AN EXPLORATION OF CORPORATE ENTREPRENEURSHIP: VENTURING SIGNATURES AND THEIR UNDERLYING DYNAMICS

by

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Submitted to the MIT Sloan School of Management in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

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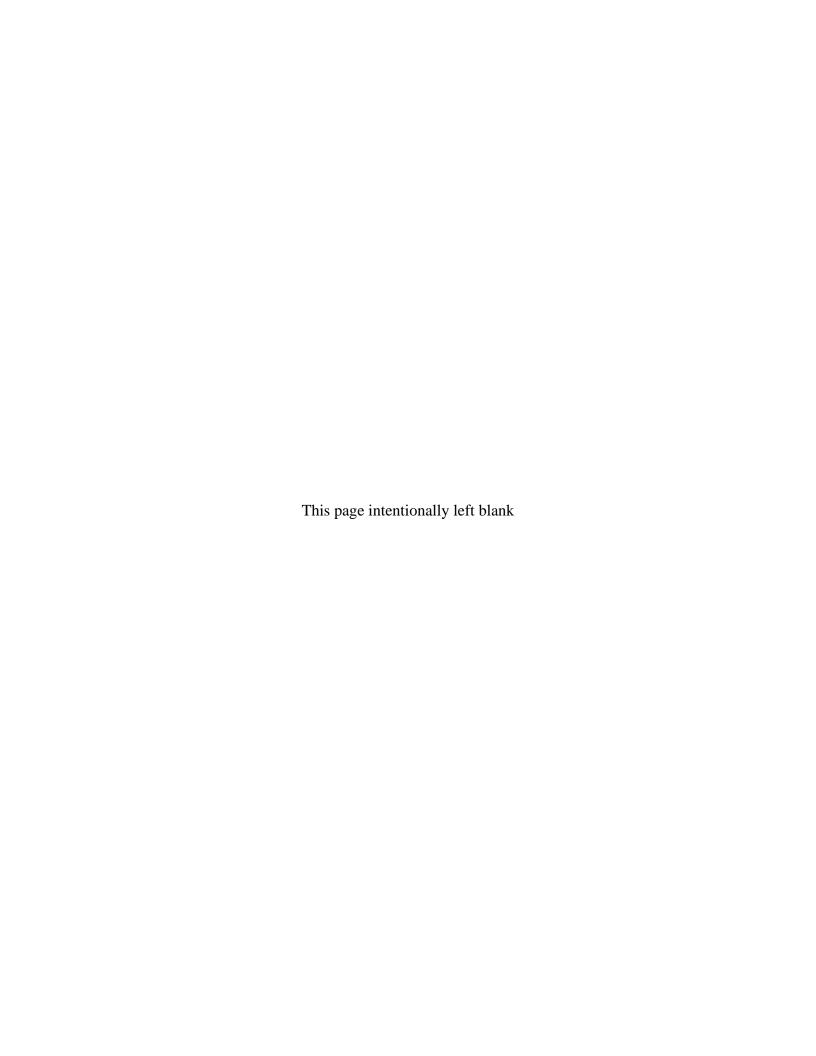
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Abstract:

The primary goal of this work is to broadly explore the factors influencing corporate entrepreneurship and to examine how its many elements can be linked together. A broad reading of the published literature on corporate entrepreneurship provides numerous frameworks and recommendations. When gathered together many of the recommendations are inconsistent or conflict with one another. The concept of a "venture signature" which evolves into a detailed look at the underlying dynamics of venturing is proposed as a way to examine corporate entrepreneurship and better identify critical influencing factors.

This work consists of an extensive review of published material which forms the basis of a set of recommendations, trade-offs, and dynamics from which a "venture signature" is created. This is followed by a series of interviews with personnel from eight corporations with venturing histories that were both successful and mixed (some successes and some failures). The venture signatures for each are constructed and then compared and contrasted element by element. Key lessons and advice from the interviews are captured as part of this analysis.

The recommendations, trade-offs, and dynamics from the literature review are combined with the interviews and the venture signatures for the eight companies. These results show that an appropriate high-level model for corporate entrepreneurship should be a dynamic one. Discussion of what a dynamic venture signature would look like and several of the dynamics of corporate entrepreneurship are developed and explained in detail. A set of "must-haves" are separated from the "choices" available to corporate entrepreneurs. A "top ten" list of organizational dynamics that affect corporate entrepreneurship is proposed for consideration when making those choices. Finally, summary findings, four questions every corporate entrepreneur should know the answers to, and next steps are provided.

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Finally, I owe everything to the love and support of my wife Karen and children Kelly and Timothy. Thank you for the constant encouragement, smiles, and hugs at the end of each day.

How to read this document

There are two main parts of this document. They are:

1. the step by step discussion of the exploration of the concept of venture signatures

leading to the proposal for a dynamic venture signature and its coupling to the

underlying dynamics within each firm (Sections 1.0 - 8.0)

2. the literature review and discussion of published works on corporate

entrepreneurship that came first and helped to formulate the thinking about

venture signatures and their dynamics (Section 9.0)

The core of the venture signature and dynamics of venturing discussion is relatively self-

contained and a limited set of references are identified throughout. Sections 1.0 - 8.0 can be read

stand-alone without the literature review but will not include all the background that generated

the thought process. This gap will be most apparent in Section 2.0 where the initial venture

signature is constructed. The literature review in Section 9.0 provides the missing background

detail that inspired the work and the thinking behind the initial venture signature and the

resulting dynamic venture signature. It also lists Recommendations, Trade-offs, and Dynamics

at the end of each section which are themselves useful lessons learned and reference material as

additional take-aways.

After Section 9.0 there are a number of additional sections which contain additional

information generated during this study which may be of interest to someone thinking about

further steps in this area.

I hope you find this a useful contribution and a good thought starter.

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1.0 Introduction

1.1 The challenge of Corporate Entrepreneurship

Corporate Entrepreneurship has long been regarded as a significant challenge but critically important for firm growth and renewal. As a result, significant management research effort has been invested in this subject. A wide variety of conclusions, recommendations, and strategies for success have been developed and published. While the broad recommendations and observations are often similar, the detailed, operational recommendations are not always consistent. In many cases they directly conflict with one another. Also, many of these analyses clearly indicate strategic or operational dilemmas that must be addressed during corporate entrepreneurship efforts. Some have provided advice for addressing these dilemmas, but this also is not consistent. Perhaps one area where the research agrees is that corporate entrepreneurship is a complex and challenging endeavor which will not yield easily to a "one size fits all" prescription for success.

Any approach to corporate entrepreneurship will have to deal with complexity trade-offs. The choices are never clear-cut and are not independent even though they are often presented that way. Examining at the range of approaches to corporate entrepreneurship, the various trade-offs, and the underlying drivers of decision-making are critical. Understanding these is necessary for developing insights into the combination of attributes that lead to success and when those are best employed. To begin it is best to look at the set of trade-offs and the particular combinations of goals, processes, resources, and style of venturing together to identify sets that seem to produce better results. But stopping there is not sufficient. A closer look at the next layer down, the drivers that influence choices in those attributes is required. We must consider

the underlying dynamics of the people, structures, and culture of the organization to be able to choose the right options. By understanding how these dynamics influence venturing outcomes we hope to be able to make more appropriate choices about structures, people, goals, etc. that will lead to more predictable corporate entrepreneurship success.

These topics are addressed in this work by examining the existing published literature and a number of benchmark companies with both successful and mixed histories of corporate entrepreneurship. Because the multiple dimensions of corporate entrepreneurship are not simply a check list but have various levels and interactions between them, a prototypical "Venturing Signature" based on reference literature is proposed that can be used to help gather data to compare "venturing styles" from one company to another, or more likely, for one company over time. The steps in the process are:

- Review of published works and identification of recommendations, trade-offs, and dynamics (RTDs)
- development of a composite signature based on the literature review
- interviews are conducted and venture signatures generated
- Analysis of the signatures follows with identification of additional RTDs and an assessment of the static venture signature.
- Proposed changes to the venture signature are made, the dynamics of corporate entrepreneurship are explored and the implications are proposed.

Through this, more insight into the more appropriate choice of factors and processes that may lead to higher success rates in corporate entrepreneurship can be explored. The concept and usefulness of a venture signature is the evaluated. Finally the rationale for a more dynamically oriented approach is explained.

1.2 Method

1.2.1 Literature Review

A broad survey of the existing management literature on corporate entrepreneurship was conducted. The details of this review are included in Section 9.0. The work was organized into several categories of recommendations, frameworks, and cases.

Areas of particular interest in this review were:

- The process used by corporations in managing corporate entrepreneurship
- The challenges of corporate entrepreneurship in established corporations
- The trade-offs, dilemmas, and dynamics experienced by corporate entrepreneurs
- Frameworks and decision making tools employed by corporate entrepreneurs
- Cases or personal accounts of experiences with leading or participating in corporate entrepreneurship efforts

Key points and conclusions in each of these areas were identified and highlighted. This background work provided the foundation for understanding the opportunities, challenges, and dilemmas with corporate entrepreneurship as well as insights into possible dimensions for the initial corporate venturing signature. Recommendations, Trade-offs, and Dynamics (RTDs) are listed at the end of each section and serve as additional "take-aways" from the readings.

A note on the process of the literature search may be of interest. The initial search was completed using recommended readings from MIT/Sloan classes on similar subjects and following their references to dig into the body of literature on the subject. In addition, a broad search of relevant journals was also conducted. After an initial round additional publications referenced in articles from the first pass were gathered and added to the set. The sources were

then reprioritized and the process was repeated. With this method a deeper understanding of the existing literature and how previous works relate to each other was developed.

1.2.2 Venture Signature – Version One

A venture signature, the concept taken from image processing and signature analysis, was assembled from the key features identified in the reviews as a way to help compare and contrast various approaches to corporate entrepreneurship. The intent of this signature is not to measure an organization's propensity for entrepreneurship, but to look at the firm's <u>approach</u> to corporate entrepreneurship. The literature review and past personal experience provide ideas for proposing a set of dimensions for building a corporate venturing signature.

The venturing signature enables the approach (the set of decisions and trade-offs) taken by a corporations to be examined as a related group rather than one-off, independent actions. In addition, it tries to include the "analog" nature of the decisions and processes used instead of following a "binary", "do vs. not do" type of checklist. The dimensions of the venture signature will include a particular focus on key trade-offs and dynamics identified in the review.

The venture signature will create a snapshot of the current state of corporate venturing for a firm. A venture signature will consist of a number of categories each with descriptive parameters. The firm's responses to interview questions determine the settings for these parameters and the results are plotted. The resulting patterns of responses from various firms are their venturing signatures. The details of the signatures are described in section 2.0.

1.2.3 Interviews

Interviews were conducted to gather details on the approaches used by a variety of corporations. The sample firms included those with a mix of success and more moderate results.

The initial venture signature proposed in this effort was used as a tool to develop a set of structured questions to be used in these interviews. A common set of questions led to a rich series of open-ended topics which explored the trade-offs and dilemmas faced by each corporation in their entrepreneurial efforts.

In preparation for specific interviews, published material about the corporate entrepreneurship efforts of these companies was examined and a background assessment of what was known and unknown about their efforts was developed. This analysis provided a good starting point for the subsequent interviews. It also helped to contrast previously published, historical accounts of their processes, with their current efforts and perspectives. This enabled probing into why their corporate entrepreneurship processes and trade-offs are different now and what new problems they are trying to address through these changes. This was an approach to determining what the critical underlying dynamics might be that affected their corporate entrepreneurship decisions.

Nine interviews with eight companies were conducted either face-to-face or over the telephone with senior corporate leaders. The intent was to interview several executives from each corporation, preferably at different levels in the organization, to get a broad perspective on the subject as well as to discuss various aspects of the details of what their processes are. This was not possible in all situations however. The interviews were recorded and extensive notes were taken. The resulting material was transcribed, processed, and used to create a proposed venture signature for each of the corporations. These venturing signatures were used for reporting the summary findings of the interviews.

1.2.4 Analysis and Venture Signature 2.0

The results of the interviews are used to look at the effectiveness of the static venture signature for capturing the current state of the firm's venturing approach. As a result, improvements are suggested based on what was learned, creating a second version of the target venture signature. The venture signature 2.0 is more than a signature. It highlights the connection between static, snapshots of a venturing approach with the underlying dynamics of corporate entrepreneurship. It is these dynamics that are at the core of what drives corporate entrepreneurship successes and failures. Venture signatures are a snapshot of these dynamics at a point in time. The implications of a more dynamic approach and what it could look like were then explored further.

1.3 Objectives

The objectives of this effort are several and reflect the following major desires:

- Gain additional knowledge on corporate entrepreneurship based on the breadth of published academic work. Create a good reference for future use.
- Propose how one might address apparent conflicts in the recommendations of the
 published works by assembling the various recommendations into a set of
 interconnected decisions, trade-offs, and entrepreneurship methods a venture
 signature and underlying dynamics.
- See, in detail, how a mix of corporations repeatedly pursue corporate entrepreneurship and determine how well the proposed venture signature captures and provides insight to the dynamics of corporate entrepreneurship and the choices made by these organizations in addressing them. Develop a more detailed understanding of

exactly how these successful corporations go about corporate entrepreneurship and their approach to managing the inherent trade-offs.

- Evaluate the effectiveness of the proposed venture signature and suggest improvements that help define core model of what contributes to corporate entrepreneurship success.
- Determine a set of useful next steps for these specific ideas and for further exploration in corporate entrepreneurship.

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2.0 Venture Signature – V1.0

2.1 Introduction

Signature analysis is a common signal/image processing technique. It is a way to handle large sets of detailed data and to extract their essential characteristics for use in subsequent decision making. The signature analysis process begins with the collection of a broad spectrum of sensor data. This data is subsequently processed and transformed through various techniques into a smaller number of characteristic "features". These features are used to group similar events or even identify the original phenomena. The set of features used for classification is typically called the "signature" of the initial event in "feature space".

Definitions collected online describe applications of signature analysis first to the monitoring of electro-mechanical systems and then to digital hardware design and test.

"A process can be identified as having a particular signature when operating correctly. This can be noise spectrum or vibration spectrum. Signature analysis involves identifying departures from the reference signature and recognizing the source of the departure." (www.control.co.kr/dic/dic-s.htm)

"A troubleshooting technique in which a stream of serial data is converted into a binary pattern that can then be compared to a pattern known to represent a functional circuit." (www.ordersomewherechaos.com/rosso/fetish/m102/web100/docs/intel-cpu-glossary.html)

Both of these definitions highlight the typical use of signature analysis which is to determine if a new event matches a known set of events. There are many more applications of signature analysis. It has been used in a number of industries for many years and there have been many papers published on the topics.

