as she has in building and running her hotel.

Julie's determination is greatly influenced by her family:

My determination to be successful exists because I have two kids to support and a husband that relies a lot on me, always has done, but that's just our relationship. So the determination to be successful, and I just like helping people. Because, God, it's just a huge investment to put out, you just don't want to lose it.

Again, the desire to see the results of such significant financial and personal investment, especially given the importance of her family, has sustained Julie's determination through the years.

In capturing the life stories of entrepreneurs to explore how entrepreneurial learning occurs, Rae and Carswell (2001) link the motivation to achieve with the ability to learn and the development of a high level of self-confidence. Though the focus of this study was somewhat different, the findings presented here with respect to owner-manager learning through problem solving and their self-expressed confidence in their abilities reveal a parallel theme.



Problem solving in small firms

The final component of the CIT framework captures participants' perceptions of the outcomes of the actions they took to address critical problems. When discussing the perceived outcomes for the firm, owner-managers generally expressed satisfaction at the results of their actions. Their actions allowed them to resolve core problems including as staffing issues, financial problems, balancing the demands of operating a business with those of their personal lives, and the challenge of expanding their customer base in a rural "blue collar" location. Their actions also ensured an acceptable level of growth, in addition to increased positive reputation and recognition in the community, which led to an increase in their customer base. As Doug stated:

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We're at the point now where I can sort of pick and choose my work. We have enough cash flow here. We're not wealthy but we can survive.

This attitude was echoed by the majority of participants interviewed, they now felt able to choose the focus of their work, to grow their business or to branch out into other product lines as a result of their ability to resolve the problems they encountered. These findings are consistent with other studies on the changing nature of problems in the life-cycle of small firms that find that the later, more stable stages of development are characterized by a focus on internal issues that can enable the owner-manager to maintain the firm's size or expand its growth possibilities (Churchill and Lewis, 1983; Dodge and Robbins, 1992.

An alternative interpretation of problem solving

The interpretive methodology of this study enabled the development of new perspectives on problem solving through the application of grounded theory combined with CIT methods. The research contributions presented here are synthesized in Figure 1 and demonstrate the interdependence of critical influences affecting the problem solving process in small firms. This synthesis reveals the holistic nature of the problem solving process in the particular context of small firms. This holistic aspect is embodied in the understanding that owner-manager behaviour with regard to solving problems can be interpreted through the consideration of various interconnected influences on the process.

The first element to consider in the proposed framework focuses on the problem solver, whose capacity to solve problems is influenced by emotions, the desire for

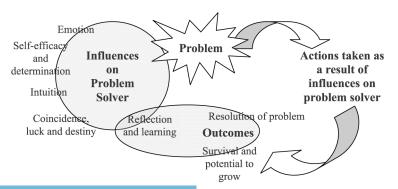


Figure 1.
A holistic framework for problem solving in small firms



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self-efficacy and determination to succeed, intuition, and finally, the attributions of coincidence, luck and destiny. These influences impact owner-managers' perceptions of the problem and the actions they take to solve the problem. These actions lead to perceived outcomes for the firm that then continue to influence the problem solver. As illustrated in this framework, reflection and learning are both outcomes of problem solving and influence the perceptions of the problem solver by their presence or absence. The interpretive methods utilized to collect and analyze participant accounts of problem solving enabled an in-depth understanding of owner-managers' interpretations of their reality. Implicit to the interpretive tradition is the understanding that these interpretations do not represent an objective, rational truth (Charmaz, 2006), but rather provide additional insights into the subjective experience of problem solving within the parameters of the study.

Conclusions

The results of this research have a number of implications for small business owner-managers. Internal management deficiency has been identified as one of the leading causes of bankruptcy in Canadian firms, most often occurring in small firms (Baldwin *et al.*, 1997, p. 9). More particularly, bankruptcy is most prevalent in the early stages of the lifecycle due to internal deficiencies that prevent managers from adequately responding to problems. All the participants who took part in the study had survived past the first stages in their lifecycle, since a key selection criterion was that they had been in existence for a minimum of five years. Their ability to respond to problems in each stage of their evolution enabled them to avoid the reality of bankruptcy faced by many small Canadian businesses.

