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THE FRAMING OF NEW BUSINESS CONCEPTS IN ESTABLISHED CORPORATIONS – AN EXPLORATORY INVESTIGATION

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Abstract: Both researchers and practitioners have recognized the importance of framing when new business concepts are launched within established corporations. Yet, the extant literature contains limited systematic evidence on how intrapreneurs go about framing their new business concepts and the implications for survival of the new concepts in the host corporations. This paper presents empirical evidence on the framing of 49 new business concepts introduced in 18 established corporations and its survival implications. The results reveal that intrapreneurs generally prefer framing approaches that emphasize opportunity and novelty over approaches that emphasize threat and commonality. Three specific framing approaches are identified: active-strategic, active-optimistic, and passive. Preliminary analyses suggest no direct effects of the three framing approaches on the survival of the new business concepts in the host corporations. The findings provide baseline information about how intrapreneurs go about framing new business concepts in established corporations, inviting further empirical work in this largely under-researched area of entrepreneurship research.

INTRODUCTION

Corporate entrepreneurship, or the process by which new business concepts are introduced and ultimately commercialized by established corporations, is at the heart of corporate renewal and necessary for the firm's long-term survival (Dougherty & Hardy, 1996; Hamel & Prahalad, 1994; Zahra & Covin, 1995). In most established companies, individual initiatives at lower organizational levels generate a stream of new business concepts that are potentially recognized and retained by the established organization. These new business concepts are typically promoted by an intrapreneur, whose task it is to develop a new concept into a commercially viable product or service, in the process "selling" it and its commercial potential to other organizational members.

Despite the fact that new business concepts are critical for the long-term survival of the corporation, their status is often precarious and only a small proportion of all new concepts can hope to survive and have a significant impact on organizational operations and strategy (Biggadike, 1979; Block, 1982). Intrapreneurs and their new business concepts must compete for the limited resources in the organization, transform inert organizational structures, and overcome the often incredulous attitudes among other organizational members (Burgelman, 1991; Kazanjian & Drazin, 1987; Lovas & Ghoshal, 2000; Sykes & Block, 1989). The success and survival of new business concepts in the established corporation requires the intrapreneur's persistent effort to attract and maintain the attention of others (Dutton et al., 2001; Pinchot, 1985), and to present or sell the new concept in a way that generates the support needed for its ultimate retention.

To attract attention and generate support for the new business concept, the intrapreneur can make use of framing when presenting and promoting the concept to other organizational members (Fiol, 1994). Framing aims at influencing the mental models through which others make sense of and evaluate new information. When successful, it supports the formation of a positive attitude towards the new concept, and ultimately results in the decision to have it retained by the organization. The way in which the intrapreneur presents and promotes a new business concept thereby can be of significant importance for its survival in the host corporation.

Although it has been suggested that intrapreneurs can make active and strategic use of framing in their attempts to promote new business concepts (Dutton et al., 2001; Howell & Higgins, 1990), empirical studies on the subject are scarce and have mostly relied upon single observations and case studies (e.g. Fiol, 1994; Pinchot, 1985). Hence, there is limited systematic knowledge about how intrapreneurs make use of framing as part of their new business venture activities. The present paper sets out to fill this empirical void, offering more broad-based empirical evidence on how intrapreneurs actually go about framing their new business concepts. Specifically, the paper explores how intrapreneurs present and promote their new business concepts in terms of the key categories threat, opportunity, novelty, and commonality (Ahuja & Lampert, 2001; Dutton & Jackson, 1987; Jackson & Dutton, 1988), as well as the implications of different framing approaches for the survival of new business concepts in the host corporations.

The paper uses survey data on 49 new business concepts introduced in 18 Swedish corporations, generating information about how the intrapreneurs have framed their respective concepts in the corporate context. These new business concepts were generally judged to represent something significantly new in terms of technology or functionality, thus highlighting the potential need for framing to get them accepted and retained by the respective corporations. Starting from baseline information about the intrapreneurs' framing of their new business concepts in terms of threat, opportunity, novelty, and commonality, cluster analysis identifies three more specific framing approaches. Event history techniques are finally applied to explore the implications for survival of the new business concepts within the host corporations.

The results suggest the existence of a baseline approach to framing in which intrapreneurs emphasize the opportunity and novelty associated with their new business concepts. The framing of new business concepts as a response to a threat or something that resembles prior successful projects within the corporation is used more sparingly. Within this baseline approach, three specific framing approaches are identified, labelled active-strategic, active-optimistic, and passive. Whereas each group represents a distinctive combination of emphasis on opportunity, threat, novelty, and commonality, the most common combination is that of a high degree of emphasis on both opportunity and novelty. Results concerning the implications for survival of the new concepts within the host corporations reveal no differences in the effectiveness of the three different framing approaches.

The paper consists of five main sections. The first section presents existing theoretical perspectives on framing and identifies those framing approaches the literature has identified as presumably most effective in securing the survival of new business concepts inside the established corporation. The second section presents the sample, methodology, measurement of key variables, and main statistical methods, and it is followed by two sections that contain the results and an extended discussion. The final section contains a summary of findings and conclusions, as well as some suggestions for future research.

THEORETICAL PERSPECTIVES ON FRAMING

At the fundamental level, framing is concerned with how individuals attempt to construct meaning and convey a picture of "reality" to other people (Benford & Snow, 2000; Fiol, 1994). The objective is to generate attention to certain issues, problems, or projects and to construct mental models that help others make sense of and evaluate new information (Dutton & Ashford, 1993; Huber, 1991). In the words of Benford and Snow (2000: 614), framing in a social context thereby denotes "an active, processual phenomenon that implies agency and contention at the level of reality construction."

In the organizational context, the way in which managers interpret new issues, events, or projects determines their potential range of behavior (Huber, 1991; Kiesler & Sproull, 1982) and ultimately influences organizational action (Chattopadhyay, Glick & Huber, 2001; Daft & Weick, 1984; Dutton & Duncan, 1987; Dutton & Jackson, 1987; Milliken, 1990). Framing is particularly important when individuals at lower or middle levels of the organization seek attention to and support for issues that fall outside established practices and cognitive frames of top management. Successful framing thereby contributes to the implementation of projects that may change corporate strategy (Burgelman, 1991; Lovas & Ghoshal, 2000), introducing new products and services which may ultimately become accepted parts of the corporation's core activities (Burgelman, 1983).

One way of generating attention and constructing meaning is to employ certain cognitive categories and linguistic labels that help people make sense of new information. These categories are comprised of objects sharing similar attributes, allowing the communicator to use shortcuts in conveying the meaning and implications of new issues, events, or projects. Three such categories identified in the organizational and framing literature are threat, opportunity and novelty. Threat has been associated with negative outcomes, uncontrollable situations, and potential loss, whereas opportunity is associated with positive outcomes, controllable situations, and potential gain (Dutton & Jackson, 1987; Jackson & Dutton, 1988). Although these attributes have been identified as distinctly related to either threats or opportunities, threat and opportunity do not represent opposite or mutually excluding categories in all respects. For example, pressure to act and the need for quick action have been associated with both threats and opportunities (Jackson & Dutton, 1988), and whereas managers may perceive a threat from a new competing technology they may at the same time recognize that it offers an opportunity to enter a new field of significant future potential.