Signature analysis has a long history in military applications for the detection of aircraft or missiles using radar (Huntsberger, Jawerth, & Kubota, 1998; Palomino & Schmitz, 2000; Some non-military applications of signature analysis include: Vogel & Huber, 1990). monitoring the electrical characteristics of motors over time to proactively estimate when they are likely to fail or to at least assist in fault diagnosis (Thomson & Fenger, 2001), image processing used for facial recognition in airport or building security systems (Foltyniewicz & Sitnik, 1996), computer virus detection is done using "code signatures" (Harper, 2002), digital notarization of electronic documents uses similar technologies (Surety, 2005), and analysis by credit card companies to spot "uncharacteristic buying habits" to assist in fraud detection. There are many more examples, in nearly every industry. Signature analysis is typically very data intensive and there are a wide variety of processing techniques that can be used. By using a broad set of input measurements the interactions between the various parameters will be captured implicitly in the set of features studied. Complex, multidimensional data can be reduced to a more manageable set of features for further analysis. These techniques have proven to be effective and research continues in the algorithms and technologies to support the wide variety of applications.

Corporate entrepreneurship is a complex, multi-dimensional challenge. There are a number of very different inputs with complex interactions between them. With all the research that has been done on corporate entrepreneurship few have looked at pulling together a broad range of data and performance criteria to examine corporate entrepreneurship in a signature analysis-like manner or to use these to examine fundamental dynamics of corporate entrepreneurship. Many of the existing studies on corporate entrepreneurship target particular slices of the corporate venturing challenge. For example, one study deals with strategy, another

deals with people, another deals with organizational structure. Specificity is important in these studies because the extraction of important "features" or recommendations is data intensive and can require significant analysis. However, because of the large number of studies and wide range of inputs, the recommendations for best practices are not always consistent with each other and sometimes conflict. Given this situation it is of interest to look at as broad a range of indicators as possible together at the same time. A set of "feature level" recommendations can be examined together to see if high-level patterns emerge that may lead to further insights into the challenges with corporate entrepreneurship and dynamics that lie beneath them.

The literature review found that techniques similar to signature analysis have been used in a few instances when studying strategy and corporate entrepreneurship challenges. One example focused on developing strategy archetypes based on a large set of company attributes combined with historical performance measures, and the other focused on developing an Intrapreneurship Assessment Instrument.

The first analysis set out to find models, or archetypes, which describe common successes and failures in strategy (Miller & Friesen, 1978). This study was not specifically focused on corporate entrepreneurship but is interesting in its signature analysis approach. Given a large number of Harvard cases and Fortune articles eighty-one cases were analyzed and thirty-one contributing variables for each case were determined. The authors then used signature analysis techniques to pull out ten common "signatures" of companies and their strategies. Six successful models and four failed models were developed and discussed. Samples of the kind of results are shown in Figure 1 and Figure 2.

The second analysis focused on developing an assessment tool to gauge the intraprenurial culture of an organization (Kuratko, Montagno, & Hornsby, 1990). It was developed and used

in conjunction with an internal training program in Intrapreneurship to both test the idea of an assessment tool and the effectiveness of the training program. Of the original five factors proposed (management support for entrepreneurship, organizational structure, risk-taking, time availability, and reward and resource availability) three were found to be both significant and affected by the training (Figure 3). An interesting aspect of this analysis is the technique of using a signature measured at multiple times to track a change in the "system".

Summary of C	Coping Methods	Used by Each A	rchetype in Succ	esful Sub-sample
--------------	----------------	----------------	------------------	------------------

		ENVIRONM	ENT	ORGANIZATION	STRATEGY MAKING
The adaptive firm under moderate challenge	S_{1A}	Dynamism Heterogeneity Hostility	(4-5)* (2-4) (5-6)	Vigilant-Traditional Delegation (6) Intelligence (5, 6, 5)** Strong Leader (Centralization, 6)	Adaptive-Positive Expertise(6) Proactiveness (6) Adaptiveness (6)
The adaptive firm in a very challenging environment	S_{1B}	Dynamism Heterogeneity Hostility	(5–7) (4–4) (4–6)	Organic-Cerebral Delegation-Centralization (6, 5) Intelligence (6, 7, 6) Technocratization (6)	Assertive-Analytical Product-Market Innovation (7) Proactiveness (7) Adaptiveness (6) Analysis (6)
The domi- nant firm	S_2	Dynamism Heterogeneity Hostility	(2-4) (2-3) (2-3)	Hierarchical Initial Strategy (6) Strong Leader (Centralization, 6) Resources (6)	Extrapolation Expertise (7) Integration (6) Innovation (6), Adaptiveness (6)
The giant under fire	S_3	Dynamism Heterogeneity Hostility	(4–6) (6–6) (3–6)	Decentralized Delegation-Centralization (7, 4) Intelligence (6, 6, 6) Technocratization (6)	Incremental-Analytical Analysis (6) Expertise (6) Conscious Strategy (6) Caution (proactiveness, 4)
The entre- preneurial conglomerate	S_4	Dynamism Heterogeneity Hostility	(4–5) (4–6) (4–4)	Charismatic Centralization (7) Delegation (6) Intelligence (6, 6, 6)	Manipulation-Expansion Analysis (6) Risk Taking (6) Proactiveness (6)
The innova- tors	S_5	Dynamism Heterogeneity Hostility	(5–6) (3–4) (5–5)	Encephalized Centralization (6) Initial Strategy (6)	Innovation within Niche Product-Market Innovation (7) Proactiveness (7) Expertise (6) Consciousness of Strategy (6)

[•] Figures in parentheses are modal scores for companies within each archetype; (4-5) means that the current dynamism score is 5, and that dynamism was scored 4 five years prior.

^{••} Listed in order of scanning (5), controls (6), communication (5) which are all considered to be 'intelligence' variables.

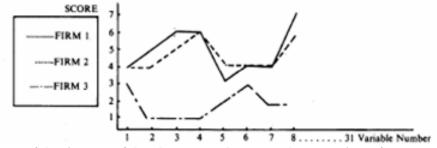


Figure 1: Summary of the six successful archetypes and an example comparison of score profiles from Miller and Freisen (1978)

Summary of Coping Methods Used by Each Archetype in Unsuccessful Subsample

		ENVIRONM	ENT	ORGANIZATION	STRATEGY MAKING
The impulsive firm	F_1	Dynamism Heterogeneity Hostility	(4–6)* (3–6) (3–7)	Top Centered-Differentiated Centralization (7) Low Intelligence (3, 1, 3)** (Key lack of controls) Differentiation (6)	Overextension Risk Taking (7) Proactiveness (6) Analysis (2)
The stagnant bureaucracy	F ₂	Dynamism Heterogeneity Hostility	(2-5) (2-2) (2-6)	Rigid-Bureaucratic Centralization (6) Low Intelligence (2, 2, 1) (Obstructed communications) Internal Strife (Conflict, 7)	Ultra Conservatism Conservatism (Risk Taking, 2) Proactiveness (1) Innovation (2) Adaptiveness (1) Traditions (6)
The headless giant	F ₃	Dynamism Heterogeneity Hostility	(3–5) (3–5) (3–6)	Leaderless-Diversified No Leadership (centralization, 1) Divisions responsible for everything (delegation, 6) Low Intelligence (3, 2, 2) (low controls & communication)	Muddling Through Integration (1) Innovation (2) Multiplexity (2) Proactiveness (2) Consciousness of Strategy (3) Traditions (6)
The aftermath	F ₄	Dynamism Heterogeneity Hostility	(3-5) (2-3) (4-6)	Makeshift Past Trouble (initial success of strategy, 2) Centralization (6) Delegation (4) Resource Availability (1)	Grafting + Groping P.M. Innovation (5) Integration (2) Risk Taking (5)

Figure 2: Summary of the four failed archetypes from Miller, Freisen, 1978

	Factor loading
Scale 1: Management support for intrapreneurship	
Management encouragement for activities	0.56
2. Decision-making power	0.37
Senior managers encourage bending rules	0.32
4. Top management experience with innovation	0.64
5. Top management sponsorship	0.67
 Individual risk-takers are often recognized whether eventually successful or not 	0.64
7. Encouragement for calculated risks	0.67
8. 'Risk-taker' is considered a positive attribute	0.68
9. Small and experimental projects are supported	0.55
Scale 2: Organizational structure	
Second chances after mistakes	0.50
Mistakes as learning experiences	0.60
3. Important to look busy	0.46
4. Difficult to form teams	0.69
5. Concern for job descriptions	0.76
6. Defining turf is important	0.73
Scale 3: Reward and research availability	
Availability of funds	0.54
2. Lack of funding	0.59
3. Problems with company budget process	0.66
4. Additional rewards/compensation	0.63
5. Options for financial support	0.56
6. Problem solving time with co-workers	0.55

^{*}Item descriptors are abbreviated.

Figure 3: The significant factors and their sub-elements from a preliminary study of an Intrapreneurship assessment tool. (Kuratko et al., 1990)

<sup>Figures in parentheses represent the modal scores of the firms in each archetype.
Scores on the intelligence dimension are presented in order of scanning, controls, and communication.</sup>

Returning to raw data collection is one possible place to start a new venturing signature. A detailed, highly data-driven, bottom-up approach to determining the features to be used in the signature analysis could be done if given enough time and access to company personnel. However this approach ignores the fact that there is a lot of previous research already available. This research describes the results of basic data collection and the processing of it into "features" (in many cases they take the form of recommended best practices and failure modes) for corporate entrepreneurship. Given that broad body of material, the goal of the present venturing signature effort is to extract some of the best "features" from the existing literature and combine them together into a higher-level venture signature. This signature will be used in the collection and reporting of information from interviews with sample companies. The goal is to understand if and how signature analysis might be useful in the further exploration of corporate entrepreneurship and its usefulness as a snapshot at a moment in time of the dynamics of corporate entrepreneurship.

2.2 Assembling the Venture Signature

To assemble the initial venture signature a review of a broad range of existing literature was conducted. The details of this material are included in Section 9.0. Section 9.0 can be read now if "full emersion" in the background of corporate entrepreneurship is desired before moving forward. For those who will explore the background in the future, the basic rationale for venture signature contents will be presented in this section. However, a review of this thesis would not be complete without examining Section 9.0 and the take-aways listed in each section.

Section 9.0 is organized by broad topic and includes a discussion of interesting research findings. There could potentially be thousands of factors in a corporate entrepreneurship signature. To process the material further, each section contains a list of recommendations, trade-

offs, and dynamics. The features selected for the venture signature were chosen from these lists. The venture signature is shown in Table 1. It consists of several major categories pulled from the major themes of the literature, each with a number of individual "sub-features". The next several sections explain the thinking behind the selection of the features for the initial venture signature.

The signature begins with goals. Like any project, having the right goals is critical to the success of a corporate venture. Based on the material reviewed, two important factors for the goals section of the venture signature are: time horizon and business impact. The corporation's expectations for the time by which the business impact is expected are critical. Shorter time horizons lead to different choices and different expectations than if the corporation understands that the ventures are a long-term investment. The time horizon was broken into three categories that emerge from the literature. They are: short-term (0-2 years), medium-term (3-5 years), and long-term (6+ years). The expected business impact of the ventures is a harder to clearly segment as every organization will have slightly different goals in mind. A couple of useful approaches were combined (Campbell, Birkinshaw, Morrison, & van Basten Batenburg, 2003; Hickman & Raia, 2002) in order to produce the set used in this venture signature. They begin with: "Improving the business core" is the goal of revitalizing existing businesses (customers and markets) with new, although many times incremental, products or services. Strategic Advantages" is the intent to leverage a corporation's strengths into new, perhaps adjacent (Zook, 2004; Zook & Allen, 2001) markets and products. "Developing New Capabilities" intends to augment the existing strengths of the corporation with new businesses, products, and services. "Creating Revolutionary Change" is aimed at both developing new capabilities for the corporation but also whole new classes of products in new markets that didn't exist before. In addition to these four, three other interesting goals were found in the literature. "Ecosystem development" uses venturing techniques to build a supportive community of corporations. It seeks to create companies who help the originating firm by either being users of their products or by providing complementary products. For example, Intel has been recognized as a model of this kind of venturing. Ecosystem development is typically achieved through venture capital investments but could also include building and spinning out companies who fit this model. A different approach, the "Pure Financial Return" category is exactly what it sounds like. The ventures are conducted for measurable financial gain only. There is no intent to build competency or get long-term advantage. Finally, the "mixed" category was included to identify those groups that have mixed or multiple goals. The referenced literature suggests that having mixed (or even worse changing) goals to be particularly troublesome. Clarity is a virtue when formulating goals. Each of these goals was included in the venture signature.

The next major category in the venture signature is strategy. A number of frameworks exist to help the corporate entrepreneur determine what might be the best strategy for pursuing a new venture. Several are reviewed in Section 9.0. The strategies found in the Roberts/Berry Familiarity Matrix (Roberts & Berry, 1985) were selected as the primary categories with the addition of a "Harvesting" strategy (Campbell et al., 2003). The "optimal entry strategies" found in the Roberts/Berry matrix address situations where the corporation will continue to have some active role in the venture. In contrast, "harvesting" is licensing out or selling assets for financial returns. It seemed important to include "harvesting" as well because it was identified as a common source of failure in the literature. Some analyses show that corporations begin with a strategy of harvesting but their strategy evolves into something else overtime (Campbell et al.,

2003). They say that the effort becomes something the venture organization was not structured or staffed to do leading to its eventual failure.

The difference between the overall set of strategies available to the venture group and those they typically employ also seemed to be an important indicator. Even though many options are "available" to them, the entrepreneurs might not actually use the full breadth of options when pursuing new ventures. They may choose to employ mechanisms that they are comfortable with rather than those that might be recommended as more appropriate for the particular circumstances. A couple of additional important "strategic" factors were also included in the signature. They are: management's need for control of the venture and management's need for strategic alignment of the venture. These factors are included to help identify if there are inconsistencies between recommended and employed structures, processes, and strategy. Finally, the desire of management to be perceived in the market as leaders, rapid adopters, or conservative followers was included as another potential differentiator.

The next set of features focuses on the people involved in the ventures. People are always identified as one of the most critical aspects of ventures of any type. The number of possible features in this part of the signature could be very large but, based on the background material gathered, it was reduced to a few key areas. In both the academic and popular literature, the CEO and other very senior management are almost always identified as key contributors to the success of a venturing effort. Their roles are discussed in many of the references. Visible support for the venturing activities in word and action by the CEO is a critical factor. There will, however, be many potential levels to their engagement. For example, is the CEO actively engaged, hands-on in mentoring and helping the ventures? Is the CEO hands-off but strongly interested? Does the CEO just monitor progress regularly? Or, is the CEO engaged at some more

distant level? Each of these levels of interaction sends different messages throughout the organization about the importance of the corporate entrepreneurship activities.

One of the most common discussions in the literature focuses on venture process teams. Primary questions include: Does the corporation have a venture team responsible for the ongoing process? Are they full-time or is this an "extra", part-time activity? The existence of such a team and the types of roles that the venture process team fulfills may be differentiators. These roles range from venture process owners and facilitators, to selecting the ventures to pursue, to mentoring new venture managers in the trenches, or to all of the above.

Another people related feature focuses on how people to lead new ventures are identified. A variety of approaches seem to have been successful. "People 1st" stands for the identification and selection of those individuals with the right skills, experiences, and temperament for a corporate entrepreneurship activity before any particular venture is identified. The "HR Process" takes this to the next level. It makes the growth of identified people part of the normal HR management processes. Alternatively, corporations can also consider selecting their venture leaders from those who champion the ideas and get them kicked-off. These are the "self-starters" and self-identified corporate entrepreneurs. They are the individuals who have demonstrated the passion and perseverance for the particular venture. Yet another set of possible leaders are the "volunteers" who are very good in execution and seek out new ideas to drive them forward once organized. Finally, people can be "assigned" the role of a venture manager just as for other projects.