Bannock (2005, p. 53), in his comparison of a number of international surveys ranking problems faced by small firms, affirms that there is a "mismatch" between what small business owners are actually preoccupied with, and the focus of the research done on them, which is often driven by policy concerns and current trends. Such trends are reflected in the Canadian Government's continued emphasis on growth when researching and tailoring their support initiatives for small firms (Halabisky, 2006), even when the majority of small business owners do not view growth as a priority (Chambers and Shaw, 2004). From an external perspective, the results of the present study have an important implication with regard to the development of small business support initiatives by the Canadian government that are more adequately tailored to meet the needs of small business owner-managers.

From an internal perspective, owner-managers need to become aware of the importance of continually developing their problem solving skills to ensure the survival of their business. The development of these skills can occur internally through ongoing learning and reflection as they address particular problems through the development phases of their business. It can also involve the ability to identify the various influences on their perceptions of problems, in order to ensure that they are adequately dealing with problems as they arise.

Researchers in the field of small business management are increasingly cognizant of the potential that lies in studying the dynamics of small firms by capturing the unique perspectives of the individuals who manage and operate them. There is great value in furthering our understanding of how small businesses operate, as is the case, for example, with the unique attributes of problem solving processes that have been



Problem solving

identified as a result of this study. This value increases when we consider the tremendous contribution made by the small business sector to the strength of Canada's economy.

The approach taken in this study is firmly positioned within an emergent body of research in the field of small business and entrepreneurship that uses an interpretive paradigm to explore the complexities of how individuals develop their capabilities and management practices (Chell and Allman, 2003) with a particular emphasis on the small business owner-manager. Studies such as this one that move beyond rational analyses and focus on providing in-depth examinations of management behaviours in small firms, offer new insights into the complex, multi-faceted reality of small firms and the individuals who own, manage, and operate them. As a result, it is imperative that researchers in the field continue to look into the unique behaviours and attitudes of small business owner-managers in a variety of settings through the application of an interpretive research paradigm.

References

- Balderson, D. (2003), Canadian Entrepreneurship and Small Business Management, 5th ed., McGraw-Hill Ryerson, Toronto.
- Baldwin, J. and Gellatly, G. (2003), Innovation Strategies and Performance in Small Firms, Edward Elgar Publishing, Cheltenham.
- Baldwin, J., Gray, T., Johnson, J., Proctor, J., Rafiquzzaman, M. and Sabourin, D. (1997), Failing Concerns: Business Bankruptcy in Canada, Statistics Canada, Ottawa.
- Bannock, G. (2005), The Economics and Management of Small Business: An International Perspective, Routledge, Abingdon.
- Birley, S. and Norburn, D. (1985), "Small vs large companies: the entrepreneurial conundrum", *Journal of Business Strategy*, Vol. 6, pp. 81-7.
- Chambers, E. and Shaw, S. (2004), A Primer on Western Canadian Entrepreneurship, Western Centre for Economic Research, Edmonton.
- Charmaz, K. (2006), Constructing Grounded Theory, Sage Publications, Thousand Oaks, CA.
- Chaston, I., Badger, B., Mangles, T. and Sadler-Smith, E. (2001), "Organisational learning style, competencies and learning systems in small, UK manufacturing firms", *International Journal of Operations & Production Management*, Vol. 21 No. 11, pp. 1417-32.
- Chell, E. (1999), "Critical incident technique", in Symon, G. and Cassell, C. (Eds), Qualitative Methods and Analysis in Organizational Research, Sage Publications, London.
- Chell, E. and Allman, K. (2003), "Mapping the motivations and intentions of technology orientated entrepreneurs", R&D Management, Vol. 33 No. 2, pp. 117-36.
- Churchill, N. and Lewis, V. (1983), "The five stages of small business growth", *Harvard Business Review*, May-June, pp. 2-11.
- Cohen, W. (2006), *The Entrepreneur and Small Business Problem Solver*, 2nd ed., John Wiley & Sons, Hoboken, NJ.
- Curran, J. and Blackburn, R. (2001), Researching the Small Enterprise, Sage Publications, London.
- Dean, T., Brown, R. and Bamford, C. (1998), "Differences in large and small firm responses to environmental context: strategic implications from a comparative analysis of business formations", *Strategic Management Journal*, Vol. 19 No. 8, pp. 709-28.
- Delmar, F. (2000), "The psychology of the entrepreneur", in Carter, S. and Jones-Evans, D. (Eds), Enterprise and Small Business, Prentice-Hall, Harlow.