Novelty and how it is perceived is widely discussed in the literature on organizational change (e.g. Ahuja & Lampert, 2001; Kazanjian & Drazin, 1987; Piderit, 2000; Tyre & Hauptman, 1992), and it has two different connotations. It may refer to novelty in a general sense, emphasizing the extent to which an issue, object or event is equally novel to all observers (for example, trading over the Internet may at some point have been perceived as a generally novel way of doing business), but it may also be seen in relation to the current operations and practices of the individual organization. From this perspective, a particular event or object may represent a novel experience to one firm, whereas it is more or less aligned with established practices in another. The opposite of novelty is commonality, or the extent to which new issues, objects or events are aligned with already established perceptions and practices in the general or firm-specific sense.

Some empirical evidence suggests that individuals use framing intentionally and strategically. Dutton et al. (2001) show that so-called issue-sellers in organizations are very conscious about how they frame the issue they want to sell to top management. They also show that the way “issue entrepreneurs” package an issue, for instance by making it appear more incremental than it actually is, or how they connect to other salient issues or important organizational goals influence the likelihood that the issue will have an organizational impact. Howell and Higgins (1990) show that champions of new ideas make use of a number of framing tactics to capture the attention of resource allocators and to convince them about the future potential of innovations. Innovators do so not only by formulating a compelling vision for what the concept might become, but also by linking the concept to larger principles and values held by the organization. In the more general setting of entrepreneurship, Hargadon and Douglas (2002) illustrate how Thomas Edison actively tried to shape perceptions of the electric light by presenting it in a way that made it seem less novel and threatening to the established gas-lighting system than it actually was.

The Framing of New Business Concepts in Established Corporations

While a distinction can be made between different objects of framing, including issues, problems, and projects (Dutton & Ashford, 1993), the present paper is concerned with the framing of new business concepts introduced in established corporations. These new business concepts are specifically defined as products or services that have introduced something significantly new in terms of technology or functionality.

In the corporate entrepreneurship literature, framing is typically associated with key individuals or intrapreneurs at lower organizational levels and outside the organizational core (Galbraith, 1982; Antoncic & Hisrich, 2003), attempting to promote new business concepts among other organizational members in general and top management in particular (Burgelman, 1983) [1]. It is concerned with how a new business concept is connected to changes and developments in the external environment, for example whether it is to be seen as a response to an external threat or opportunity (Zahra, 1991), and how it is to be perceived in the light of ongoing internal operations and practices. The ultimate objective is to generate attention to the new business concept and to develop a collective understanding of it among various decision makers. This attention and understanding is intended to lead to positive attitudes, support, and ultimately the organization's retention of the new business concept and strategic renewal (Guth & Ginsberg, 1990).

Apart from generating attention and support for new business concepts, framing in the corporate entrepreneurship context often (but not necessarily) has the connotation that individuals strategically try to communicate pictures of reality that do not necessarily correspond to all "objective" or known facts. Intrapreneurs thereby attempt to convey an appealing picture of new business concepts without resorting to outright misrepresentations of the objective and true facts. As an illustration, Pinchot (1985) describes how in response to evolving top priorities at GM the lead intrapreneur at one point presented and "sold" the Fiero sports car as a fuel-efficient car for commuters.

Although the framing literature is fundamentally concerned with creating and conveying a picture of reality to other people, it does generate some *a priori* expectations about what framing approaches should be most effective in generating attention and support for new business concepts. The first expectation concerns the extent to which new business concepts are presented as a way to avoid threats or to take advantage of potential opportunities for the organization. It has been found that managers are more likely to pay attention to and respond

[1] A probably more limited number of new ventures are the result of top-down processes, and it has been suggested that these processes are most prevalent and effective in the case of products and services that already at the outset are found to involve far-reaching strategic change which involves the entire corporation (Day, 1994; Stopford & Baden-Fuller, 1994). Although variation introduced through top-down processes may have important consequences for firm growth and long-term survival, the resulting new products and services and their potential retention will not be the main focus of this paper.

to threats than to opportunities (Dutton & Jackson, 1987; Jackson & Dutton, 1988). In the more general context of strategic decisions, it has also been found that while there is marginal difference between the ultimate impact of framing based on adaptation (threat) or innovation (opportunity), the former appears to invoke much shorter strategic decision processes (Nutt, 1998). In order to attract attention to new business concepts in the first place, the most effective approach would be to frame new concepts as a necessary response to a threat from the environment, rather than emphasize how the concepts represent a new opportunity for the organization.

The second expectation is that framing new business concepts in a way that emphasizes their similarity to already existing operations and practices is more effective than presenting them as something novel. New business concepts framed in a way that makes top managers feel a greater sense of control have a higher probability of success in the project-selling process (Dutton & Duncan, 1987). Also, top managers are more likely to commit to new business concepts for which they feel they can provide valuable personal skills and input (Dutton & Ashford, 1993). Proponents of new business concepts also need to align the presentation of their projects with existing internal and external norms and beliefs about what is appropriate and legitimate (Dutton et al., 2001; Howell & Higgins, 1990; Lounsbury & Glynn, 2001). From these perspectives, new business concepts where commonality is emphasized are more likely to generate understanding and positive support than those framed in novelty terms.

Yet, assuming there is an initial preference for emphasising threat rather than opportunity in the framing of new business concepts, the literature has produced two competing hypotheses regarding the emphasis on novelty or commonality (Chattopadhyay et al., 2001; George et al., 2006; Gilbert, 2005). Arguments based on prospect theory suggest that the threat of a potential loss shifts attention towards novel solutions that tend to be riskier than established solutions and routines of the corporation. The most effective way of framing a new business concept would therefore be to emphasize that it responds to an environmental threat but also proposes a novel solution to mitigate this threat. In contrast, the threat-rigidity hypothesis suggests that any threats to individuals and organizations tend to be met with rigidity and the cementing of already established cognitive structures and behaviors. From this perspective, the appropriate framing of new business concepts should rely on the emphasis on threats to the organization, combined with a presentation of the new concepts as something which resembles or corresponds to already established operations and practices.

Although the extant literature suggests that some framing approaches are more successful than others, the various combinations of the threat/opportunity and novelty/commonality categories appear to involve some inherent trade-offs, originating in the need to generate both attention and support for new business concepts. Specifically, consistently emphasizing threat (and thus evoking feelings of uncontrollability) to get attention for a new business concept may lead to a loss of support during the implementation stage (Jackson & Dutton, 1988). In view of this, the ultimate success of framing may depend on the individual’s ability to shift the emphasis and content of communication over time, and strategic framing implies that the individual alternates the use of framing categories in communicating with others. The skilled intrapreneur thereby consciously or unconsciously adapts communication and framing according to the receiver (Huber, 1991), attempting to generate the most favourable response from the broad and varied set of individuals who may be involved in the selection of new business concepts. Hence, in the process of promoting a new business concept the intrapreneur may emphasize both threat and opportunity, as well as novelty and commonality, depending on the particular situation and organizational position of the receiver.