Just as there are different sources of potential venture managers, there are also differing opinions on the personal characteristics and experience that should be looked for when choosing a venture manager. These differing opinions can also make it a good signature feature. Five

key types of venture leaders have been suggested. They are: One, the "established major business leader". These are the people who know how to get things done in the corporation and have the respect and relationships needed to make something happen within the system. Two, the "Inside-Outsider". This is a leader from perhaps a smaller division, or a division outside the mainstream, who has the experience but perhaps less traditional corporate "baggage to manage" and is more willing to question and not be trapped by how things get done now. Three, promising up-and-coming, mid-level management who bring energy and a desire to build something of their own. And finally, the idea generator him or herself. This person may come from any background, but most importantly should be a self-starter with the passion and the drive to see it through. Each of these kinds of people has been recommended for a variety of circumstances.

Finally, the last part of the people section of the venture signature is the corporation's approach to entrepreneurship training. When deep in the action and pressures of a new venture it can be very difficult for the team to learn on the job. Some companies will want to prepare their people ahead of time. But then, it could be argued that just diving in may also be the best way to learn what's really important in a start-up situation. In general, it is expected that some kind of entrepreneurial training is useful. It seems strange to some that a corporation would train some of its best people in entrepreneurship and potentially prepare them with the skills to leave the corporation and go off on their own. But without doing such training internal ventures may always find themselves starting with a skills disadvantage. (Perhaps this is partly why corporate entrepreneurship is not more successful.)

The next category is the <u>process</u>. The notion of "effective process" may seem contradictory to the idea of dynamic, creative, entrepreneurial environments. As Section 9.0

points out, good entrepreneurs follow a process; it's just designed to eliminate the largest sources of uncertainty first. It can look very haphazard and will often be very iterative. Entrepreneurs recognize that choosing the right process means finding the appropriate balance between bureaucracy and chaos for the challenge at hand. This is also true in a corporate environment. Having a process for corporate entrepreneurship is universally suggested by research as a necessary requirement. The performance of any one venture will in turn be influenced by the maturity and completeness of that corporate entrepreneurship process. Key aspects of "process" captured in the venturing signature are: the maturity of the process, how good the process is at helping new ventures coexist with established businesses, how rigid or inflexible the processes is, what aspects of uncertainty (market or technical) does the process focus on, are "in-market testing" and an iterative approach used, and what requirements for the use of internal corporate services are there?

Organizing for new ventures is also a hotly debated topic and is included in this signature as well largely due to that. There are many contradictory points of view on this subject. The signature contains both the options available to the venture group and the options commonly used in an effort to capture any habitual tendencies. Beyond the purely structural aspects of organizing, the "connectedness", or dependence, of the new venture on the existing business, and vice versa is also important and is included. Also, if the new venture is structured in a way dramatically different than the existing business, it creates another opportunity for difficulties which can pose future challenges to the venture (especially if they are to be integrated in the future).

Organizational structures flow nicely from culture which is the next part of the signature.

Culture is a difficult topic to specify and quantify but a number of important areas for corporate

entrepreneurship were identified. They are: the climate of entrepreneurship within the corporation, the corporation's tolerance for failure, the amount of collaboration and networking that the corporate culture encourages, and the movement of talent throughout the organization. Each of these areas contributes to an underlying set of dynamics which will influence the style of the corporate entrepreneurship undertaken and its likely result.

The last two areas in the venturing signature are the sources of venture ideas and the incentives for the people pursuing them. The idea source seems important. There are two key areas in the signature which are the breadth of places ideas are gathered from and the frequency with which this happens. This is a potential differentiator because not every company is as "open" to new outside ideas as perhaps they could be. Finally, incentives fall along a continuum from at one end, the same incentives as existing business unit managers receive, to the far extreme such as equity stakes in a new venture similar to what external entrepreneurs would expect. It is easy to see where conflicts in incentives arise from equity across the corporation and the debate over the risk involved with leaving an established position and advancement track for that of a new venture manager. Table 1 shows the set of items found in the resulting Venture Signature Version One. All of these parameters were extracted from the detailed review of existing literature found in Section 9.0. Detailed references and more discussion of each of the areas, and others, are presented there in much greater detail. This assembled venturing signature was next used to support the exploration of what a number of firms are doing for corporate entrepreneurship. The next section discusses the findings of the interviews in detail.

Category	Criteria	Levels							
10	Time Horizon	Short Term (0-2 yrs)	Med Term (3-5 yrs)	Long Term (6+ yrs)					
Goals	Business Impact	Improving Core Business	Exploiting Strategic Advantages	Developing New Capabilities	Creating Revolutionary Change	Ecosystem Development	Pure Financial Return	Mixed	
	Venturing Strategies available to venturing unit	Internal Development	Acquisition	Licensing (In)	Internal Ventures	Joint Ventures or Alliances	Venture Capital and Nurturing	Educational Acquisitions	Harvesting (License Out)
	Venturing Strategies typically employed	Internal Development	Acquisition	Licensing (In)	Internal Ventures	Joint Ventures or Alliances	Venture Capital and Nurturing	Educational Acquisitions	Harvesting (License Out)
>-	Management Need for Control	Low	Med	High					
Strategy	Management Need for Strategic Alignment	Low	Med	High					
Str	Management Need for Market Leadership	Typically Lead Industry	Follower OK	Cautious Follower					
	CEO Support	None	Mild	Moderate	Strong	Actively Involved			
	Venture Team	None	Part-time	Full-time					
	Venture Team Role	Process Owners	Venture Selection	Venture Mentoring					
	Identification of People	People 1 st	Self-starters	volunteers	HR process	Assigned			
People	Venture Mgmt	Established Major Business Leaders	"Inside-Outsiders"	Promising Mid- Level Mgmt	External Leadership	Inventor / Self- Starter			
Рес	Intraprenurial Training	None	Ad Hoc	Mentoring	OTJ	Structured Program			
	Venturing Process	None	Ad Hoc	Defined	Repeatable				
	Process protection of Venture from "corporate antibodies"	None	Low	Medium	High				
	Process Customization for Venture	None	Low	Medium	High				
	Process Focus	Technical Uncertainty	Market Uncertainty						
Process	Process facilitates rapid "in-market testing" and iteration?	None	Through Services Group	Yes but not under corporate brand	Yes	Internal market testing			
Pro	Use of Internal Corporate Services	Required	Choice of Sr. Management	Choice of Venture Management	No Support				

Table 1: The Venture Signature assembled from a literature review and used in the initial company interviews.

	Organizational Options Available (which options are OK to use)	Direct Integration	New Products / Business Departments	Special Business Units	Micro New Ventures Department	New Venture Division	Independent Business Units	Nurturing and Contracting	Complete Spin off / Subsidiary
Organization	Organizational Options Typically Employed (which options are typically used)	Direct Integration	New Products / Business Departments	Special Business Units	Micro New Ventures Department	New Venture Division	Independent Business Units	Nurturing and Contracting	Complete Spin off / Subsidiary
	"Connectedness" of ventures to existing businesses	None	Low	Medium	High	Integrated			
Or	Existing Business Organization	Heavy-weight Business Units	Matrixed Competency and Business Units	Mixed (Front / Back)					
Source of Ventures	"Openness"	Research-based Ideas	Gathered from Internal Business Units	Gathered from Services Units	From Customers	From Universities	From Anywhere	From Sr. Mgmt	
Sou	Frequency of Idea Collection	24x7	Quarterly	Yearly	Every few years	Never			
	Climate of Entrepreneurship	Open and Quality Communication / Trust (L/M/H)	Funding known to be available for entrepreneurial possibilities (L/M/H)	Intensive environmental scanning (L/M/H)	Management support for entrepreneurial activities (L/M/H)	Collaborative and relationship driven (L/M/H)	Ability to grow with what you start (L/M/H)		
ıre	Tolerance of Venture Failure	None – Failures mean "Death"	Low – Mistakes happen to everyone else	Medium – Painful but manageable	High – I'm more concerned about what you've learned				
Corporate Culture	Collaboration / Networking	Cross organizational projects are how we do business	Cross organizational projects are common	Cross organizational projects are rare	People largely stick to their business				
Corpor	Movement of Talent	Moving around is required to advance and managed closely	People move every 2-3 years across the corporation	People move often, but typically within business units	People find good homes and tend to stay put				
Incentives	Type of venture Incentives	Same as exiting businesses	Same as exiting businesses but milestone-based specifically for venture or individual	Unique to venture or individual	Similar to incentives for external entrepreneur				

(Continued) Table 1: The Venture Signature assembled from a literature review and used in the initial company interviews.

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3.0 Interview Results and Venture Signature Discussion

3.1 Introduction

The feature-level venture signature was used to facilitate both the gathering and reporting of data from the detailed interviews with the sample corporations. The goal of these interviews were to explore each firm's style of corporate entrepreneurship, their resulting venture signature, and the effectiveness of a signature approach to understanding more about corporate entrepreneurship.

A number of companies with good, mixed, and poor overall reputations for corporate venturing were approached to participate in this study. Response to the invitation to participate was mixed. Eight companies eventually participated in the interview process. The interviews were conducted over several months and many were recorded to ensure the accuracy of the data collected. Each of the transcripts as well as follow-up questions for further clarification and elaboration were shared with each of the interview subjects.

The discussion that follows examines these interviews using the venture signature as a guide. A number of observations are discussed for each of the major areas of the venturing signature and comparisons between companies and published references are made. Also, the venture signature will be evaluated for its value-add in this process. The mapping of venture signatures and interviews quotes to specific corporations will be kept confidential.

3.2 Interviews

A range of personnel were contacted in the companies that volunteered. Table 2 shows the list of interviewees and their roles. The intent of multiple interviews was to organize them in such a way as to get a 360 degree view of the venturing process for these companies. The desired roles were: senior manager and champion of the venturing process, venture process management and facilitation, venture leader, and internal customer for the venture opportunity. A mix of interviews was desired but was only achieved in a few firms. In some cases the individuals interviewed had held multiple roles. This varied experience was helpful in gathering the mixed perspectives desired. In addition to the information learned in the interviews, several of the corporations have been the subject of published research, case studies, and lectures at MIT/Sloan. This added to the knowledge of the firms and their venturing approaches helping to round out the 360 degree views.

Company	Interview Subject	Additional Material	Notes
A	 Sr. Mgr and Champion of Venturing Venture Process Mgmt and Facilitation / Venture leader 	Cases Published papers News Item	The interview focused on repeatable processes and example ventures.
В	 Venture Process Mgmt and Facilitation 	News Items	
С	 Sr. Mgr and Champion of Venturing 	Published papers News Items	
D	 Venture Process Mgmt and Facilitation 	Cases Published papers News Item	
Е	 Venture Process Mgmt and Facilitation 	News Items	
F	• Sr. Mgr and Champion of Venturing	Cases Published papers News Item	
G	Venture Leader	News items	Discussed details of
Н	Venture Leader	News Items	specific ventures

Table 2: Summary of interview subjects and background material available for each firm included in the study.

3.3 Examining the Venture Signatures for Interviewees

Figure 4 shows the venture signatures for the eight corporations studied. Each of the vertical blocks represents the overall signature for a corporation and are labeled simply A through H. Each of the signature features (the rows) and each of the potential answers for each

feature (the small boxes on each row) map to the venture signature described previously. (Table 1).

It's important to note that often there are several boxes highlighted for a particular feature in the venturing signature. This indicates that the company pursues multiple approaches to venturing at the same time. For each "answer" or box in the venture signature elements there are three potential states. A dark box indicates that this answer was strongly supported by the interview results. A white box means that this did element did not emerge from the interviews or follow-up questions. Finally, in some cases the actions of particular corporations did not map cleanly into the definition of the venture signature, or in others, the particular answer was referred to but not at the full level intended by the questions. In both of these cases a box with wavy lines is included to indicate those situations.

Finally, the letters H,M,L in each of the boxes for the Culture of Entrepreneurship rate the firm as High, Medium, or Low for each item. This assesses an overall climate of entrepreneurship in each of the companies. These rating were qualitatively assigned, as were the rest of the venture signature results.

The companies were organized in Figure 4 based on their recent performance and reputation for venturing success. The first four (A-D) have been identified as companies with demonstrated, repeatable, recent success in venturing. Not every one of their ventures has been successful but in general they have done well with respect to their goals. The next two (E and F) have a history of venturing but either mixed recent results or a current reputation this is neutral or negative with respect to venturing. The last two (G and H) are different. They are examples of recent, one-time, <u>major</u> ventures by well established companies. One company has had a history of venturing efforts before this one and the other had never pursued a venture of this

magnitude before. Both of these ventures are considered successful. For these two cases, the venture signature is capturing the parent company's approach to venturing from the perspective of this large, one-time venture.

A discussion of the interview results in accord with each of the features in the venture signature follows.

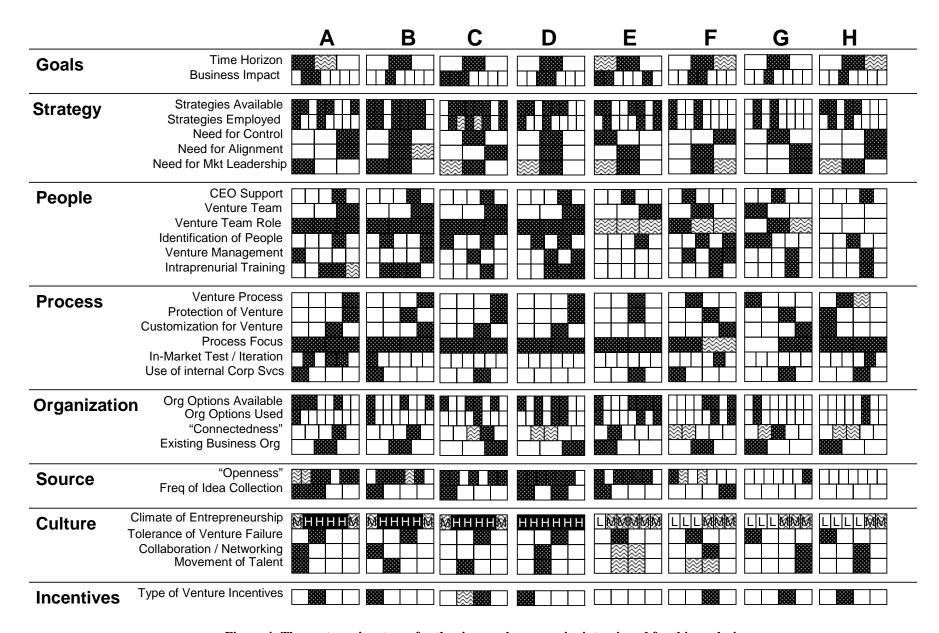


Figure 4: The venture signatures for the six sample companies interviewed for this analysis.

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3.3.1 Goals

The interviews agree with published recommendation that clear, well articulated goals for both the ventures themselves and the ongoing venturing programs (if they exist) are critically important. Also, the interviewed firms commonly described desired outcomes of "exploiting strategic advantages" and "developing new capabilities". These interview results align well with the general report that the goals of companies focused on "growth and renewal".