- Denzin, N. and Lincoln, Y. (2005), "Introduction: the discipline and practice of qualitative research", in Denzin, N. and Lincoln, Y. (Eds), *The Sage Handbook of Qualitative Research*, 3rd ed., Sage Publications, Thousand Oaks, CA.
- Dexter, A. and Behan, G. (1999), "Small business consumers: the emotional economic unit", Journal of the Market Research Society, Vol. 41 No. 2, pp. 171-91.
- Dodge, R. and Robbins, J. (1992), "An empirical investigation of the organizational life cycle model for small business development and survival", *Journal of Small Business Management*, January, pp. 27-37.
- Down, S. (1999), "Owner-manager learning in small firms", *Journal of Small Business and Enterprise Development*, Vol. 6 No. 3, pp. 267-80.
- Fineman, S. (2003), Understanding Emotions at Work, Sage Publications, London.
- Flanagan, J. (1954), "The critical incident technique", *Psychological Bulletin*, Vol. 51 No. 4, pp. 327-58.
- Florén, H. (2006), "Managerial work in small firms: summarising what we know and sketching a research agenda", *International Journal of Entrepreneurial Behaviour & Research*, Vol. 12 No. 5, pp. 272-88.
- Gadenne, D. (1998), "Critical success factors for small business: an inter-industry comparison", International Small Business Journal, Vol. 17 No. 1, pp. 36-56.
- Gasse, Y. (1997), Entrepreneurial-Managerial Competencies and Practices of Growing SMEs, University of Laval Centre for Entrepreneurship and SMEs, Québec.
- Georgellis, Y., Joyce, P. and Woods, A. (2000), "Entrepreneurial action, innovation and business performance", *Journal of Small Business Development*, Vol. 1 No. 1, pp. 7-17.
- Gibb, A. (1995), "Small firms' training and competitiveness: building upon the small business as a learning organisation", *International Small Business Journal*, Vol. 15 No. 3, pp. 13-29.
- Gibb, A. (2000), "SME policy, academic research and the growth of ignorance, mythical concepts, rituals and confusions", *International Small Business Journal*, Vol. 18 No. 3, pp. 13-35.
- Glaser, B. (1992), Basics of Grounded Theory Analysis, Sociology Press, Mill Valley, CA.
- Glaser, B. and Strauss, A. (1967), The Discovery of Grounded Theory: Strategies for Qualitative Research, Aldine de Gruyter, Chicago, IL.
- Goffee, R. and Scase, R. (1995), Corporate Realities. The Dynamics of Large and Small Organisations, Routledge, London.
- Goss, D. (2005), "Entrepreneurship and 'the social': towards a deference-emotion theory", Human Relations, Vol. 58 No. 5, pp. 617-36.
- Grant, P. and Perren, L. (2002), "Small business and entrepreneurial research: meta-theories, paradigms and prejudices", *International Small Business Journal*, Vol. 20 No. 2, pp. 185-210.
- Halabisky, D. (2006), The Growth Process in Firms: Job Creation by Firm Age, Industry Canada, Ottawa.
- Harris, M. and Gibson, S. (2006), "Determining the common problems of early growth small business in Eastern Northern Carolina", SAM Advanced Management Journal, Vol. 71 No. 2, pp. 39-45.
- Hartel, C., Zerbe, W. and Ashkanasy, N. (2005), *Emotions in Organizational Behavior*, Lawrence Earlbaum Associates, Mahwah, NJ.
- Hisrich, R. (2004), Small Business Solutions, McGraw-Hill, New York, NY.
- Hood, P. and Lowy, A. (2004), *The Power of the 2 x 2 Matrix: Using 2 x 2 Thinking to Solve Business Problems and Make Better Decisions*, Jossey-Bass, San Francisco, CA.