Implications for Survival in the Host Corporation

While the framing and corporate entrepreneurship literature has generated some relatively clear expectations about successful framing approaches, in the present paper the assessment of survival implications must remain limited and exploratory. This is partly because the full set of internal and external variables that influence the success of new business concepts in established corporations is potentially very large (e.g. McGrath, Venkataraman & MacMillan, 1994; Thornhill & Amit, 2000; Tsai, MacMillan & Low, 1991), requiring theoretical treatment and data well beyond the capacity of the present paper. Also, while it can be expected that intrapreneurs who focus on threat and either novelty or commonality in their framing approaches will be more successful than others (Dutton & Jackson, 1987; Jackson & Dutton, 1988; Nutt, 1998), the performance and survival implications of any alternative framing approaches are essentially unknown.

As the main function of framing is to attract the attention of other organizational members and to improve the chances of getting support for the new business concept, the basic assumption is that framing activities do have an influence on the success of new business concepts. This success may then be measured in terms of the survival of new business concepts in the host organization (Nutt, 1998). It could perhaps be argued that any form of active framing produces more success than passive approaches, but this expectation depends on the extent to which intrapreneurs make use of the "correct" framing approaches. Taken together, the assessment of survival implications concerns a largely unexplored issue in the corporate entrepreneurship literature, and in the present paper data limitations only allow for a preliminary and rudimentary search for conspicuous differences in the effectiveness of different framing approaches.

METHODOLOGY

Sample and Data Collection

Sample. To analyze the framing of new business concepts in established corporations, the paper draws upon a survey of the nature and fate of 49 new business concepts introduced in 18 Swedish corporations (for a similar approach, see Thornhill & Amit, 2000).

To be included in the sample, the new business concepts had to: (1) Represent the autonomous initiatives of employees of established corporations (as it turned out, these employees were mostly engineers), (2) concern a product or service that introduced something significantly new in terms of technology or functionality, and (3) have passed what Burgelman (1983: 226) calls the "conceptual" or "pre-venture" stages. Because the collection of data combined the use of interviews and surveys, the costs of data collection limited the sample to new business concepts that had originated in Swedish companies. It is notable that the sampling targeted and included both retained, spun-off, and terminated new business ventures.

Because there are no publicly available lists of significantly new business concepts in established corporations, the new business concepts were identified through snowball sampling (Hair et al., 2003; for detailed information about the sampling process, see Appendix A). In the current study, such snowball sampling was combined with a convenience-sampling approach, that is cases were included in the sample whenever a new business concept which met the sampling criteria was identified during the course of the study. Observations were thus gathered from two main sources: personal contacts with managers and engineers who were directly asked whether they could act as respondents and/or knew about other concepts that fit the sampling criteria, and secondary data sources such as newspapers and magazines.

The 49 new business concepts were introduced in 18 Swedish corporations, at the time of data collection ranging in sales from USD 9 million to USD 37 billion (median USD 7 billion). The largest number of observations pertaining to one individual host corporation was 8, the smallest one. The companies operated in a relatively diverse set of industries, by and large representative of the structure of Swedish industry, including industries such as IT and telecommunications, automotive vehicles, pharmaceuticals, steel, pulp and paper, and electrotechnical equipment. There is a relative dominance of firms in the IT and telecommunications industries (just under 25 per cent of all observations), and a fairly even distribution of firms across the remaining industries.

Data collection. Data were collected from key informants, who were typically the primary inventors and champions of the new products or services associated with the new business concepts[2]. In the very few cases where the inventor was not the main champion of the concept and/or was not involved in commercialization attempts, the project manager who took over management of the venture was used as the key informant. The identified individuals were involved with the venture on a daily basis and can be expected to have possessed accurate and detailed knowledge about the nature of the new business concept and how it developed within the existing corporation. The majority of survey responses were collected during face-to-face meetings, in which an initial interview was followed by the completion of a 128-item questionnaire. In a limited number of cases, telephone interviews were also conducted. The questionnaire was filled out in a controlled setting and in the majority of cases in direct connection to the initial interview (for additional details about the data collection, see Appendix B).

One drawback of using key informants is that it introduces potential informant biases (Bagozzi, Yi & Phillips, 1991). Specifically, the views and perceptions of informants may be biased by their specific organizational roles, and their interpretation of certain events and

[2] A number of individuals may be involved in the process of promoting and implementing new business concepts, including the original inventors of new products and services, “champions” who may buy into the project and promote the new concept throughout the organization, and middle managers who connect the ventures with top management (e.g. Burgelman, 1983; Day, 1994; Galbraith, 1982; Howell & Higgins, 1990). In the great majority of cases examined in this paper, and as found in other studies as well (Burgelman, 1983), the original inventor also remained the key champion throughout the new business venturing process. The term “intrapreneur” thus refers to the person who came up with the new product or service concept and was also the key individual promoting it within the established corporation. It cannot be precluded that potentially different forms of framing occurred among other individuals involved in the development and promotion of the new business concept, but it has not been possible to account for these framing activities in the present study.

circumstances may differ significantly from that of other persons within the same organization. Furthermore, informant reports might be distorted by memory failure, inaccurate recall or hindsight bias (Golden, 1992), which is a common problem in survey-based research (Doz, Olk & Smith-Ring, 2000). The main reason for not using multiple informants, and as experienced in similar prior studies (MacMillan, Block & Narasimha, 1986), was restricted access to well-informed additional respondents (Kumar, Stern & Anderson, 1993). It was initially attempted to obtain complementary information from middle- and top managers, but this approach proved impractical. Because of the sensitive nature and still precarious status of many of the business ventures, key informants were very reluctant to identify one or several additional sources of information, presumably out of fear that contacting these individuals might have uncontrollable and negative effects on the success of their concepts in the corporation.

The problems of hindsight bias and selective recall were somewhat reduced by the procedure of conducting an interview prior to the completion of the survey. During the interviews, respondents were asked to review the history of their new business concepts in considerable detail, which is likely to have activated their memory and permitted more accurate answers to the various questions in the survey. Another factor favoring recall was that the respondents were asked about a major event in their professional career. Such major events are likely to be associated with emotions, excitement and pride of having been involved in the new business ventures, all factors which can be expected to enhance the accuracy of recall.

Common method bias is of potential concern in studies relying upon key informants (Podsakoff, MacKenzie & Lee, 2003; Podsakoff & Organ, 1986). While it is not a significant problem in identifying intrapreneurs' framing approaches, it has a potential influence in the analyses of survival implications. However, the survival times employed in the present paper represent a relatively objective and unambiguous measure of success. For analyses using survival times, problems associated with consistency motives were further mitigated as information about survival times was collected during the interviews that preceded the completion of the questionnaire (Podsakoff et al., 2003). Social-desirability problems should represent a minor concern, as responses were confidential and individual questions did not concern issues where respondents may have felt compelled to produce socially legitimate or desirable answers. Overall, however, restricted access to multiple respondents and potential common method bias both suggest caution in interpreting select analyses and empirical results.

Variables

The variables used for identifying general framing patterns among the investigated intrapreneurs were derived from the extant literature on framing and identical to those used as criterion variables in the cluster analysis. The measurement of all framing variables was based on a 7-point scale, ranging from 1 (totally disagree) to 7 (totally agree).