Company H, agreed that the communication of goals was of particular importance to the venture's success. They suggested that specifically contrasting not just what the project was going to be aimed at, but how it would be both the same and different from other projects people had worked on in the past was important to success.

"I think the key to success is creating an environment inside the business where people understood what needed to be done differently and what needed to be done the same. Communicating broadly was how all of us did this. We made sure everyone in the organization knew what we were about, what we're trying to do, how were trying to do it, and what would be the same and what could be different."

The specified time horizon was another important part of the goals for the interviewees. There was some variation, but most firms set the time frame for their corporate ventures to 3-5 years from initiation to business "success". None of the companies interviewed had <u>only</u> short-term goals (0-2 years). Company A was focused "closer-in" than the rest of the others making it an exception. The short time horizon appears to have had a large impact on how Company A approached the rest of its venturing choices. In contrast, the rest of the companies with longer time horizons seem to have been impacted less by this one particular decision. For example Company A focused on quicker cashing opportunities. These largely consisted of bringing

existing technology to new market segments, sometimes through different channels. The company focused on clear financial goals and execution. The implications of this focus can be seen in the rest of its venture signature (in terms of people, strategy, and process choices). This approach has proven to be effective for this firm. It seems plausible that a short-term emphasis focuses efforts on finding and exploiting "low-hanging fruit". It may not be sustainable as an ongoing goal because there are only so many "easy wins". At some point the remaining venture opportunities are going to be longer-term and riskier. This fact seems to have been recognized by Company A. After a period of short-term focus it has now extended its goals and timeframe to include "developing new capabilities" over a medium time horizon. Even so, it continues to look for near-term opportunities as well. The mix of medium range ventures with short-term opportunistic action when appropriate seems to be effective.

In contrast to company A, the companies with longer time horizons and primary interests in "developing new capabilities" and "creating revolutionary change" seemed to have mixed results and their signatures varied with respect to each other. The longer time frame and riskier goals definitely gave these firms the opportunity to take more risks, try different approaches to venturing, and experiment more. Longer horizons may also have promoted riskier project selections or kept firms from quickly stopping poor ventures because pressure for returns seemed lower. These risks appeared to be higher for those companies that did not have a strong venturing process.

Company B, which has a strong process, described its goals in the following way:

"What we are trying to focus on is much more disruptive. There is some incremental and some shorter-term stuff but our job is to be thinking what is coming next. Not how to take the hill, but what is on the other side of the hill... the next hill. And that requires some times – well - we fail a lot more than the

other guys – fail in the traditional sense of the word – but our failure is also a form of success because you learn lessons along the way."

"Oh yeah. The way we describe it is "the wall". You know, we're all building "the wall". These guys over here [the existing business units] are putting in the big rocks or whatever. We're [the venturing team and] doing two things: the glue stuff in between the big rocks that will tie stuff together, and more importantly, we're focused on the small holes that could get huge and loosen these rocks. Yeah, it's not only where there is white space, but also where there is existing coverage now but something may move in and disrupt us."

Company B emphasizes the long-term and focuses on it, but it has been able to still be successful nonetheless. It appears to be helped by this process. Also interesting is that these comments reveal a focus on <u>disruptive</u> opportunities. This is not specifically called out in the venture signature. The desire to find opportunities that can change the rules of the game does seem to be a popular motivator for many corporate entrepreneurship activities. Even Company A, with its short/medium time horizon, was very concerned about finding the disruptive opportunities before others do.

"...deciding whether to pursue one or not is the level of disruption. This is almost getting to the borderline between art and science. Of course there is one angle which is, "what is disruptive to the industry that we belong to or participate in" is one question to be answered. The second one might be, "what is disruptive to us?". Maybe it might be affecting the industry but we don't care because we're not part or don't play in the piece of the market. Ok, so there are two parts. We need to try and understand whether this is an emerging and disruptive technology, or business model, and secondly will that have an impact on us. We try to look at that in a fairly lateral sense because you have to look at these things and go "OK maybe not today but if these three things come together they could actually impact us later".

The additional focus on "disruption" and the desire by many companies to get ahead of other firms to disrupt them is very interesting. It may encourage projects that are riskier. Perhaps it encourages projects that have larger potential impact from the beginning. The efforts may be as much defensive as offensive. A common discussion is how aggressively a firm protects a revenue stream by being the ones to disrupt it rather than a competitor. For some firms this appeared to be a conscious effort to combat some of the failure modes in the Innovator's Dilemma (Christensen, 1997). In some cases the new internal ventures are possibly the ones that will seek to destroy and existing business. This has potential ramification for these ventures in the future when they try and integrate them with them with exactly those businesses that they are trying to kill. No one in the interviews talked in detail about how they are managing these challenges with potentially disruptive ventures.

This discussion highlights a more general issue that came up in the interviews that is also currently not part of the venture signature. The alignment between the goals of the parent organization and those of the new venture have the real potential to diverge over time. This goal divergence can be a source of conflict and can potentially lead to the failure of the venture.

In the goals section of the venture signature only the time horizon differentiated various styles of venturing for the firms interviewed. But even this was only at a crude level. The ventures discussed had fairly broad (and sometimes multiple) goals which is regarded as a danger sign in the literature. The impact of the goals on this particular sample was small. There is potentially an interesting underlying dynamic process for setting goals that could also be useful to understand. It might reveal the particular drivers that push goals to different time horizons and different levels of inherent risk. These underlying dynamics as a result may impact

the chance of success for the new venture. Understanding the particular levers and policies to employ to get the best answers as possible from these decisions could be worth further study.

3.3.2 Strategy

Strategies, or perhaps a better word might be tactics, for corporate entrepreneurship and entering new businesses have been widely researched. There are many recommended approaches based on a wide variety of conditions and situations. Section 9.0 contains a survey of some of these approaches and some thoughts about how selections might be made. When questioned about their strategy, didn't talk to it specifically. An overall view of how each thought about new business ventures had to be synthesized from a number of other comments.

The venture signature includes features that capture the breadth of strategies available to the teams as well as those actually used. The hypothesis is that companies will be more successful if their decisions about how to best exploit a venture opportunity are not constrained artificially. Teams will likely be more successful if they have the tools and discipline to choose an appropriate approach for each opportunity. On the negative side, with many options the teams could face "analysis paralysis" and the inability to decide what to do. This area was of particular interest.

In general, the more successful firms had more options available than the others did. For the companies interviewed, these two parameters (combination of strategies available and combination of strategies used) varied widely. Almost all firms shared the strategies of "internal development" (i.e. integration into existing business units) and "internal venturing" (the creation of independent venture teams). Along with these two, many combinations of additional strategies were available to the venture teams depending on the company. There were four companies (B,C,F and G) where the venturing teams made full use of the options available to

them, but there were differences in the number of options available. Companies B and C had a number of options available and they talked about using each of them as appropriate to meet goals (especially B). These firms tended to be successful at venturing. On the other hand, companies F and G employed all the methods available to them, but these methods were very restricted. Company F had mixed results and G was a one-time, major venture. From this small sample, there is at least some support for the hypothesis, but only when the set of options available is broad.

Exploring this further, Company B fit the model well. Company B had large set of options available to it and was structured so that they fit together into a nicely functioning system. They had one organization (reporting to corporate management) that contained three groups with venture responsibilities: strategic alliances, mergers and acquisitions, and an entrepreneurial-focused venture development/technology group. The venture team seemed well trained and had the flexibility to pick and choose what combination of approaches made sense for the particular situation.

"The three big topics are: one, strategic alliance capability. What I mean by strategic is the really important ones for technology development but also for go to market.

The next is the M&A [mergers and acquisitions] organization. These guys are the institutional knowledge and capability for how to manage the deal doing process in both minority investment as well as acquisitions. We've realized that you've got to do things somewhat consistently or you are going to shoot yourself in the foot. These guys also tend to maintain a lot of very strategic relationships externally, with VCs, and with other folks. Not that anyone else can't as well, but these guys own the process. They aren't the ones with day-to-day responsibility. They recommend some things and do some approval. The mainline approvals,

from an M&A perspective, are members from many organizations that contribute to that.

The group I'm in, "venture center", is essentially an internal incubation group for new market and new technology opportunities. So the way when you talk about our innovation model overall you know the three words we use are: Partner, Buy, Build. OK? – and think outside the box. That's what we do."

This group described developing an idea and then figuring out the right combination of tools to make it a reality. They commonly considered augmenting an internal idea with the right external partnerships or acquisitions to make the venture stronger. This organization explored growth opportunities with their internal partners and determined the best way to go after them. The variety of approaches allowed them come up with good options without constraints or being forced to only "do it all internally" or in any fixed way. The combination of skills and perspectives on the team could be engaged to support a new business idea from all sides. Interestingly, this company stayed away from spin-outs. They did not pursue good ideas that were not going to be suitable for long-term integration into an existing business unit. They had no desire to use this particular venturing strategy.

"Sure, one option is to spin it out. There are a handful of examples. If we can't put it inside a business unit... sometimes we pare it back or most often kill it."

For a group that that is well organized and ready to use so many other venturing strategies well it was interesting to hear that they had no interest in spin-outs where ventures could grow independently to see if they really are viable. Why was this so? Was it just the way Company B works? Was it due to a bad experience in the past? Other sources of information beyond the interview suggest that it was a bad past experience that might have discouraged the group from using this strategy. A "cultural barrier" or at the very least a "strong policy" has been erected against this method and it has become something they just don't do.

This bias reveals an important missing feature of the initial venture signature approach. The current venture signature has no real way to capture the organization's history. As this example shows, previous experiences, both good and bad, can strongly influence what is done in the future. This organizational memory that creeps into decision making needs to be examined to fully understand why decisions are made by a venture team and how they can be improved. Company B articulates this bias when they say "that's just how we do it" but doesn't show any interest in testing to see if that restriction is still reasonable. It is an interesting situation. Perhaps because they have so many other options and plenty of viable ventures available that this isn't a "critical issue" at this time for them. It's possible that in other companies with fewer options being employed that similar "cultural barriers" or historical biases are limiting their options and success. Perhaps the underlying sources of these biases should be explored and re-evaluated.

Other features in the venture signature revealed a few additional interesting patterns. First, most companies had a need for a medium to high level of control of their ventures. Only one seemed to be comfortable with low control and this was one of the large, very distributed organizations, Company E. It has many separate groups, each with their own slice of the venturing activity, but had no clear coordination between them (like Company B did). This company also seems to have mixed results in its venturing.

Second, these companies tended to prefer "internal development" as at least one of their standard approaches to venturing. This approach tended to lean towards embedding the new venture into an existing business unit of some kind. In some companies (A and B particularly) the integration started very early. This was an interesting result as it seems to contradict at least some recommendations that new ventures need to be in separate organizations. For example, the "ambidextrous organization" (O'Reilly & Tushman, 2004) suggests that a separate heavyweight

project structure is needed and claims that integration of old and new doesn't lead to successful growth. This would argue against immediate integration and tight coupling. It appears that Companies A and B have found appropriate mechanisms or have cultures that support this kind of approach. Perhaps these groups are so concerned about the long-term rejection of new ventures by existing groups that they want the connections more explicit up front. This forces old and new businesses to deal with each other early rather than dealing with transition and integration issues later in the venture life cycle.

"...We also on a regular basis make the broader business units that are relevant to those initiatives aware of what we're doing. At some point, once we develop some momentum and that can mean many different things, we get them more involved and we also potentially get them to commit resources. Eventually for our stuff to be successful we have to transition it, and sell it if you will, to the business units so that they will adopt it, integrate it into what they are doing, and to eventually take it to market because we don't have that capability.

And quite frankly that is probably one of the most challenging aspects and I think if you ask any internally venturing group, that is by far one of the most challenging aspects for many, many different reasons. One reason is that the existing business units are already extremely busy. They usually don't have very many free resources. They tend to be shorter term focused. They also tend to have a little bit of a Not Invented Here (NIH) mindset. So there is a lot of selling and relationship building that needs to be maintained."

In other firms the emphasis on early integration was lower. In companies C and E integration was always intended but occurred at a later point. In two others (D and F), integration was a possibility but not necessarily pre-ordained from the beginning. These groups had "more ambidextrous" organizations than A and B, but still relied on shared capabilities and connections between the new venture and existing businesses to deliver a successful outcome in hopefully a more resource efficient manner.

Third, they all shared a need for at least moderate, if not high, strategic alignment between the ventures and their existing businesses keeping the company (particularly A,B and C) from going too far a field. These were not companies who were seeking to become more diversified or dramatically changing "who they are". This was even true for those venturing groups with broader charters. Even those teams stuck to a corporate "strategic envelope" that was within the vision of the corporation. A good example of this was Company D. It had the explicit role to not do what the business groups might, but still had an overall corporate vision to work within.

Finally, these corporations varied on their need for market leadership but it wasn't an area that was successfully probed in most interviews. It turned out to not be a very useful factor in the venture signature.

Overall, the features in this portion of the venture signature identified some interesting differences between the various companies. The venture method breadth available vs. range employed provided is interesting and revealed some biases within some firms. The control feature provided some differentiation for successful companies while the alignment feature didn't differentiate at all. The discussion of the venture signature has led to the recognition that some important elements may be missing if the signature is to capture the essential approach to corporate entrepreneurship for these companies. The venturing options discussions revealed that the biases or cultural barriers that affect the firm's choices are very important to understand. This may come from a number of sources including the firm's history. None of these are well represented in the current venture signature. In addition, each firm made choices based on the particular venturing problem management was most concerned about. These choices appeared in how closely to tie the ventures to existing business units and the timing of that integration.

Management's understanding of the organizational dynamics of their firm (whether implicit or explicit) drove some of these decisions. As such, the dynamics contribute significantly to why particular choices were made. These would be important to capture and understand. These dynamics are not currently in the venture signature either.

3.3.3 People

The people section of the venture signature provides some of the clearest distinctions between firms and their ventures. The people aspects cover the features addressing management support, team presence and ownership, leader and member selection, and skills development.

Support for venturing has two flavors. It can be support for the ongoing venturing process or it can be support for a specific venture. Most of the companies interviewed (A-F) discussed both types and these two kinds of support should be differentiated. For companies G and H support focused primarily on a particular venture.

As predicted, senior management support, especially from the Board of Directors, CEO, and senior executives, is unanimously identified as very important for the ongoing success of a venturing process. Often the published research will cite the CEO as the critical supporter (Kanter, 1989). One of the leaders of a major venture made the point that the CEO alone is not enough:

"I think at the end of the day it becomes a question of the leadership team on the new business winning and preserving the confidence of the senior management [team]. You want a broader base of support; the CEO, the board, and the CFO. By the way, along the way it does you a lot of good if you're not breaking every HR rule. What you need is everyone rooting for you. You don't want the support just because you're getting all the work done [and hitting milestones] but have irritated everyone along the way. That doesn't help you. Sponsorship is important and [the venture] leadership needs to be sensitive to this. They need to

be selling [internally], and to have the trust and support of those along the way. In tough times that's what carries you through..."