- Ibrahim, A. and Soufani, K. (2002), "Entrepreneurship education and training in Canada: a critical assessment", *Education + Training*, Vol. 44 Nos 8/9, pp. 421-30.
- Industry Canada (2001), Micro-enterprises Survey, 2000: A Progress Report, Industry Canada, Ottawa.
- Industry Canada (2003), Business Management Skills in Small and Micro-enterprises, Industry Canada, Ottawa.
- Jennings, P. and Beaver, G. (1997), "The performance and competitive advantage of small firms: a management perspective", *International Small Business Journal*, Vol. 15 No. 2, pp. 63-75.
- Kathri, N. and Ng, H. (2000), "The role of intuition in strategic decision making", *Human Relations*, Vol. 53 No. 1, pp. 57-86.
- Koontz Traverso, D. (2001), The Small Business Owner's Guide to a Good Night's Sleep: Preventing and Solving Chronic and Costly Problems, Bloomberg Press, Princeton, NJ.
- Korthagen, F. (2005), "The organization in balance: reflection and intuition as complementary processes", Management Learning, Vol. 36 No. 3, pp. 371-87.
- Lee, S.-S. and Denslow, D. (2005), "A study of major problems of US women-owned small businesses", *Journal of Business Strategy*, Vol. 15 No. 2, pp. 77-89.
- Mitroff, I. (1998), Smart Thinking for Crazy Times, Berrett-Koehler, San Francisco, CA.
- Monk, J. (2000), "Why small businesses fail", CMA Management, Vol. 74 No. 6, pp. 12-13.
- Newton, K. (2001), Management Skills for Small Business, Industry Canada, Ottawa.
- Nkongolo-Bakenda, J.-M., d'Amboise, G. and Anderson, R. (2005), "Réconcilier théories et pratique des affaires dans le contexte de l'entrepreneuriat des petites et moyennes entreprises: le 'Grounded Theory' est-il une solution?", Fostering and Incubating Canadian Entrepreneurship Conference Proceedings, Canadian Council for Small Business and Entrepreneurship, Waterloo.
- O'Gorman, C., Bourke, S. and Murray, J. (2005), "The nature of managerial work in small growth-oriented businesses", *Small Business Economics*, Vol. 25, Spring, pp. 1-16.
- O'Gorman, C. (2000), "Strategy and the small firm", in Carter, S. and Jones-Evans, D. (Eds), Enterprise and Small Business, Prentice-Hall, Harlow.
- Patton, J. (2003), "Intuition in decisions", Management Decisions, Vol. 41 No. 10, pp. 989-96.
- Perren, L. and Ram, M. (2004), "Case-study method in small business and entrepreneurial research", *International Small Business Journal*, Vol. 22 No. 1, pp. 83-101.
- Prasad, P. (2005), Crafting Qualitative Research, M.E. Sharpe, Armonk, NY.
- Rae, D. and Carswell, M. (2001), "Toward a conceptual understanding of entrepreneurial learning", Journal of Small Business and Enterprise Development, Vol. 8 No. 2, pp. 150-8.
- Rasiel, E. and Friga, P. (2002), *The McKinsey Mind*, McGraw-Hill, New York, NY.
- Sadler-Smith, E., Hampson, Y., Chaston, I. and Badger, B. (2003), "Managerial behaviour, entrepreneurial style and small firm performance", Journal of Small Business Management, Vol. 41 No. 1, pp. 47-61.
- Sandberg, J. (2005), "How do we justify knowledge produced with interpretive research?", Organizational Research Methods, Vol. 8 No. 2, pp. 41-68.
- Spector, P. (1982), "Behavior in organizations as a function of employees' locus of control", Psychological Bulletin, Vol. 91, pp. 482-97.
- Statistics Canada (2006), "Business incubation in Canada: preliminary indicators", *Innovation Analysis Bulletin*, Vol. 8 No. 2, pp. 1-15.



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16,1

184

No. 1, pp. 17-27. Strauss, A. and Corbin, J. (1998), Basics of Qualitative Research: Techniques and Procedures for

Stokes, D. and Blackburn, R. (2002), "Learning the hard way: the lessons of owner-managers who have closed their businesses", Journal of Small Business and Enterprise Development, Vol. 9

- Developing Grounded Theory, 2nd ed., Sage, Thousand Oaks, CA.
- Welsh, J. and White, J. (1981), "A big business is not a little big business", Harvard Business Review, Vol. 2 No. 12, pp. 2-12.
- Zinger, T., LeBrasseur, R. and Zanibbi, L. (2001), "Factors influencing early stage performance in Canadian micro enterprises", Journal of Developmental Entrepreneurship, Vol. 6 No. 2, pp. 129-50.

Further reading

Glaser, B. and Strauss, A. (1999), The Discovery of Grounded Theory: Strategies for Qualitative Research, 2nd ed., Aldine de Gruyter, Chicago, IL.

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