Threat. Two of the survey questions were designed to capture the threat aspect of the respondents' framing approaches, specifying the type of environmental change the new business concepts responded to. The first question addressed threat as a cognitive category, whereas the second question represented one of the attributes that have been associated with this category (Dutton & Jackson, 1987): (1) 'In conversations with people inside the company (but outside the venture team) the concept was portrayed as a response to a threat against the company', and (2) 'In conversations with people inside the company (but outside the venture team) it was emphasized how the concept could counteract a decline in company profits'.

Opportunity. Two survey questions were designed to reflect the opportunity aspect of the respondents' framing approaches, again differentiating between opportunity as a cognitive category and one of its attributes: (1) 'In conversations with people inside the company (but outside the venture team) the concept was portrayed as a response to a new market opportunity for the company', and (2) 'In conversations with people inside the company (but outside the venture team) it was emphasized how the concept could contribute to increasing profits for the company'.

Novelty. The novelty dimension of the respondents' framing approaches was measured by a question that captured the extent to which the new business concept was presented as novel in a general sense: 'In conversations with people inside the company (but outside the venture team) it was attempted to emphasize the degree of novelty of the concept'.

Commonality. While a low score on the novelty measure suggests an emphasis on the commonality dimension, reluctance to emphasize novelty does not necessarily mean that commonality is emphasized instead. A separate question therefore addressed the extent to which the new venture was presented as similar to earlier and successful projects: 'In conversations with people inside the company (but outside the venture team) similarities to earlier successful projects were emphasized'. Earlier successful projects are likely to have become retained and institutionalized in the form of established operations and practices (Burgelman, 1983), and similarity to earlier successful projects captures both procedural aspects (how launching and implementing the new business concept resembled earlier projects) and structural aspects (the degree of alignment with established operations and practices).

Survival. It is inherently difficult to assess the performance of new business concepts, especially in the early stages of development. In many cases, the new concepts are yet to reveal their commercial potential, and profitability measures tend to be highly ambiguous because of varying levels of investments throughout the development process.

To explore the implications of different framing approaches, the survival measure captured the length of the new business concepts' survival in the corporate context. This was a relatively objective measure, measured from the year in which the intrapreneur started investing serious and regular effort in developing the new business concept, and captured by the question 'what year did active development of the new business concept start?'. At the time of data collection, the status of the individual new business concepts could then be that they were either retained by the corporation (yet, by definition still at potential risk of being terminated), or terminated (a category which included both formally discontinued concepts and those that had been spun off)[3].

Statistical Methods

The first part of the empirical investigation maps out the intrapreneurs' framing of their new business concepts and also identifies specific groups of intrapreneurs in terms of their framing approaches.

The identification of groups of intrapreneurs with similar framing approaches is based on cluster analysis, using threat, opportunity, novelty, and commonality as the main criterion variables. Following the suggestions by Ketchen and Shook (1996), the cluster analysis uses a combination of hierarchical agglomerative and iterative partitioning methods (for similar

[3] In many cases, the intrapreneurs had conceived of the fundamental idea underlying the new business concept several years before the one defined as the year of introduction. During this period the intrapreneur only occasionally tinkered with the technology, often at home or during his/her spare time, trying to determine whether there might be a business opportunity associated with the concept. This pre-conceptual stage, comparable to what Burgelman (1983) refers to as the opportunity-definition stage, is not included in the calculation of survival times. Notably, serious and regular effort in developing the new business concept did not require any official recognition or support from the host organization. Survival time calculations did not include the first year of the new concept's existence, but did include the last year of observation, thus averaging out any errors that may arise from concepts being introduced at the very beginning of a year and last recoded at the end of any particular year (either as a surviving new business concept or as a terminated concept).

applications, see e.g. Hadaway, 1989; Parker, 1997). The hierarchical agglomerative method was Ward's method, which has been commonly used in the social sciences and the strategic management literature (Aldenderfer & Blashfield, 1984; Ketchen & Shook, 1996). The iterative partitioning method was the k-means method. All analyses were made with the SPSS 14.0 statistical package.

While there is no definitive way of deciding upon the optimal number of clusters or groups, the presence of two framing dimensions and expectations about the most effective framing approaches suggested there could emerge three to four groups of intrapreneurs in terms of their framing approaches. It was therefore decided to provisionally end the clustering procedure when three to four clusters had been identified, and that the ultimate decision would take into account a heuristic examination of the dendogram and examination of fusion or agglomeration coefficients.

Analyses of survival implications involved life-table analyses, which provide information about survival probabilities across the identified clusters of framing approaches.

RESULTS

Framing Approaches

Table 1 provides baseline information about the framing of new business concepts among the surveyed intrapreneurs.

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Insert Table 1 about here

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The results show that the intrapreneurs in the sample generally emphasize opportunity rather than threat when presenting and promoting their new business concepts among other organizational members. Differences between the means of questions 1 and 3 as well as 2 and 4 are all significant at the 1 per cent level. Also, the new business concepts tend to be presented as novel, whereas their similarity to earlier successful projects is generally de-emphasized ($p<.01$).

While the descriptive statistics reveal the baseline tendencies in the framing of new business concepts among the respondents, cluster analysis provides additional information about the grouping of intrapreneurs according to their use of combinations of the threat, opportunity, novelty, and commonality categories. The first stage of the cluster analysis used Ward's method with squared Euclidean distances to identify preliminary clusters and seed points for the iterative partitioning analysis that followed. Although scale values were identical across individual questions and variances did not differ significantly across the variables, all variables were standardized to Z scores (thereby preventing variables with larger variances from having an artificially high influence on the cluster solution)[4]. The resulting dendogram suggested that three to five clusters provided useful separations of observations and cluster solutions. The analysis of the agglomeration coefficient suggested a particularly pronounced jump between the three and two cluster solutions, and hence the three cluster solution was employed as a starting point for the subsequent k-means analysis.

The k-means procedure used the clusters and cluster centroids identified by Ward's method and made an additional number of passes through the data. By making multiple passes through the data, the final solution is less impacted by outliers (to which Ward's method is sensitive) and the final solution optimizes within-cluster homogeneity and between-cluster heterogeneity (Ketchen & Shook, 1992). Yet, it requires that the number of clusters be determined *a priori*. The k-means procedure produced three refined groups of intrapreneurs in terms of their overall framing approaches (a total of four cases changed clusters as a result of the k-means procedure), differentiated by some but not all of the selected criterion variables (Table 2).

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Members of the first cluster, comprising 15 intrapreneurs, follow what can be labelled an *active-strategic* framing approach. The most notable characteristic of this approach is the comparatively high emphasis on both threat and opportunity when connecting new business concepts to developments in the external environment (yet, in absolute terms, the emphasis on threat is moderate). Theoretically, threat and opportunity should represent somewhat opposing categories, and the observed use of both suggests that the intrapreneurs in the active-strategic group adapt their messages according to the specific situation and organizational position of the receiver; sometimes, the threat aspect is emphasized whereas at other times new market

[4] Analyses based on the non-standardized variables had a moderate effect on the number of cases in each of the identified clusters, but no substantial effect on the relative values of the criterion variables or cluster characteristics.

opportunities are highlighted. At the same time, results concerning the novelty category suggest that members of the active-strategic group put moderate emphasis on the novelty aspect, and that they rarely present the new business concepts as similar to existing and successful operations and practices in the corporation.