The CEO may be the ultimate champion for the venturing efforts, but the broader the support, the more friendly the firm's internal environment will be and the more sustainable the effort during the inevitable senior management changes. Another company reported a similar perspective on CEO support. The most senior level support is a starting place, but others throughout the organization need to support the ventures. This is especially true in the organizations where the ventures will finally find a long-term home.

"These [ventures] are decided and agreed and endorsed by the corporate strategist for the company. [The corporate strategist] reports into the Chairman and CEO of the company so it's a very senior level... I'd almost be certain that the venture wouldn't go ahead unless the CEO and Chairman also agreed that it sounded like a good idea to go ahead and pursue. So I would think that his [the CEO's] stamp would be on it to some degree. In addition to those two players the senior vice presidents of business units that will impacted by this (for example if its software, then that group, or perhaps it has services involved) would also be stamping their endorsement over the top. These [ventures] have very senior level endorsement and approval and so they operate like that. Usually they also say – what we usually do – we house the opportunities inside one of those senior vice president's business units."

The difference between support for a venturing process and support for a specific venture cannot be overlooked. For the companies interviewed most of the comments on support were focused on supporting a venturing process and the specific ventures that emerged from it. They were concerned about a failure mode in venturing, or projects in general, that occurs when the CEO, Board of Directors, or senior executives develop a "pet project". This can happen when they focus on the project over the process. In these situations a project can be pushed forward when it should have been stopped based on the application of good project and venture management

practices. There are many examples of this problem with new ventures and projects in general. Just one well studied example is the Iridium Satellite system from Motorola (MacCormack & Herman, 2000). There were many potential areas where this project went wrong, but the championing of the effort by the Chairman of the Board sustained the project and made it easier for poor (or lack of) decisions to remain unquestioned. In contrast, in the cases discussed in these interviews CEO support for particular ventures has come at the recommendation of the venture teams or the best strategic advice developed by the company. Only the new venture ideas that the group, through the application of their process, felt good about pursuing were brought up for review and eventual support. This particular nuance of support is not explicit in the current venture signature.

Since CEO and senior management support for both the process and selected ventures is needed, it is wise for a venture leader to understand the factors that affect this support. What organizational dynamics are likely to change senior management's commitment to corporate entrepreneurship? What factors do intrapreneurs responsible for the venturing process and individual ventures need to understand about the dynamics of support for these efforts? Does this also mean that a venture project is doomed from the beginning if it doesn't have this support? The answers to these questions seem to have more impact on the possible outcomes than simple yes or no answers about support would show. Capturing patterns in how these underlying dynamics occur in particular organizations might be a useful addition to a venture signature.

Another driver of success is having the venture process be someone's job. The results of the interviews clearly support the need for someone, or some team, to have the explicit, full-time job of managing the process for finding, hatching, evaluating, and harvesting new business ideas. There is one approach to this however. When addressing this need companies took <u>very</u>

different approaches on how to formulate the management team, organize, staff, and run the group that will own this goal. In a several of the companies (A,B,C,E) it was a small team of experienced people, largely the business development or strategy areas, who were responsible for managing the process. For example, Company A managed the process from corporate strategy with people who had the skills in market analysis, broad product skills, and skills in business development. These people helped identify, filter, and sponsor new ventures. Company B, on the other hand, had a whole division where the various skills, partnering, mergers and acquisitions, business development, and technology scouting were located together. The business development people in that group are considered "entrepreneurs in residence" with the job of "gelling up" individual ideas, getting things going, and running the day to day operation of the process. The senior management of the division is responsible for the overall effectiveness of the venturing process and in managing toward the corporate goals. The need for both "entrepreneurs in residence" and the senior management overseeing the process has been identified (O'Connor & Ayers, 2005). Companies A, B, C, D, and E all has such distinctions and different complementary roles to be filled. To be effective each of these groups needs to understand the motivation and goals of their counterparts very well. Given that both of these groups existed in some fashion it did not seem to matter what the actual organizational structures and detailed processes were. While the entrepreneurs in Company B were concentrated in a particular organization, Company D distributed its entrepreneurial talent throughout the entire organization. They were located in both business groups and research labs and were a source of pride for Company D. It also appears to be quite effective for them. Whatever the specific location of people, the dynamics of the interplay between the process and the venture leaders appears to be an important factor for success.

The next feature in the venture signature is the profile, experience and background, of the venture leaders themselves. Here again there was some variation. Company A looked for established business leaders to lead its internal ventures. They looked for proven leaders with:

- credibility within the company
- the operational experience to know what was eventually required once the business got to be large and to do the right things from the beginning
- An established network throughout the corporation that would be useful to build the business quickly and support it.
- the ability to work in an uncertain and ambiguous environment

On a side note, it's also interesting that this company's goals were primarily near-term. They also seemed to have a high need for control and alignment and as a result they tended to focus on low-hanging fruit. This makes their profile for venture managers a natural fit with their goals and strategy. Company A needs people who already possess the skills to run a business inside the company. The company sought to grow these businesses quickly and run them well over the long-term. People who could "grow into the position" were not going to be the preferred choices in this situation. The established, proven leaders in Company A were. But Company A was also aware that not all of the established business leaders would have the complete set of attributes required. It's a unique type of individual that they looked for.

"To think that an emerging team could get going on day one and two years later be still operating on the same plays if you like, ... I wouldn't believe it.... I can't see how that would be true. I mean, there would be some change. It could be that the offering might be the same, and the technology that they have developed the same, but the way they go to market would almost certainly be different. Their approach to the market, their messaging, their offering structure, pitching and pricing, where they are playing and their dependencies on their value chain etc

would probably all change. And that's why you need the type of individual who can handle that type of volatility. It's a different kind of person who can handle that vs. the ones who have a well established business mentality. It's almost a kind of operational individual and the entrepreneurial individual. And you need the second category most often in these ones."

The leaders of the ventures needed special skills, but they were not the only ones. Another venture manager interviewed described one of his only internal hires as:

"A respected individual from the parent organization but considered by the established conservative management as a maverick so he tended to stir things up. He knew how the existing corporation worked and had the respect and network established. He added a lot of credibility to the venture... Even though a maverick in the existing company, he may still have been a little too conservative for the new venture."

To be successful it requires finding a leader and supporting personnel who really have a balance of internal working knowledge and entrepreneurial tendencies. This is not easy to do and as the literature suggests that people with these skills or attitude may be driven out of established corporations (Dess, Lumpkin, & McGee, 1999). Finding people with the right skills created some real recruiting challenges for Company A. Another barrier to recruitment was the established reward, recognition, and advancement systems in place in the company.

"What you might find is that the delivery managers give you resistance [to recruitment]. Their job is to drive the team to deliver a project. Someone may say, "Hey that's just a little thing relative to what I'm already doing and I would rather grow up big and tall on this mainstream project than that little hobby horse thing over there." So there is a little bit of [hesitation]."

Getting established leaders to leave organizations of hundreds or thousands of employees with large profit and loss responsibility to go start up something with an initial team of for or six people is not for everyone. Even those with an entrepreneurial tendency could be hard to attract away especially when an individual's success in an organization is determined by the size of the major businesses that they run. This made recruiting a critical internal process for them. They also discovered the need to be much more flexible when negotiating incentive packages with those leaders they really wanted. They did find that not all of the critical start-up personnel had the same concerns but flexibility and tailoring to the individual was still important.

"I would expect that technology people would have an expectation to be a part of [the new venture]. The venture is likely to contain technology that only two or three players really know and usually they are very passionate about it. They have almost dedicated their lives to this and they want to play."

The different underlying incentives of the people central to the new venture can greatly influence their willingness to participate. The way this dynamic plays itself out in a given firm can greatly influence people's choices to participate and on the overall success of venturing efforts. Differences in these dynamics could be factors that should be tracked in greater detail.

In contrast to company A, other companies (C and D for example) pursued either up-and-coming business leaders or the intrapreneurs who generated and nurtured the venture idea from the beginning to be candidates for venture management positions. These people tended to be the self-starters, the intrapreneurs, and the people passionate about the application and the potential business. In Company D these people had the opportunity to lead the venture as far down the path as they want. They could grow it from concept to major business if they had the skills and desire to learn and adapt on the job. Here passion about the <u>particular</u> business was a critical motivator. Another way to organize was demonstrated by Company B. It had the venture managers responsible for starting <u>many</u> businesses and then handing them off.

"People who like to be in the "venture center" are the more entrepreneurial people. They don't get caught up on taking it all the way. People who need to see the revenue and need to see their stuff go to market tend not to be as successful in

"venture center". We're the people who gel it up. We take the different pieces and pull them together. We get the early stage stuff going, get some momentum, and then find a home for it. After that we move on to the next thing."

The objective of the venture manager in this case is to explore, test, formulate, and to "go IPO" (internally in this case) and transition the venture to the operating business and someone else with the skills to take it to market and grow it over time. They then move on to finding the next business opportunity. This process too can make a lot of sense. Once ventures in a system like this achieve a particular stage of success, new personnel requirements and business decisions emerge because of the need to grow and integrate the business rapidly. This path could take many routes. In the companies interviewed, there was typically a transfer of the project into an existing business unit. As discussed in the previous section, this transfer was often a difficult process. One of the interesting perceptions described in one of the interviews was that of the receiving organization stating that the "venture group" had all the fun.

"One comment is, "you guys are doing all the fun stuff, why should we take this and do all the sustaining work... blah, blah, blah." That's a tough one..."

There was a certain amount of jealousy reflecting a, "the grass is greener on the other side" syndrome on the part of the existing business management. This conflict can be directly related to the bigger issue of broad support and the amount of connectivity between the new ventures and existing organizations and projects. But again this example shows how the interaction between organizations in the firm, the trust, the transparency, the personalities of key individuals, and the bureaucracy all need to be well understood if the right approaches are to be chosen.

Not all personnel for ventures are insiders. In some cases the key venture people came from the outside. For example, Company H's venture which was a one-time, major corporate venture had an external person brought in to lead it. The project was a critical one for the

company. There was significant pressure to find the right person and to find someone who would do it differently from "the typical leader". Management recognized that they needed something different and this encouraged them to go outside. For them, the risk of having a leader who didn't know the details of managing within the company were outweighed by the need for a different approach, the independent organizational structure (very ambidextrous-like), and senior management support for the venture.

Choosing the right people with the right overall attributes is important. These people are hard to find though. How do you make sure you have the right kinds of people? The majority of those interviewed addressed this through training. Interestingly, training did not emerge often in the reference materials, but for those companies interviewed it was something they considered quite often. In general the successful firms were willing to get venture leaders and their teams the kind of training they needed without hesitation. This training was to help them to both be successful in the venture assigned and to identify and evaluate potential new ventures in a disciplined way. Company D had a very strong program that proactively trained people and disseminated them throughout the corporation. In their roles throughout the organization they were to look for entrepreneurial opportunities and were eventually targeted to lead mainstream businesses. This program was very compelling and was organized in a similar way to process improvement programs such as Six Sigma. In programs like Six Sigma, or TQM before it, the ultimate goal is to fundamentally change the way a company functions. In successful programs, this was accomplished in part by continually training selected, well respected, individuals in the tools and techniques of the new system. In this training they would learn the concepts and develop expertise by applying those skills on a real-life project for which they were responsible. In addition, because of the time spent with others in the program they would also develop a

network of people with broad backgrounds but similar change agent experiences to rely on in the future. When each of these people had moved on they took their experiences, knowledge, and network to other parts of the business. Through this mechanism, a broad dissemination of new skills and a new "mind set" was accomplished over time. It was hoped the new mind set was more entrepreneurial as a result.

Company D used this "train and disseminate" approach. The training model was quite interesting. It was an ongoing program that ran two times per year with approximately fifteen to twenty participants. They were selected from across the company's world-wide operations. These individuals were identified by their management as emerging leaders with an entrepreneurial spirit. The program consisted of:

- Five weeks of classroom training spread over six months
- Business school faculty and experts from around the world were brought into these sessions to teach various modules.
- Topics included: market analysis, business plan development, technology and business trends
- Between the weeks spent in the classroom the individuals developed business
 plans for the ventures they were assigned.
- Cohort building and networking with other Intraprenurial trainees in the program
 created a network of like minded people spread across the corporation.

Each of these individuals was sponsored by a group or division senior manager and provided with a new venture idea that he/she was to explore in the program. Over the course of six months they developed the business plan for this venture. They developed deep understanding of the markets, customers, delivery channels, technology, and value networks

necessary to make the ventures real. At the end of the six months, they had to "pitch" the idea to the senior corporate management team and do it without slides (PowerPoint or otherwise). They needed to know the business and the opportunity inside out and make the case for it in an extended "elevator pitch". This whole process was organized as a competition and the winning pitch was chosen from those presented. The winning intrapreneur was recognized by senior management and the venture was funded. Participants in this process described the whole experience as a very positive one. Because it is set up as a competition there is the potential that those that don't win could be disappointed. This seems to have been managed well and it was mentioned that people graduating from the program all went on to bigger and better things. As they did they took their skills and eye for opportunities into these new areas throughout the firm.

Company D's efforts on selected, proactive skills development seeded the intrapreneurial environment. Their program also addresses the organizational dynamic that includes what the organization perceives as success. Because only high-potential people were selected to participate and "good things" happened to them after the course they became trail blazers for the rest of the organization defining a potential path for success. This reinforcement has the potential to strengthen an organizational dynamic which could lead to more entrepreneurial behavior within the organization. This, along with some new business successes, is what Company D hopes will take place.

Company A on the other hand had discussed training but it was embedded in the venture process itself. The training provided was based on the needs of the particular venture rather than being proactive. Venture teams that were formed could, if needed, go as a group to an entrepreneurial business development program. These concentrated (one week typically) training programs were held at various business schools with access to the best faculty possible.

The goal of this training strategy was to customize the program to the needs of the new venture team and to give them the core skills and the knowledge about to where to go for more details.

"They have a program they run called SLF (Senior Leadership Forum). It's a tailor made three to five day program. It's not uncommon to have a new or start-up venture, or even an existing venture, go to this program. It does things like: help with the market entry timing, with strategic thinking, and helps align everyone on the same page. It's a catalyst to do some of those things. Even for ventures that are in good shape it's a way to fine tune everyone's market thinking and lets everyone second guess themselves and determine if we are really following the strategic path we want."

These SLF events can prove to be very important to the venture as a time to stop and think and get on the same page with a new or more refined approach to the opportunity.

In contrast to both of the previous styles, Company B had still another way of looking at training its people in the skills needed for new business creation. They relied on the <u>individuals</u> in the corporation to identify the skills <u>they</u> needed to do their job better. The company is highly supportive and helps the employees address their needs through seminars, classes, conferences, or other training opportunities but it is the responsibility of the employee to initiate the conversations.

"[Company B] has always been very much about satisfying employee needs, but the responsibility is on the employee to identify and push, with the help of management. But if people aren't hungry and thirsty and want to go after it, having a manager say you need to go do it – that's just not going to work. I've been there since 1993 and that's always been the culture."

This is natural for the culture of this organization and their style of running their venture teams.

As a whole the environment in Company B is very self-starting and entrepreneurial.

Finally, Company C focused on on-the-job training and growing promising leaders through hands-on leadership opportunities. Upon the creation of a new venture whether it was done as an internal start-up or via an equity position in an outside company, Company C would put young, but promising managers into leadership positions that gave them real opportunities to learn. This strategy emphasizes the need for real life situations to help learning and a patient and customized approach to developing individual talent. In some cases this meant running a new venture, in other is it was a particular mechanism that they have established is called the "BObCat Role".

"One of the things that we always try to do with an investment in an external company is to get them to agree that we can put a board observer on their board. ... We view this whole thing not only as a way to grow the revenues of Company C and bring new businesses in and all that, but we view it as an opportunity to educate younger business leaders in Company C by giving them the exposure to an entrepreneurial environment, a young growth company. Company C has struggled for a few years now with the ability to internally create new businesses. We haven't been doing that very successfully. And as a result we don't have a lot of opportunities for young business leaders to get that experience. And one of the charters of the venture organization is to create those opportunities by our investments and our relationships with these outside companies and so on. We call this role the "Bobcat role". This comes from the BOB meaning Board OBserver and Cat is Catalyst. The catalyst role is for this person, as the business perhaps comes into the company or develops a further relationship with Company C, to help make the parts work together. Learning from both sides is required for that... the Bobcat is to act as a catalyst for future integration and experience growth."

All three examples show how choices, structures and processes for training are chosen and influenced by cultural and organizational dynamics.

The companies that had less repeatable results for their ventures, or engaged in one-time ventures (Companies E, F, G, and H) didn't describe any specific entrepreneurial training. These companies do have employee-driven training programs that enable their employees to define needs and take the appropriate training (just like Company C). These companies have tended to focus training programs for developing specific skill sets identified as important by the company. It's questionable whether employee generated training requests would be aimed at growing entrepreneurial skills however. Both selection restrictions and company environment can limit the training considered by employees. This could be especially true if there is no specific training focused on these skills, or the company doesn't have a strong existing culture of entrepreneurship or successful entrepreneurial role models.. Would employees self-select the training based on the skills needed to succeed with the business as currently defined (mainstream) to get ahead as they see their current corporate role models do? Would they even consider spending time on skills that don't seem to be emphasized or rewarded? This dynamic could be an ongoing challenge for companies who don't already have a strong entrepreneurial culture. How will these companies grow intrapreneurs? What are the specifics of the dynamics they need to get started? How do they keep those with an entrepreneurial attitude interested and developing?

Overall, people's interests, individual goals, and their capabilities obviously play an important role in the success of any venture. The focus of the venture signature on CEO and senior management support for the process and ventures as well as the presence of a dedicated venture team were strong indicators of success. The subtle difference between senior management support for a venturing process vs. support for specific ventures was not captured in the venture signature and is worth recognizing because of the possible negative effects of pet

projects. The role of the venture team itself and its relationship with senior management were identified as an indicator, as was the presence of entrepreneurial training. One of the most powerful effects of the program may be the signals about the importance of entrepreneurship that a high-profile training and venturing program provides to the firm's broad employee base. The specifics of the training program seemed to be less of an indication of success as its availability. A number of interesting training approaches were discovered in the interviews. The specifics of how companies identified people to lead or staff ventures and the types of backgrounds that were considered varied wildly between firms. There didn't seem to be one best approach that leads to success. The specific choices seem to reflect the internal conditions of the firm and the specific needs and dynamics found there. It seems that the more explicitly a company understood these underlying dynamics and designed their system to fit, the greater success.

3.3.4 Process

All of the companies interviewed that intend to repeatedly explore and exploit new ventures (companies A-E) have defined some sort of a process for their venturing activities. The process helps to both focus and steer the efforts of the specific venture managers and provides an opportunity for visibility to senior management. In this section of the venture signature the key factors relate to the rigor of the process employed, how well it helps protect the venture from "corporate antibodies" and the flexibility of the process.

Company A has a well defined process that they described:

"There is a fairly detailed process for monitoring the progress of our ventures. Making sure we understand the depth of the kind of challenges that they are facing and how the markets are moving around is important, so we monitor each of the ventures very carefully. In that process, we hope to get "headlights" into

whether the opportunity and venture are working, not working, or actually changing course. We do that for the ones that are chosen – that we go chase."

Some of the processes, for example Company A's, were very well defined and seemed to be "run by the book". The different stages were well specified. There was a process for scanning, evaluation, exploration, and growth. It fit the needs of Company A and its shorter-term goals and execution focus. Their process starts with the identification of the ideas by a crossorganizational team of people:

"...but we do have a fairly deliberate process of looking at technology and looking at business models. That is done by a combination of the corporate strategy office, the market intelligence team, the research groups, and working with each of the business units who are operating their current year business. There are strategies for each of those businesses where they are looking out to new opportunities. So we work with a matrix of players from across the company to share insights that we collect individually and start to build out a pipeline list of what we think might be the emerging candidates that warrant either further investigation or warrant the beginnings of a venture.

Once they decided to create a venture they quickly assembled a team.

"So we created a team from across the company from services and software players. ...We then had sub-teams: like you guys are the market intelligence players and you guys are the technology players, you're the value proposition, and you're the partner guys. I don't know why – It was relatively easy. And sometimes what was found was if the business opportunity was something that really was going to be a big deal, quite often, I think, people are on to it already and working on it. It's often a matter of getting those individuals who are already there together. We try collocating them together, getting them to coordinate their efforts and putting some deadlines and timetables on people."

The process follows with very specific milestone checkpoints. At each checkpoint, specific market and technical questions need to be answered before the venture can continue on to the

next stage. These check points are attended by the sponsoring management and challenges are discussed and ideas generated. These milestone events are more than checkpoints. These meetings are described as "working sessions" to address the needs and generate actions to support the ventures. They are not just status reviews. The attendees at the milestone reviews formed more of an active problem solving Board of Directors than just passive listeners. Company A still relied heavily on the skills and abilities of individuals, but there was a lot of additional supporting structure and capabilities to bring to bear when needed. This involvement at these meetings also seems to create further commitment and data-driven decision making by senior management.

On the other hand, Company B's process is much more flexible and dynamic. It is driven largely by the needs of the individual entrepreneurial teams. A structured process is in the background since the management team needs some control over the ventures. This is particularly important when a large number of ventures are ongoing at any point in time. Any ad hoc arrangement would likely fall apart quickly.

"There are multiple steps in the review process. The very early step, everyone in the venture center, has a sort of "rule of the road", that all of us spend 20 to 25% of our time continually, just kicking the tires on new stuff. Stuff that's interesting... whatever... so that's the informal part and you evaluate those ideas on your own or, quite frankly, with your first level manager. Now once that goes on there.... Now once you get to a point where you need two guys, three guys, maybe a few more, you need some money to do some early prototyping. Maybe do a little firmer market analysis, whatever, then we go through the first step of it which we call "T-core" which is the venture center opportunity review. And that's basically where we get together with all the leaders on the teams and basically say, "Guys this is..." and it's usually six or seven opportunities that are being evaluated probably every two months or so and we put them on the table.

We ask, "What in the world do you think? Do we throw some resource at them?" When we do that we're obviously evaluating the new stuff coming in to the pipeline, but also the existing projects that are already resourced in the group so it's a conflict, portfolio management if you will, with the stuff we're working on and we're always juggling opportunity costs metrics and always evaluating the stuff. Take a project we've committed to previously. We ask, "Do the assumptions we've had before still exist? Is the market developing the right way? Is the technology developing the right way? How is the traction with the business units? Does it make sense to pull the plug on that stuff?" Depending on the results we reposition our resources elsewhere because obviously we don't have unlimited resources. We're constantly dancing that dance.

So the T-Core process is the first step in the process. But the second and third steps are just as important. So now people have basically said, "OK this looks like it's going to be something interesting. Let's throw more resources at it and take it to the next step." That's usually a six month, eight month whatever... to get it to the next point where we find out if it is really starting to get interesting... so T-Core is really sort of a seed funding. Seed funding maybe early "A" funding...

The next step is what we call our concept commit. Concept commit is basically where we're starting to get much more formalized in what we're doing. We're going to put more resources, more engineering, more business resources, were potentially going to get more aggressive with our partnering externally, where we're really going to notch it up is working with the business units and where we're going to get them more involved is actually giving it the thumbs up – thumbs down potentially and the go forward decision.

So that decision gets made and then we go a little bit further and ultimately we get to the third stage, or what we call engineering commit. The criteria here are that we have an exit path into the business units that is fairly well committed. We have internal and external resources committed usually. We have external business unit resources committed usually and we potentially have external partner resources committed as well. At this point we have a very, very defined

schedule, and at that point it's just a question of executing and delivering. Our job in venture center is ultimately transitioning that stuff into a business unit. Now after that point there's, in many cases, some ongoing support for all the stuff that we did, but at that point tech center resources start getting peeled off and they can be applied to some of those new things that are constantly being put into the other side of the funnel."

The process for this company depended much more on the personal energy, drive, and entrepreneurial spirit of those involved, especially at the beginning. The process description produces an impression of nurturing new businesses rather than a rigidly staged and managed pipeline of ideas. It appears much more like a business incubator rather than a staged pipeline of ideas, at least at the beginning.

At their core, both of the examples support the published research that suggests the processes must have clear business development milestones (Kanter, 1989); (Quinn, 1985). This presumably helps keep the team on track with the particular questions they need to be addressing and, perhaps more importantly, provides people (senior management and partners) external to the venture clear visibility into what is happening there. This is similar to any project management system. Company H described their efforts:

"We took a lot of heat in the processes. The thing that was really the key to success was to give the company enough indication that we were going to do what we said we'd do. We had to hit some of those targets so [the company] had the will to go on."

The importance of milestones along the way is clearly important to develop knowledge about the opportunity and the dynamics of the market for the offering in mind. This has to be done and is one of the primary reasons why a process is important. But, in addition, another reason came up in the interviews. It was described in relation to "internal motivation" for the venture team itself.

"This is the "family vacation model". Are you married? Do you have kids? Have you ever taken a driving vacation?... OK... So what's the key to a driving vacation?

There must be interesting sights along the way...

I tried this. We left a day late for a family vacation because of work. I thought we're going to drive straight though to make up time ... this was a failure... it's the same thing. You have to have things along the way that give people a reason to believe.

In the case of what we did... and I kind of stumbled into this ... but realized the importance of this early on. We would have these market share victories... where we would get to a top market share position in the 4Q of every year when most of the product sold. We would beat our primary competition. We beat them for four years in a row in the fourth quarter and then finally beat them for the full year in US market share. Now, we know that market share doesn't necessarily translate into profitability but everyone knows that the only people who make money in the long term are number one and number two. This gave the venture team, and company, a reason to believe."

As pointed out, these "interesting sights along the way" may not be the correct measures for the eventual destination, but if they show progress of some sort they are worth taking a short pause and celebrating in order break-up the "long trip" and remotivate everyone to press forward.

Both the interviews and academic references agree that successful processes are focused on addressing both the market and technical uncertainties of the new venture. In many of the example processes teams often focused on addressing both areas simultaneously in order to understand all potential "show stoppers" regardless of whether they are technology or business model in nature as soon as possible.

"Everyone in the group ["venture center"] has about 15-20% of the cycles (that's what we say) to be constantly trolling for ideas. They are constantly talking to

people. When people feel good about something they put a little bit of meat behind it both technically and business and we go through an internal process that we've developed that puts all the stuff on the table. The staff ranks them and says OK. With a limited set of available resources this is where we start to identify where we're going to start placing our bets. So between early bets, more established bets, nurturing stuff, we have a bunch of offerings. We have things in different spaces and stages of development and we're constantly monitoring and maintaining. It's essentially a portfolio management exercise and you know quite a few different projects across quite a broad set of technologies and market opportunities. When we identify stuff and can get it to a certain point one of the things we do is to leverage resources on "the other side of the fence" to accelerate things more aggressively than we could with just 100 people in the "venture center" group."

In contrast discussions with Company F revealed that the majority of the questions, while they had some market content, where much more focused on the maturity of the underlying technology. There were reasons for this. The market questions are often difficult to address in venture opportunities that are five years out in the future, and that was one of the challenges for Company F. Given this the process would allow technology investment to continue even though the market questions were not sufficiently addressed.

Overall, the descriptions of the processes used by the sample companies varied widely. Some of this variation may be solely due to the ability to get a good process description during the interview, but some of it also reflects the degree of formalism in the process used by the different companies.

One of the most interesting discussions about venturing processes came from one of the one-time ventures. Company G's project, while it was a unique venture for the parent company, was led by an experienced corporate entrepreneur. This leader had developed a seemingly simple approach for developing a "sure-fire" venture that is both interesting and successful. It

focuses almost entirely on deeply understanding the customer and their unmet needs within a particular product or service domain and, developing a set of core beliefs and customer values that represent what the business must be about to address those unmet needs. The business is then built around those fundamental core values. The current state of technology, the existing business environment, the industry structure were all fed in and combined with the core values. Together they specified the required choices as to the structure, people, processes, incentives, business model needed. If in the market the results are not what was anticipated then changes are only made to the structure, people, processes, and business model after first going back to the core values and environmental factors to understand what was not correct at that level. If the core values are still legitimate then the external assumptions are re-evaluated and only after this investigation and deeper understanding is developed are the venture structures, people, processes, and business model changed in accordance with the redefined or updated values and environmental understanding. The successful entrepreneur who described this process feels very strongly about it. Why is this so important? He feels that this process keeps the venture true to its core values. Without returning to the core values when changes are made it is easy for the business to evolve away from those values in bits and pieces and to become misaligned with the true customer needs. He feels that is this occurs it is certain death. If everything stays aligned this entrepreneur believes the business venture will "just have to succeed". When asked what other companies, if any, approach new businesses in these ways only two firms came to his mind. The first was Jet Blue because they make all decisions based on their five core values. These values are Safety, Caring, Integrity, Fun, and Passion (Gittell & O'Reilly, 2001). The other company is Amazon.com, because of its extreme knowledge of its customers and focus on the customer experience on the web.

In support of his process and the need for continually examining changes in the context of core beliefs, he described a recent failed venture which was spawned from the venture he started when working for Company G. After he left the CEO role of the original venture an opportunity for new market expansion appeared. The story goes that without stopping and doing the necessary up front work about deeply understanding the new customer's unmet needs the opportunistic acquisition was performed and the new venture launched. The acquisition and expansion quickly became a failure as the existing product did not fit well with the new customers. It didn't resonate with them in the same unique way it did in the old market. What happened? He felt they expanded a venture too fast, perhaps by a year. The environment was not quite right for the new service. In addition, the team did not revisit the customer analysis that was originally done. They were rushed by an acquisition opportunity that had appeared and they felt they didn't have time. They had expected that the acquired company would know their customers, but in hindsight, perhaps the reason the company was available for acquisition was that they didn't really know their customers and they had their offerings wrong.

Of course many ventures don't go as planned. Company B shared an experience that had common themes heard in many interviews.

"I was working on one project that we thought was a 2-3 year one. In the 5th year we decided that we're not going to put in more time. There were so many things externally that we couldn't control and were not happening as we expected. We stopped but maintained a certain level of investment and if certain things hit a particular inflection point then we have the option to reengage."