The second group of intrapreneurs, comprising 25 and thus the majority of the sample respondents, follow a framing approach that may be labelled *active-optimistic*. The relatively single-minded focus on opportunity rather than threat among members of this group suggests they see positive aspects and possibilities for gains as the most important an indeed sufficient elements for gaining attention and support for their new business concepts. At the same time, and perhaps consistent with the focus on the positive and likely gains, intrapreneurs in the active-optimistic group prefer to present their new business concepts as something novel. Presumably, intrapreneurs in the active-optimistic group expect other organizational members and top management to embrace similar and essentially positive attitudes towards new business concepts.

The third group of intrapreneurs, comprising the relatively small number of 6 intrapreneurs, is characterized by the absence of framing activity. Because this group emphasizes neither threat nor opportunity in association with their new business concepts and also tends to take a moderate position with respect to the concepts' degree of novelty, the adopted framing approach can be labelled *passive*. While it may be concluded that this group of intrapreneurs makes little use of framing in attempts to present and promote new business concepts, presumably with negative effects on their success rate, there is an alternative interpretation of the results. Specifically, it could be hypothesized that the passive group acts strategically in the sense that its members hide their efforts and operate "under the radar screen" (Burgelman, 1983), attracting as little attention as possible to their new business concepts until they are proven and easier to sell to top management.

Notably, none of the three identified groups displays a clear combination of threat and either novelty or commonality, and indeed the largest of the identified groups is found to emphasize opportunity rather than threat in the framing of the new business concepts. Overall, the results from the baseline framing approaches and the cluster analysis indicate that the intrapreneurs in the current sample do not adhere to what the literature has identified as the most effective framing combinations[5].

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[5] Further analyses were performed to examine the sensitivity of the results to the three-cluster solution. The two-cluster solution collapsed the active-strategic and active-optimistic groups, keeping them separate from the passive group. The four-cluster solution kept the active-strategic and passive groups

Implications for Survival in the Host Corporation

While the extant literature suggests that certain combinations of framing should be more successful and prevalent than others, the success and survival of new business concepts is influenced by a large set of other explanatory variables, such as the overall qualifications of the intrapreneur, the nature of the business concept, the entrepreneurial orientation of the corporation, or overall environmental conditions and business cycles. Taking full account of these factors is beyond the theoretical and empirical scope of the present paper, but exploratory analyses can still shed some preliminary light on how the observed framing approaches are connected to the survival of the new concepts within the host corporations.

Out of the 46 cases that were included in the cluster analysis, at the time of observation 27 had been terminated and 19 had been retained (although technically speaking, all retained new business concepts remained at risk to be terminated). Life-table analyses connecting the three identified framing approaches to the survival of the new business concepts in the host organizations show no significant survival implications (Figure 1), whether in the short or long term. If anything, members of the passive groups face better survival chances than members of the active-strategic and active-optimistic groups, but again there are no significant differences in survival rates across the three groups and any observable differences appear to disappear over time[6].

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Insert Figure 1 about here

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DISCUSSION

Framing Approaches

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intact, but split the active-optimistic group into two sub-groups. While these two sub-groups differed in their emphasis on individual criterion variables, relative values or directions of differences vis-à-vis the active-strategic and passive groups remained unchanged. There was one exception, however, as one of the two sub-groups displayed a significantly higher emphasis on commonality than the other.

[6] As in the case of the effect on the development of the new business concepts, the same fundamental results are obtained when applying a two- or four-cluster solution. For alternative analyses using perceived development times as the dependent variable, see Appendix C.

The results concerning the baseline framing of new business concepts among the respondents are at odds with what the existing literature considers to be the most effective framing approaches. One would expect that if the intrapreneur manages to convince other organizational members that the new business concept is a necessary response to an emerging threat (Dutton & Jackson, 1987; Jackson & Dutton, 1988), the chances for getting attention and support for the new concept would increase. Yet, the intrapreneurs in the sample indicate that they predominantly present their new business concepts as responses to a new market opportunity, and also that they frame their concepts as an opportunity to increase profits (rather than counteract a decline in profits).

One logical interpretation of the results is that most intrapreneurs see it as most natural to sell new business concepts as opportunities, perhaps because intrapreneurs are expected to pursue new opportunities and create the future rather than reactively respond to imminent threats. A related explanation would be that the respondents for various reasons did not care to frame their new concepts in any explicitly strategic way. As explained by one of the respondents during the pre-survey interviews:

> "One can sell projects like used cars. But if one does so then it becomes difficult to sell a project a second time. It is best to use mostly facts mixed with the right amount of advertisement."

Given the need for fitting new business concepts into the existing operations, practices, and norms and beliefs of the corporation (Dutton & Ashford, 1993; Dutton & Duncan, 1987; Dutton et al., 2001; Lounsbury & Glynn, 2001), downplaying rather than emphasizing the degree of novelty would appear to be the preferred and most commonly observed framing approach. Yet, the intrapreneurs in the sample do the opposite – they emphasize the degree of novelty associated with the new business concepts and are reluctant to associate their concepts with prior successful projects in the company. One potential explanation for this would be that practically all of the respondents were engineers, a group for which the development of novel and different solutions is part of the professional identity. Most of the respondents also held or had held formal positions in R&D departments, where the preference for novelty may be particularly high compared to other parts of the organization. Another explanation for the reluctance to connect the new business concepts to historical precedents would be that associating the concepts with prior projects in the company could revive the political struggles associated with these projects; when the positions of other and potentially influential organizational members targeted for persuasion are unknown, intrapreneurs may find it sensible to adopt cautionary approaches.

The cluster analysis provides a more fine-grained analysis of framing approaches adopted by the sample intrapreneurs, although it must be re-emphasized that cluster solutions are sensitive to judgmental decisions about the number of clusters and criterion variables. The analysis reveals three specific groups of intrapreneurs in terms of their framing approaches, which can be mapped onto the theoretically derived expectations about the most effective combinations of framing categories. According to the established literature, a majority of the respondents would be expected to use a combination of threat on the one hand and either novelty or commonality on the other. To a large extent, however, the cluster analysis confirmed the fundamental tendencies revealed in the baseline results – the expected combination of the threat and novelty or commonality categories is typically not adopted.

The comparatively balanced emphasis on threat and opportunity in the active-strategic group deserves particular mentioning, because theoretically threat and opportunities are opposing rather than complementary possibilities. The basic interpretation of framing in this group is that its members use a differentiated framing approach, in which messages are framed differently according to the particular situation and receiver. An interview quote from one of the surveyed intrapreneurs may serve as an illustration:

> “It is all about adapting to the flavour of the day. Sometimes one tries to emphasize the new business opportunities the project has to offer, or one tries to demonstrate how the project can support and improve the existing core business areas. At other times one tries to emphasize possible threats from competitors, like saying that other competitors have already started to invest in this technology and we run the danger of lagging behind.”

Such observations illustrate the malleability of framing, but while the active-strategic group tends towards the strategic use of framing differentiated framing approaches are not a prominent feature of the active-optimistic and passive groups.

Antecedents to framing. These somewhat unexpected results pose the question whether intrapreneurs are uninformed about cognitive biases among top managers, or whether they simply frame their new business concepts in ways that reflect their ‘true’ or objective nature. One possible explanation for the observed framing approaches would be that the new business concepts differ in their fundamental qualities, which then translates straight into the intrapreneurs’ framing approaches.