The challenge the quote describes relates to the way that companies are able to promptly start, and perhaps more importantly, stop projects that no longer are promising as they once were. Killing a venture can be very difficult. A process for venturing must consider this carefully.

The companies who were not able to talk about their process in any depth (Companies E and F) were the ones with more mixed results. The interviews for these companies didn't generate much conversation about process so it's hard to say that they had no process at all, but it was clear that there were gaps in what they were able to tie together. Some of the potential problems with trying to do ongoing venturing without a process include:

- A lack of organizational learning in what has worked or not worked in the past in terms of venture ideas and the process itself. Essentially you are always on version one of the process. (No double-loop learning. (Argyris & Schon, 1978))
- doing the common set-up for new ventures many times from scratch
- a need to reinvent supporting relationships with each and every venture
- Expectations and communication may be harder to manage because there are no predefined mechanisms or agreements.
- And many more...

Overall, the need for a venture process is clear. But while there are some basic recommended attributes of the high-level process the details and focus of the process can vary from company to company and still work for them. This seems to be due to the firm's goals, culture, and style of the company. One size does not fit all.

Beyond the basic need for a process a signature feature that was also of particular interest in the reference material was "in-market testing" early on for ventures (Garvin & Levesque, 2004). The reference material identified it as a very important attribute of a venture team's process that was likely to contribute to venture success. The reaction to probing in this area during the interviews was mixed. One interesting company practice that emerged from combining the interview data and other analyses of company ventures was Company A's

apparent tendency to leverage its services organization (which most large corporations now have) for both early testing of offerings and the acquisition of new ideas. The testing aspect seemed to be very important. The services group is potentially a large set of "very friendly customers" especially where end customer operations are outsourced to the venturing company. It's here where new products could be tested and evaluated in relatively safe, but still real, situations. Exploiting this opportunity though a services group enables Company A to market test ideas sooner, gain additional insight, and improve. This mechanism provides much faster iterations and faster learning than if new products went to market solely through traditional mature product channels. This rapid learning and iteration is much more like how a stand-alone entrepreneur often has to behave. They don't have the luxury of lots of resources to live off of while developing all aspects of the offering. It also provides the opportunity for faster return on investment because paying customers are engaged through the services much earlier than if the company had to "dot all the i's and cross all the t's" for an offering as stand-alone product.

Obviously the "venturing process" is only one of many processes that corporations have. There are established processes and groups for all aspects of business operation. The use of shared corporate resources is a common point of discussion for corporate entrepreneurs and managing the necessary relationships must be part of the overall process. The more successful companies discussed shared resources as a normal way of getting the work done. Some had mixed feelings about the requirement to use the resources, but still thought it was OK.

This is an interesting dilemma for corporations. One of the benefits of starting a new venture inside an existing corporation is to have access to a broader set of capabilities than would otherwise be available to a start-up. One might imagine that this would make venturing easier in a large company. It does in some cases, but often access to these shared capabilities can be

difficult to arrange especially when it comes to allocating expenses and "paying" for the common services used.

For example, Company F (with mixed results) pointed out that often the issue of shared or corporate resources comes up in discussions of the returns calculated for a venture. Often during a review a venture is being examined to determine why it is less profitable than originally projected. Sometimes this is due to the normal venture development process, timing, assumptions, adoption rates, etc. But in addition, sometimes the argument is made that the venture has a cost structure driven by high charges for the shared corporate services. For example the venture is required to use internal facilities space because it's available, and no money needs to flow outside the corporation to pay for it. But the venture doesn't really get this for free. It is charged to them at the company's "internal rate". This burdens the venture with higher costs than it might find if it just leased space somewhere and the requirement to use the common service removes the ventures flexibility and ability to influence its cost structure. They are charged at the going internal rates and have no control over the cost. This is typical of issues around shared corporate services. Other areas where shared corporate services can be difficult is decision making speed and customization of individual process to meet the needs of the venture.

It is interesting that these issues only came up in the discussions of ventures with mixed results. Perhaps this indicates that using shared resources is less of a cause of failures than indicator of potential bigger problems. A good, solid venture may not fail for this reason, while one that is somewhat shaky or questionable or comes from a company with a questionable environment for venturing, may be dramatically impacted.

Overall, the venturing signature highlights many of the important factors in the area of process. The presence of a structured, milestone-driven process seems to be an indicator of a

successful venturing organization. The particular details of that process appear to be less important indicators of success. The critical element of the process may be that it needs to fit well with the way that the firm operates internally. The specific organizational dynamics and particular challenges each organization faces in its own industry need to drive the detailed choices. The process needs to integrate the analyses for both business and technology questions early. This seems to be done well by the successful companies. A longer-term focus for ventures can make addressing market questions very difficult and that may contribute to problems that some companies had. The process is important for providing transparency to upper management and peer organization. The process also provides opportunities for the ventures to seek help, and perhaps more importantly, it provides places where other organizations can contribute in a positive way. The process can be a mechanism to control any negative impacts from the venture or on it. It can also provide a means for the ventures to leverage resources in other groups. In all of these areas, the process helps enable multiple groups: senior management, venture management, new ventures, existing businesses, all to have a shared understanding of what's going to happen and provides checks and balances to help ensure that good ventures survive and poor ones die quickly.

3.3.5 Organization

Most of the companies interviewed used very few organizational structures. Each seemed to choose a preferred style and typically stuck to it. Only one of the companies, Company D, discussed the use of multiple organizational structures in order to achieve its venturing goals. However in this particular case, it had the existing structures and groups established that made the various options easier to construct. It was not starting from scratch each time.

Three of the companies (A,B, and C) focused entirely on direct integration of the venture into existing business units. They differed, however, with respect to when they integrated the two. Company A pursued this strategy right from the beginning of the venture.

"A venture leader would be appointed. In this case since if we said it would be housed in Services typically the leader would also be sitting in services. They wouldn't have to be from services but that wouldn't be unusual. They would directly report into a Services line manager. But they would have representation from across the business in a dotted-line sense to create a single team which had cross-corporation business unit representation."

This group would still be recognized as a venture group even though it was part of an existing business. The venture would report to both the business unit senior manager and the corporate venturing process owners to ensure that it would not "get lost" in the existing business organization. This was a very important part of Company A's organizational structure. Without attention from the top of the corporation, there was a risk that local management would lose interest in the new venture businesses because they were so small compared to the big businesses already being run. This could result in neglect, starvation, or outright action to "kill it" by the business management team.

The leader of the venture from Company G described an example of organizational neglect that happens all too often, and one he was inadvertently guilty of. The corporation he was a part of made an investment in a small start-up with interesting technology that could be very useful to the mainstream company. They made it part of his organization and funded it. He personally felt good about the technology and it's potential. As the pressures of the mainstream business continued he forgot all about the start-up. Some time later the corporation, who also seemed to forget about the start-up, had a major, well-funded, high-profile initiative in the same technical and business areas as the start-up. His management team got on-board with the

corporate initiative. By the time the small start-up group spoke up the corporation and even the group the start-up was in were already committed to the other initiative. Eventually the manager had to shut down the small activity in favor of the corporate effort. The start-up died not from the active efforts of internal competitors or from "organ-rejection", but just because it got lost in the bigger business. A contributing factor also seems to be that the leaders of the small venture did not stay connected enough to senior management and that made it possible for them to forget the activity was there. This was an unfortunate event and one that the venture manager from Company G wanted to make sure didn't happen again.

Company B was concerned about connections to the existing businesses because of situations like the previous one. In addition, Company B's way of approaching ventures had them wait some time before integration. It only moved the ventures into the existing business units once they were well understood, growing, and ready for an "internal IPO". During the beginning phases, the venture was organized in a new venture unit. It was kept separate from its future business unit home (but there was still cross-organizational participation in the venture.). Even still, the potential for "getting lost" in a situation like this is still real. In order to ensure that the connectedness still remained high between the new venture and its future home Company B would make sure to staff the new venture with people from the business unit and the venture group.

"[The people have experience in] both technology and market. Like in the one we just pulled together. [The venture group is] committing four people and there are another five or so cross organizationally from other places in the company who are also committing some time to flesh the idea out. So in some cases it's only "venture center" folks, but in others it's broader. And the ones that tend to work are the ones where it is broader. Not because of the amount of resources. But because of the mental buy in early in the cycle from people who are eventually

going to be the ones who receive this and run with it. Because they are the ones who have to take it to market."

The initial separate structure for the venture keeps the responsibility for the exploration of the risky new ideas within the "venture center". This team can take more risks and this partitioning won't distract the business from its existing business. But at the same time the business units are engaged though the efforts of some key personnel who are working with the venture to help see if the business idea is viable as well as technically feasible. This connection to the ideas from the beginning facilitates the eventual transfer and keeps the connectedness high.

However, eventual integration into a business unit is not always the final home for a new venture. In contrast to the previous examples, Company H focused exclusively on NOT integrating the new venture into an existing business unit. From day one, a separate business group was created and the venture grew alongside its established counterparts. It was important for the venture to have an identity and "an environment" of its own. This enabled the business model, channels, and the overall way of doing business to be different in the new venture than what occurred in the established ones. It needed some "space".

"I think the key to success was creating an environment inside the new business where people understood what needed to be done differently and what needed to be done the same and then communicating it broadly. It was all of us [the management] who did this. We made sure everyone in the organization knew what we were about. They know what we're trying to do and how were trying to do it. They knew what would be the same and what could be different."

Beyond the organization chart, the physical location of a group can have a strong impact on the effective structure of the organization. The venture management team from Company H chose to keep the physical location of this particular new venture alongside the existing business even though some of their first thoughts, and the common advice to the team, suggested that the new

venture should be <u>physically</u> separated from the old business. At the time the management team didn't fully appreciate the importance of remaining physically near-by.

"In retrospect being close in and very transparent with the rest of the company ultimately helped us not get killed. If we were losing a lot of money early on and we were on the west coast the response could have been, "We're never going to understand this. We're never going to be successful. How will we be successful?"

Killing the project might have been the likely result of such thoughts but being close by helped keep this from happening. But upon reflection:

"... I think the location question is a red herring. Because what is this advice that "I have to locate in Silicon Valley"? What that says is that I don't have the management wherewithal to create the business environment I need. I have to let the external environment construct it for me. That would have been the conventional wisdom. But we didn't do that."

Even with local physical presence the venture management team recognized that connectedness needed to remain high with the rest of the corporation. They could not simply wall themselves off and go do their job in isolation. A fine balance needed to be struck.

"We communicated... It's important to communicate in all directions. I would always work to communicate up, down, and sideways.... to peers and peer organizations. It is relationships. In my position I had to make sure peer organizations understood how and why we were doing things. I wanted to make sure we had their support, and we did have their support...probably because everyone understood why this was important to do. Relationships are very important in things like that because you need to keep the wolves at bay or sometime you need their help or they need to feel like part of it. It's all about setting the needle at the right balance point on all of these issues."

The venture management team worked hard to find the organizational, physical, and operational connectedness that was right for the project and the rest of the company in order to be successful.

The key message from these examples, which is also reflected in several of the references (Burgelman, 1984); (Dess et al., 1999); (Iansiti, McFarlan, & Westerman, 2003) is that the eventual destination of the venture should be a large factor in determining what the organizational structure for the venture should be. If it will ultimately be integrated with an existing business unit, then plan that from the beginning. In addition, getting the right balance of connectedness between the new venture and the existing corporation is critical. This can be achieved through formal structures and cross-organizational processes or through informal chats or other communication mechanisms.

Connectedness is often critical for the initiation of many ventures as well. Ultimately, the senior management of the organization must support the venture, but others may need to be included as well. Support for a venture needs to come from all the parts of the organization committed and supporting the venture.

"What I need to do is... Well in [Company E – Group X], there are 10 business units. So what I'll do is work with each. Within in each business unit I have a contact person with whom I communicate and work with. That person might be a business development person, someone in charge of product development or strategy. I try to work with that person on a regular basis and talk to the business head periodically. What I can do is get the strategy person online with an investment, or that contact person whoever they are. When it's pretty clear it makes sense strategically and I have that person's buy-in, then what we do is circle back to the head of the business unit. We explain the business to him – sometimes the strategy person takes care of it for me - and we get them on board. If we are successful, then I've got to go through the process at corporate business development or [with other groups] if they are involved – and kind of work with them and kind of get it done."

This led Company E to observe that, "The internal network is as important as the external network". Without an internal network, great deals won't get traction internally.

Developing connections is not always easy. Company G's venture manager described an example of how connectedness competed with the fear of excessive parental control in the minds of the venture team managers. In his example, the venture was created as a separate entity but had strong connections to the parent organization. The venture management team was always trying to maintain the interactions between the two at a level where they felt the parent wouldn't gain too much control over the venture. Unfortunately, the venture team's fear of losing autonomy drove some of the interactions between parent and venture in a way that may have slowed the growth of the new business. The use of needed parent resources and capabilities may have been turned down based on this fear. It was not until a portion of the parent's stake in the venture was sold to the public that the relationship between the venture and the parent became more trusting. The perception was that with the restrictions and rules of the public market to constrain the parent's actions, the chance of a loss of venture autonomy was greatly reduced. This made all the difference to the team and with this added "safety" the connections could be maintained in a more productive way.

Another mechanism for enhancing connectedness is to have an internal Board of Directors for the venture. This board could consist of key leaders and partners from across the corporation who would advise and review the progress of the venture. This kind of internal board can help strengthen connectedness and buy-in from critical people within the mainstream organization.

A Board or Directors structure is not without its problems though. Another example recounted by Company G's venture manager told the story of some potential negative effects of a high-level Board of Directors for a venture. In this particular case it was not the board of

directors who created any problems, but the direct path to senior management that bypassed some established oversight organizations made things difficult.

"We organized the venture to have an internal board of directors to help guide it and to provide important connections back into the [Parent Organization]. This was made up of the Chairman, the Finance Director, and several others. We brought information, plans, and decisions right to this group. This was very good for what we needed, but it also bypassed a number of organizations that were used to having a say in decisions like those we were making. This was particularly true with the financial analysis group. There wasn't a decision that wasn't typically run through them. With our board of director's structure, they weren't involved. This became a problem. The financial analysis group often complained about why this venture was "so special" and complained even though the Finance director was on the board. Eventually a new person took over the role of Finance Director and heard about the "issue" from his staff. He said he was going to "get things under control" once again. The rules were changed and the financial analysis team was in the middle again. This slowed progress greatly can create a lot of strife. The venture resisted this effort greatly. The finance director did not last long in that position."

The connections created with the board of director's structure were invaluable, but there were unexpected consequences of bypassing groups further down in the organization that were used to a certain degree of power. A thorough stakeholder analysis may identify situations such as this.

"Here again the "smooching" is important. Don't forget that you may need to work on the support staff as much as the bosses."

Another type of conflict between existing organizations and a new venture is the conflict between an internal development group and an acquisition or a partner strengthened though corporate venture capital investments. Company E recounted a situation where venture capital investments in promising companies can come into conflict with internal development, in this case a research group.

"The corporate technology folks tend to live in an ivory tower. Now they are very bright people and they can be very good at evaluating ideas and providing technical expertise. Unfortunately, the corporate technology guys frequently have an agenda. In that they live off of basically what they sell to divisions internally. So if you have a company that doing something that's better than what corporate research is doing internally then you've got a battle on your hands.