Exploring the strength of association between some objective qualities of the new business concepts and the adopted framing approaches can shed some preliminary light on the issue. Specifically, the data allow for a comparison between the actual threat experienced by the respective organizations and the adoption of threat-emphasising framing approaches, and between the actual novelty introduced by the new concepts and any novelty-emphasizing approaches.

In two of the survey questions, the respondents were asked about the extent to which the development of the new concept ‘took place under strong pressure from competing companies’ and the extent to which ‘competition from other companies with similar ideas has been hard’ (both equivalent to a competitive threat). Answers to the first question were found to correlate positively and significantly with the respondents’ inclination to frame their concepts as responses to threats against the company ($p<.01$). For the second question, however, the correlation was slightly negative and not significant. In other words, if the actual environmental threat to the company was small, the respondents refrained from presenting their new concepts as responses to external threats and vice versa, but this only applied in a general sense and not when considering competition in the realm of the specific new business concepts.

A set of introductory survey questions also asked about how the respondents rated the degree of novelty of the new business concepts in relation to the solutions that currently dominated the market. Drawing upon Schumpeter’s (1934) categorization of innovations, respondents were asked to indicate the new business concepts ‘introduced an entirely new product or service’, ‘introduced an entirely new way of manufacturing’, ‘introduced an entirely new organizational form’, ‘opened up an entirely new geographical market’, ‘opened up an entirely new customer segment’, or ‘utilized entirely new components or inputs’. All questions were answered on a 7-point scale, ranging from 1 (totally disagree) to 7 (totally agree), and the average score used as an overall indicator of the concept’s degree of novelty.

The results show a positive but non-significant correlation between the underlying nature of the new business concepts and the actual framing approaches adopted by the intrapreneurs, suggesting that objectively novel business concepts also tend to be framed as novel but not in any systematic way. In combination with the results concerning the threat category, this suggests that there are considerable degrees of freedom for intrapreneurs to select preferred framing approaches, but the chosen approaches generally run contrary to what is identified as the most effective approach in the established literature.

Implications for Survival in the Host Corporation

In the absence of a model that incorporates a set of additional variables that may explain the survival of new business concepts in the host corporations, analyses of the relationship between the framing approaches of the identified clusters and survival remain exploratory. There are no signs that any of the three identified framing approaches produces significantly better chances of survival for the associated new business concepts, which can probably in part be explained by the relatively high intra-group heterogeneity of the identified clusters[7]. If framing approaches have direct effect on the survival of new business concepts, it then seems that the effect may be restricted to smaller and extreme sub-groups of intrapreneurs or involve other framing categories than those identified in the present paper.

Of course, the absence of clear-cut effects on survival can also be explained by the inability of the intrapreneurs in the current sample to adopt the theoretically or normatively most effective framing approaches, especially those combining a clear emphasis on threat and either novelty or commonality. While it is possible to single out a handful of such cases in the present sample, the numbers are too small to allow for any meaningful cross-group comparisons and statistical tests. It must also be emphasized that the present data do not allow for the analysis of more subtle aspects of framing behavior and especially intertemporal variations in communication displayed by strategically skilled intrapreneurs. In sum, however, the current results suggest the absence of a simple connection between framing approaches and the success of new business concepts in established corporations.

Limitations and Critical Evaluation of the Findings

Several important limitations to the empirical investigations must be kept in mind. First, it can be noted that respondents did not necessarily perceive of threats, opportunities, novelty, and commonality in the opposing ways indicated by theory and prior empirical work. Specifically,

[7] The inconclusiveness of the results is further supported by simple analyses of the performance implications of individual framing dimensions, where in Cox regressions neither threat, opportunity, novelty, or commonality emphases were found to have a direct, significant effect on the survival of new business concepts.

the analysis of correlations between the criterion variables shows that the framing of new business concepts as a response to a threat to the company is weakly but positively correlated with framing in terms of opportunity (Table 3).

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Insert Table 3 about here

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Although a negative correlation was expected, these results may conceal that in a large number of cases individual intrapreneurs have maintained one baseline approach to the framing of the new business concepts, for example typically emphasizing opportunities rather than threats, but consciously or unconsciously adapted and altered communication according to the specific context and organizational position of the receiver. In such cases, respondents would be able to report framing attempts that involve both threat and opportunity.

Additionally, Table 3 shows that the framing of new concepts as responses to threats against the company correlates positively and significantly with the framing of concepts in terms of their capacity to counteract declining profits, but even more so with opportunity. This could mean that many of the respondents do not necessarily associate the threat and opportunity categories with distinct attributes. Novelty is only weakly correlated with an emphasis on similarity with prior successful projects in the company, but in this case the weak association may reflect the difference between novelty in a general and company-specific sense. Taken together, these observations suggest that respondents may have had quite varied or even unclear perceptions of what constitutes threats and opportunities. At the same time, the very nature of framing, especially if seen from a strategic perspective, does not necessarily preclude mixed communication according to specific circumstances and the assumed priorities of the receiver.

Second, we are very much aware of the basic measures that have been employed. The basic approach to measurement may be weighed against the insights that can be gained into a still incompletely documented phenomenon, and further studies may explore how more fine-grained measurement and an enlarged set of framing categories and attributes yield other results.

Third, the results from the cluster analysis are sensitive to judgmental decisions about statistical method and identification of cluster solutions (Aldenderfer & Blashfield, 1984). While the results presented in this paper provide an illustration of what appear to be *de facto* differences in framing approaches across groups of intrapreneurs, the exact specification of these groups and the nature of differences depend on the criterion variables and the model choices that have been made. It is also noticeable that variation in the individual criterion variables is high, suggesting that these groups that have been identified include individual cases which diverge quite significantly in terms of their selective emphasis on either threat, opportunity, novelty, or commonality. The framing approaches that have been identified in the present paper therefore represent but a starting point for further and more fine-grained taxonomical work.

Finally, the sample is restricted to new business concepts in established Swedish firms, and the sampling technique that was used prevents any claims that a representative and unbiased sample has been obtained. Yet, it may be re-emphasized that the pragmatic approach towards sampling and data collection has been dictated by the general problems of conducting research on the nature and fate of new business concepts. In the absence of publicly available and systematic information about new business concepts in established corporations, flexible and opportunistic approaches are virtually a necessity for conducting large-sample surveys in this area.

SUMMARY AND CONCLUSIONS

The main purpose of this paper has been to empirically explore how intrapreneurs go about framing new business concepts in established corporations. The findings suggest the existence of a baseline approach to framing in which intrapreneurs emphasize the opportunity and novelty associated with their new business concepts. In comparison, framing new concepts as a response to threats to the company or something that resembles prior successful projects within the corporation tends to be used more sparingly. Given this baseline tendency, the paper identifies three specific framing approaches among the surveyed intrapreneurs, labelled active-strategic, active-optimistic, and passive. An exploratory investigation of how the three framing approaches influence the survival of new business concepts in the host corporations did not reveal any significant direct effects.

Two main conclusions follow from the analyses. The first is that the surveyed intrapreneurs do not frame their new business concepts in ways the extant literature has identified as the most effective or successful. To the extent existing expectations about the most effective framing approaches are correct, it then follows that in general intrapreneurs could become more reflective and skilled in terms of how they frame new business concepts within their host organizations. Yet, given that we still know relatively little about the nature and implications of framing new business concepts in established corporations, offering more specific practical advice remains a task for future research to accomplish.

The second conclusion concerns the absence of a direct and simple relationship between framing and the success of new business concepts in established corporations. To the extent there is a direct relationship between framing approaches and the survival of new business concepts, the empirical results suggest that the quest for successful approaches must consider alternative forms of framing and more subtle relationships. Specifically, the effectiveness of framing approaches could depend on how they interact with contextual factors, or how intrapreneurs consciously or intuitively make intertemporal adjustments to framing when promoting their new concepts. These intertemporal adjustments have not been captured by the present study.

While the paper offers some initial empirical insights into the framing of new business concepts in established corporations, its exploratory nature leaves a number of questions unanswered and open for future research. Validating and perhaps more likely amending the three identified groups of intrapreneurs and their specific framing approaches by using larger and cross-country samples is one obvious research avenue. This taxonomical work should also consider more fine-grained measurement and/or consider alternative framing categories and attributes. Future research may also explore the antecedents of framing approaches in more detail. Specific questions include how framing approaches depend on the characteristics of the intrapreneur, for example his or her professional background or general and firm-specific experience, and to what extent framing is an intuitive or conscious activity.

A second but comparatively difficult undertaking is to further explore the performance and survival implications of different framing approaches. More targeted research may address whether there is a trade-off in attracting attention to a new business concept and getting support for its implementation, or how intertemporal variations in framing may influence the development and survival of new business concepts. Additional questions concern how the effect of framing might depend on interaction with other variables and circumstances, and if some framing approaches more effective than others under certain organizational and environmental conditions. In all of these efforts, difficulties in accurately measuring the performance of new, ambiguous, and still evolving concepts are likely to persist, and survival times may prove the most useful and objective measure to employ.

Overall, there appear to be ample opportunities to further explore the nature and survival implications of framing new business concepts in established corporations, and more fine-grained investigations would undoubtedly address an important aspect of the life and growth of organizations. Ultimately, these efforts should be able to generate more fine-tuned theory and guidance for the practicing intrapreneur.

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Table 1

Baseline statistics framing variables

Question (from 1 “totally disagree” to 7 “totally agree”)	n	Mean	Median	Std. Dev.
Threat				
In conversations with people inside the company (but outside the venture team):				
1. The concept was portrayed as a response to a threat against the company	48	2.27	1	1.87
2. It was emphasized that the concept could counteract a decline in company profits	48	3.27	3	1.92
Opportunity				
In conversations with people inside the company (but outside the venture team):				
3. The concept was portrayed as a response to a new market opportunity for the company	49	5.41	6	1.80
4. It was emphasized how the new concept could contribute to corporate profitability	48	5.29	6	1.74
Novelty				
In conversations with people inside the company (but outside the venture team):				
5. It was attempted to emphasize the degree of novelty of the concept	49	4.73	5	1.89
Commonality				
In conversations with people inside the company (but outside the venture team):				
6. Similarities to earlier successful projects were emphasized	48	2.35	2	1.73

Table 2

Identified clusters by criterion variables[a], raw score means (standard deviations within parentheses)

Question (from 1 "totally disagree" to 7 "totally agree")	Cluster 1 (n=15)	Cluster 2 (n=25)	Cluster 3 (n=6)
Threat			
In conversations with people inside the company (but outside the venture team):			
1. The concept was portrayed as a response to a threat against the company	4.40 (1.92)	1.40 (0.71)	1.00 (0.00)
2. It was emphasized that the concept could counteract a decline in company profits	4.07 (1.58)	3.32 (1.98)	1.17 (0.41)
Opportunity			
In conversations with people inside the company (but outside the venture team):			
3. The concept was portrayed as a response to a new market opportunity for the company	5.73 (1.03)	6.20 (0.76)	1.83 (1.60)
4. It was emphasized how the new concept could contribute to corporate profitability	5.47 (1.25)	5.88 (1.13)	2.00 (1.55)
Novelty			
In conversations with people inside the company (but outside the venture team):			
5. It was attempted to emphasize the degree of novelty of the concept	3.53 (1.73)	5.92 (1.00)	3.17 (1.94)
Commonality			
In conversations with people inside the company (but outside the venture team):			
6. Similarities to earlier successful projects were emphasized	2.00 (1.36)	2.52 (1.69)	2.17 (2.40)

[a] Cluster solution includes only cases for which information across all criterion variables was available; n = 46.

Table 3

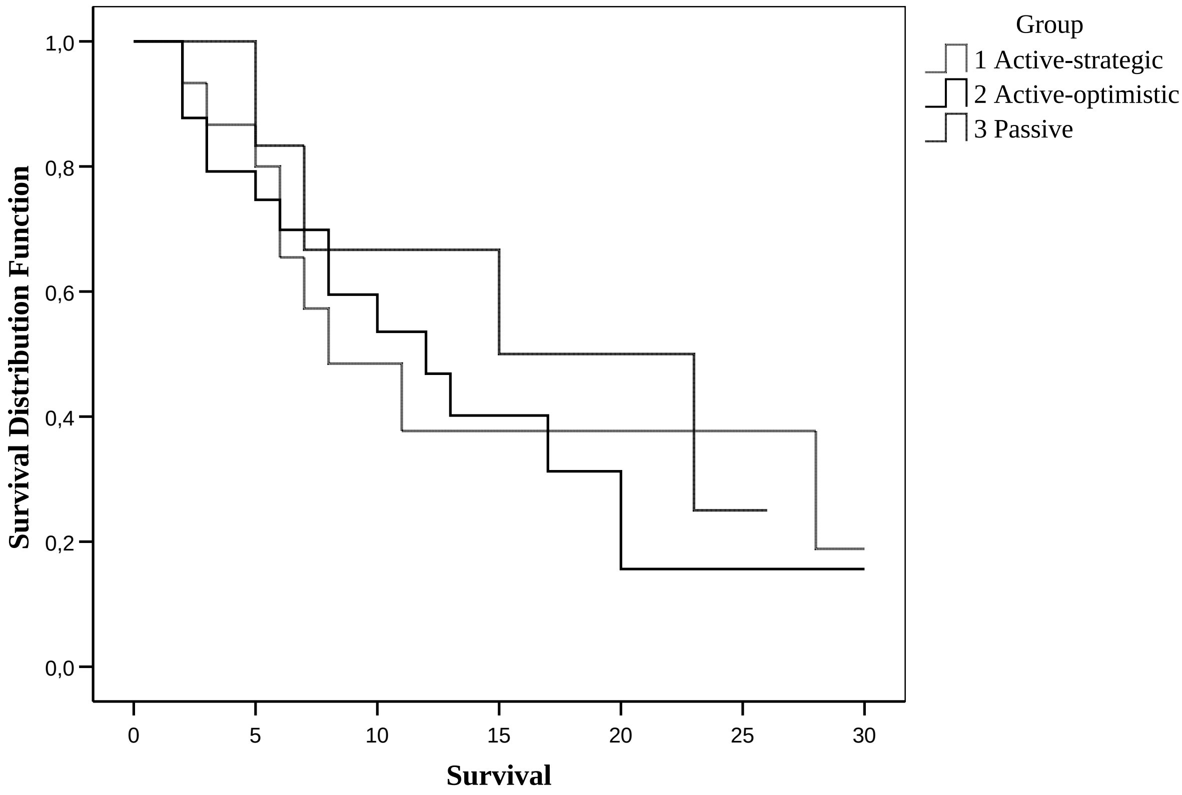
Correlations among criterion variables [a b]

Variables	1	2	3	4	5	6
1. Threat						
2. Counteract decline	.34*					
3. Opportunity	.14	.45**				
4. Increase profit	.14	.42**	.71**			
5. Novelty	-.10	.11	.38**	.28		
6. Similarity emphasis	-.18	-.17	-.07	.10	.02	

[a] Includes cases for which information across all criterion variables was available; n = 46.
[b] ** Correlation significant at the .01 level. * Correlation significant at the .05 level.

Figure 1

Survival of new business concepts, life-table analysis



Appendix A

In the first phase of the sampling process, which started in 2000, e-mails were sent to previous participants of Executive Education programs at the Stockholm School of Economics, many of whom had engineering backgrounds and were personally known by members of the research team. In a mailing of 131 letters, the contacted people were asked to identify ”products that have been introduced recently and represent something significantly new in terms of technology or functionality”, adding that the products should ”not predominantly be improvements of existing products”. They were explicitly asked to think also about projects which had been either discontinued of spun-off.

The mailing resulted in a total of 83 responses. In 36 cases, the contacted people suggested one or several specific concepts for further investigation, in the majority of cases (75 per cent) connected to their own organizations. 31 of the contacted people stated that they did not know of any concepts that matched the description, sometimes adding that they would continue holding a lookout for possible observations or suggesting names of other people in their organization who would possess the relevant knowledge. In addition, four leads were given to people who should be generally knowledgeable about the existence of products that matched the selection criteria (these people were associated with investment companies and engineering labor unions). 16 of the mails were returned as undeliverable.

A number of the identified concepts were not pursued further. For example, some concepts had been introduced through independent entrepreneurial efforts (i.e. they were not introduced within already established corporations), while others had been acquired from outside sources or represented close imitations of already existing technical solutions. In an additional number of cases, the prospective respondents were working for foreign-based firms, which because of the need for personal interviews were associated with prohibitive costs in terms of data collection. In total, the first phase of the sampling process generated 16 observations that became part of the final sample.

To expand on the number of observations, a second phase of the sampling process started with contacting the Royal Swedish Academy of Engineering Sciences (IVA). This organization maintains an extensive network of contacts with engineers, scientists, and senior executives throughout the Swedish business community. Discussion resulted in the establishment of a list of more than 50 members, representing 35 companies who were perceived as particularly suited for the identification of the aspired type of concepts and innovations.

A total of 47 people on the list from the Royal Swedish Academy of Engineering Sciences were contacted, starting in June 2002. In almost all cases, the people contacted referred to one or several other members of their current or past organizations, typically with engineering background and working within or with close contacts with formal research and development departments. In total, this second phase of the research process added 35 observations to the final sample.

In addition to the formalized search for observations to be included in the sample, observations were continuously sought and identified through searches of the Swedish business press, personal contacts of the members of the research team, and a range of occasional and unplanned encounters. Identified inventors or project figureheads were contacted over the phone and it was verified whether the identified concepts fulfilled the sampling criteria. These less formalized contacts generated 43 observations in the final sample, 20 of which were generated from one contact which provided access to the internal venturing department at one single company, and 15 that were the result of searches of secondary data sources.

As key informants were typically identified through personal referrals, there were very few dropouts after confirmed participation. Three confirmed respondents eventually declined participation, whereas an additional three respondents were contacted and met for an interview, yet never completed the survey. Data collection ended in October 2003, comprising 88 usable questionnaires and observations. Questions concerned with framing were introduced during the second phase of the sampling process, resulting in 49 observations that are used in the present paper.

Appendix B

In the process of data collection, the research team began each interview session with a short description of the ongoing research. The introduction was made in very general terms, and great care was taken not to let respondents know about any theoretical relationships or hypotheses that were being tested. The discussion then turned to some of the background variables and history of the new business concept, including its time of establishment and current stage of development. This part of the data collection process lasted from about 40 minutes up to 1.5 hours in some cases, and provided valuable insights into the history of the new business concept and any particular features associated with it. In addition, the introductory conversation was seen as important to aid recall among the respondents, ultimately turning their attention to the questionnaire that concerned detailed information about the new business concept and its relationship to the host organization.

After the introduction, respondents were asked to complete a five-page questionnaire. The design of the questionnaire drew upon the literature on survey design (Converse & Presser, 1986; Peterson, 2000) and initial discussions with two persons knowledgeable about the corporate venturing process. After completing the questionnaire with additional questions that were identified as relevant through the interviews, the preliminary questionnaire was then pre-tested on: (a) researchers knowledgeable about the construction of questionnaires, and (b) two company representatives. The pre-testing resulted in further improvements to the general design and identified a set of questions that needed clarification and re-formulation.

Before filling out the questionnaire, respondents were reminded that the information concerned the new business concept in relationship to its host organization, and it was also stressed that each question came with a “don’t know” option. When filling out of the questionnaire, which on average took about 20-25 minutes, respondents followed the guidelines of the questionnaires and worked on their own. Very occasionally, the research team would be asked to clarify individual questions, and answers were then given in a neutral way. Generally, there were no visible signs of fatigue among the respondents as they approached the final parts of the questionnaire.

Because the great majority of the questionnaires were filled out in the presence of one or two members of the research team, and prior contacts had confirmed the willingness of specific individuals to respond to the questionnaire, it is known that the collected data indeed reflected the perceptions of targeted respondents. There are no reasons to believe that any of the questionnaires were passed on to people who might have been less knowledgeable about the nature and development of the new business concepts.

Appendix C

Additional analyses employed the intrapreneurs' self-reported estimates of development times, which correspond to satisfaction scores (Covin & Slevin, 1989; Venkatraman, 1990) and measures that capture the firm's ability to meet internal milestones on schedule (Thornhill & Amit, 2000). Two specific questions asked whether: (1) 'The market introduction of the new business concepts has gone faster than expected', and (2) 'The new business concept has developed better than expected'. Both questions employed a 7-point scale, ranging from 1 (totally disagree) to 7 (totally agree).

Performance implications, raw score means
(standard deviations within parentheses)

	Cluster		
Question (from 1 "totally disagree" to 7 "totally agree")	1 (n=15) 'Active-strategic'	2 (n=25) 'Active-optimistic'	3 (n=6) 'Passive'
The market introduction of the new concept has gone faster than expected	3.27 (2.28)	2.76 (1.74)	2.00 (1.26)
The new concept has developed better than your expectations	3.73 (1.67)	4.32 (1.82)	3.33 (1.97)

The results indicate that new business concepts promoted by intrapreneurs in the active-strategic group and the active-optimistic group were introduced faster on the market and developed better than those promoted by the passive group (assuming similar initial expectations and aspirations among the responding intrapreneurs). This is in line with expectations from the extant literature, suggesting that active framing of new business concepts speeds up implementation and development processes, but none of the observed differences across clusters are statistically significant.