These guys have their own agenda and it can be at odds with what, in some cases, is best for the company and what is best for overall. So corporate research can be an asset, but they can be a big liability. And because these guys tend be working projects that are further out, these projects tend to be in well defined areas that are of big interest to venture capital. So you know – now one situation I've had where the guys from corporate research had an initiative that was fairly near, actually directly competitive with, an outside company that I invested in. They fought it tool and nail. Eventually I was able to make the investment. There were both good and bad results. The good was that it energized this R&D group to internally promote themselves and to get their product going faster; to make it more salable. On the other hand, what it's done is they have been successful at blocking any collaborative efforts with the company. We haven't been able to harvest the strategic synergies with this company."

This is one example driven by corporate venture capital investments, but the conflict could easily have been described as the cannibalization of an existing business by an internal venture as discussed often in published literature (Christensen, 1997).

The venture signature helped to shed some light on this subject by focusing questions into several important areas. The exploration of the organizational structure did elicit a number of very interesting and insightful observations from the interviewees. However, the range of structures available and used did not appear to be as clear an indicator of success as the range of venture options available and used appeared to be. The challenges with structure and especially finding the right balance of connectedness were difficult. A number of mechanisms for

achieving the appropriate connectedness were discussed. The unique organizational and people dynamics within the particular company will determine what is likely to work best.

3.3.6 Sources

The majority of the companies (especially the more successful ones) interviewed found inspiration for new ventures in many places. In many ways they seem to have embraced many of the "Open Innovation" (Chesborough, 2003) ideas that are currently popular. They each exploited a number of internal idea channels and some explored external sources of ideas aggressively as well. For example some of the external sourcing processes looked like the following described by Company A.

"It's a matter of being as informed as possible, keeping a "watching brief" of what's going on. It's keeping tabs on people that we believe know (either inside or outside the company), of market directions, trends, of likelihood of such things being adopted. And in a way, it honestly gets down to a few individuals who have a view across the business to say "what do we all feel like here?"

As venturing programs of all sorts become more established the companies interviewed saw more and more people participating in the idea generation and submission processes.

"It's been an interesting exercise. I think also what has happened is that it is a well known program across the company now. And so there are people that know we've tapped into new markets and new opportunities. People are interested and even letting us know, "Here's my latest thought, what do you think?" We do now get those things coming up through the company now. So it's actually kind of good.

There are two sources: there is a very deliberate process and then there is the ad hoc process. We don't stop people from standing on their chairs and saying – "Hey listen to me for a minute!" In fact, there are many people around the

company that have a unique vantage point into new ideas. So we definitely do not discourage anyone from yelling out and saying "Here!".

In addition to spontaneous sources of ideas for new ventures some companies have an open process for actively soliciting new ideas.

Company D described a business plan competition, the Venture Challenge, which is regularly held to gather new venture ideas from across the company. It is open to everyone across the company and like business plan competitions at universities (i.e. MIT's 50K competition) the potential exists for good plans to be funded. Company D has seen tremendous growth in the number of submissions over the years. The number now reaches 500+ business plans per year. The minimum requirements for the business are that it must have the potential to for revenues of 500 million dollars, have low capital and head count needs, and a roadmap/timeframe for profitability can be described. The interviewee from Company D lamented that he is no longer able to read all the plans because there are just too many. He felt the business plan competition was a great way to stimulate thinking and entrepreneurial spirit within the company. It was also a way to create role models for internal entrepreneurship.

"I think that's part of our role... is to network these people together. As the venture group... we do this internal innovation bottom up and also extend our collaboration, but one of our jobs is to also bring together the innovators inside the company and we do that with various tools like we have our Venture Challenge, which is our internal business plan competition, we also run these summits where we focus on a technology, or a market issue or a problem and we bring into that summit about three or four different, I would say, innovative type people and external people and try to get them working on problems and solutions. Um, I think because we're here as a group that people have an outlet to discuss their ideas with... sort of allows that free exchange of ideas or testing their ideas."

There are "challenges" with their process as well. First, all of the submissions need to be read and responses provided to the submitters. With 500+ submissions this is a lot of effort. Another is just the management of all the ideas. One aspect of that Company D said they were struggling with is what to do with all the submissions at the end of the competition. Ideas that weren't selected are not necessarily bad ideas. They may need some further work. Perhaps it wasn't yet time for this idea. There are many possibilities. At this time Company D just puts them on the shelf. They know something better is needed as many good ideas can be lost this way, but have not yet solved this issue.

In addition to purely internal ideas sourcing, the better performing organizations seem to be adopting the "open innovation" concepts and were actively sourcing ideas from many places and actively managing those pipelines. Universities are of course one of these channels but there are many others. Companies B and D shared similar approaches. Company B described theirs this way:

"That's why we're on campus doing what we're doing. Five years ago, even three years ago, it never would have happened. We do sponsored research... but only with one university. There is history. I'm personally working to make (MIT) on the same par. The point is that here is an understanding that we've got to take this to the next level. Just from a resource point of view, from a breadth of things, where we cast our net and how we do it. What we look at ... it needs to be a broader purview. Because you don't know what the next disruptive set of things will come from."

It is important to note that the university relationships entered into by the corporations that seem to be more successful are very interactive and occur at multiple levels. The first level is connecting at a technologist level. This is perhaps where the majority of the traditional interaction has been between companies and universities. The interaction focuses on the

research and its potential application in the company's business domain. The additional level that these successful companies are adding is bringing the business development people into the picture. This elevates the conversation immediately to the possible ventures that could result from the research not just the technology for its own sake. Finally, at both the technical and business levels, the interaction frequency and intensity is fairly high. These relationships are often based on sponsored research but also depend on time and effort spent on campus with the technical teams. The impact of the face to face time seems to be very positive.

A downside of multiple channels is that most of the companies also mentioned the challenges with managing a lot of ideas. They had varying degrees of success examining all the ideas. The problems Company D described are a good example of this.

Two companies in particular (companies D and F) mentioned an additional challenge; the types of ideas being generated. Not all of the ideas being identified were truly business ideas. In fact the majority of new ideas generated by many of the "source channels" were either basic technology ideas or new features for existing products. On the other end of the scale were also many ideas that were currently "dreams" with "several miracles" that needed to occur for them to be feasible. Relatively few ideas were actually complete, new business ideas. Improving the ratio of business ideas to others was one of the concerns expressed. It seems that most people, including those that take the time to write up and submit ideas, don't seem to have the skills to fully develop entrepreneurial business concepts. Unfortunately this is not typically a skill that is on the hiring profile. But this also highlights why having a dedicated venture team is important. In many cases the initial idea may not be a full blown business idea, but the venture team members often work with ideas to see how they can turn them around, stretch them, or combine them into interesting opportunities. Companies without a process for working ideas like this

may also have problems with sourcing enough actionable ideas even though they seek them broadly.

Companies A, B, C and D clearly had a goal to do more "open innovation" (Chesborough, 2003) and to have connected efforts with "on campus teams". Open innovation sources look attractive to them because:

- They are striving to do more with less
- They realize they don't have all of the talent
- It helps them stay connected to broad industry and especially technology trends

Both companies are still trying to make it work and are building the required relationships and skills to improve the connections over time.

One of the other attributes of a sourcing model for new ventures is flexibility. Good ideas can emerge in planned collection processes at specified times, but this won't always be the case. Planning cycles are important but may not facilitate the rapid exploration of new ideas when they emerge. A very fluid and flexible way of reacting to new ideas and new information as soon as it is available is a very important capability that also seemed to be a differentiator between those who have been successful and those with mixed results.

Overall the venture signature as defined is of only limited value in determining useful patterns of sourcing for venturing. The impact of different approaches within the companies that practice broader idea sourcing is not apparent in the current high-level signature. The results of the interviews suggest that the frequency of sourced ideas does appear to be a differentiator. Those who have typically had more success have had ongoing and very public processes for soliciting and finding new business ideas. The dynamics of the organization can also influence sourcing. There were no "Not Invented Here" problems specifically described by the

interviewees but they can be seen as potential contributors to general problems with broad, open innovation sourcing.

3.3.7 Culture

It is difficult to assess the culture of an organization through a small set of interviews and especially difficult to describe it with a few features such as those in the venture signature. Schein (1999) describes a much more detailed process to be pursued with several groups of people as a way to approach this. The recommended approach was not doable with the time and access available, but even still some of each of the organization's habits, norms, and domain behaviors started to emerge in the interviews.

Overall it was clear that there was a real mix of corporate cultures here. At the highest levels companies B and D seemed to be the most similar with respect to corporate entrepreneurship, but they were still quite different in many other respects. The differences combine to create two unique environments that strongly influenced the choices made to implement the entrepreneurial strategy for each company.

The first element of the venture signature assessed the climate of entrepreneurship for the company. This was accomplished by reflecting on the categories listed and assigning relative scores across the set of interviewed companies. In the successful companies they either rated high in all categories or high in at least four of six categories.

In many of the successful companies corporate entrepreneurship is expected and a part of business operations. The entire company knows that venturing is important and is regularly undertaken. The presence of a well known and respected venturing group, a process for venturing, and some success stories (even folklore) continue to reinforce the importance of

corporate entrepreneurship. The results, good and bad are communicated and shared widely. The interviewee from Company A mentioned:

"I think also what has happened is that it is a well known program across the company now and so, I'm not really sure when this program started but, at least a number of years ago it started and I think that there are people that know we've tapped into new markets and new opportunities and so we're well known across the company and so people are interested and even letting us know."

The processes in the successful companies reinforce the culture of entrepreneurship. Company D described their results.

"Um, I think because we're here as a group that people have an outlet to discuss their ideas with... sort of allows that free exchange of ideas or testing their ideas so we're actually now .. we're actually just writing an article now for the internal company magazine about what we're doing, just trying to encourage people to be open with us about whether they have any ideas or innovations."

"I would say that it's promoted in a way that... you know we give it money, we give it funding, and we're given added time in all the communication channels and I think also the fact that we've been able to produce successful ventures has helped. So a lot of ventures end up being communicated to the public through the traditional press releases like any project would."

These efforts reflect an effort to strengthen the culture of entrepreneurship within the organization. They also begin to reveal some of the various reinforcing dynamics that will help strengthen that culture over time. The other factors in this feature: intensive environmental scanning, management support for entrepreneurial activities, a collaborative and relationship driven environment, and the ability to grow with what you start are all contributors. As the individual ratings in the venture signature show, the more successful companies left the impression about being stronger in these areas than the other companies.

The only companies that received a "none" rating on tolerance of failure were G and H. For Company G which had a long and seemingly conservative history the new venture was risky but because of its links to the parent company it couldn't be allowed to fail. The same was true for the venture from Company H. The venture was so critical to the future of the company that it also couldn't be allowed to fail. In the rest of the companies, the attitude towards the value of a venture was more conducive to experimentation and learning without being too soft that there was no pressure to perform. Company B described it as:

"There is some incremental and some shorter-term stuff but our job is to be thinking what is coming next. Not how to take the hill, but what is on the other side of the hill... the next hill. And that requires some times more failures. We fail a lot more than these guys [the engineering groups] - fail in the traditional sense of the word – but our failure is also a form of success because you learn lessons along the way."

All the successful companies shared this "glass half full" view of apparent venture failures and backed up that attitude with the appropriate supporting actions.

Collaboration and networking is also the way the successful companies get business done. They have a structure and culture of cross-organizational projects that extends into the new ventures. The cross-organization needs of the ventures are natural in Company A's environment.

"You know that [Company A] is a fairly matrixed organization anyway, so putting aside [new ventures] and dealing with emerging opportunities, every part of the company has to depend on other parts of the company to get the job done. That's not unusual so it's actually the degree of coordination, the degree of funding and joining hands on those sets of topics that lead us to understand how complicated it can be."

Similar observations were described by Company D in previous quotes.

Company D is also particularly focused on the final feature in the culture section of the venture signature. The movement of talent is an important part of what they feel they do well.

"There's always so much change going on here. The organization is always very fluid. Little groups are easily moved between the different entities. It's a very dynamic organization. You never see the organizational charts here. I've worked at [some other company] when I graduated and there they made detailed organizational charts. Everything is nicely structured.

I think the idea is to put people in certain environments and then put them over there next...and then they have a network that they can draw back on to make the business better in the future.

I think we [the venture group] turn over our headcount back to the business groups every three years. So you get this flow of people in and out and so they take their network into the business group and vice versa... people come from the business group with their network. So I think that's also a very important thing. So you end up with a guy in ventures who used to work for [group X or Y] and he has a very good network and vice versa a guy who goes out of ventures into the business group and then has a good network back into the ventures."

Asking high-level questions and rating the company's culture based on the venture signature is a "quick-and-dirty" approach. The anecdotes collected from the interviews emphasize the importance of understanding the culture when choosing how to make decisions about many of the other areas important to new ventures. Specific choices about organization, process, and people choices all are impacted by the organization's culture. A good understanding is required to be able to assemble the right set of policies and structures to support corporate entrepreneurship. The venture signature picks up some of those factors at a point in time but the dynamics of how they work seems to be even more interesting.

3.3.8 Incentives

For the companies interviewed, the incentives for employees involved in new business ventures were described by all of them as "the same as existing businesses". In addition, the interviews all agreed with published research (Block, 1982; Day, Mang, Richter, & Roberts, 2001); that incentives should be based on relevant metrics for a start-up or growing business rather than those appropriate for an established business. The key difference between internal and external stat-up was that the types and relative amounts of incentives for the internal venture needed to be consistent (or at least defendable) with those in other parts of the organization. Some portion of the individual incentives was clearly "negotiable" and customized to the needs of the particular employee. But this again is not out of the ordinary. This was important in some cases to get the ventures staffed with the "right people".

Company D was very specific that the incentives are structured the same across the corporation because "we succeed and fail as a company". In the past this company, as well as others it seems, have explored other possible schemes for new ventures but have returned to using consistent models for the venture teams. The issues created by having "big winners" over in the venture area while the people actually leading established businesses who pay the bills for the company were always larger and more difficult than estimated by everyone. One of the typical arguments for different incentives for the ventures is that the risks are "higher" in a startup. These arguments were understood, but not totally believable to the venture process managers.

"Several times we've had internal entrepreneurs who are starting up a new venture internally say that the risk was high and they should get upsides like external start-ups get. While I hear what they are saying, I don't quite buy it. They are still getting a salary. They have offices, access to facilities and corporate resources. It's not as barren an initial landscape. Don't kid yourself.

Essentially, people saw these outside entrepreneurs getting huge returns and felt they deserved a part of it too. Their ideas were just as good; just as world changing. But they weren't leaving to go get it, they had a safety net. They wanted the same rewards it to be brought inside without taking all the risk."

As this discussion points out, the consensus was that decisions around the financial incentives for an intrapreneur should be based on an analysis of risk vs. reward and consistent models across the broader organization

While this analysis is useful, it leaves out an important portion of the incentive question. The previous analysis focused solely on the impact to the individual entrepreneur. It did not consider what the impact of incentives of various types might have on the surrounding "system" (peers, peer organizations, and partners within the corporation) and in-turn the impact on the success of the new venture due to resulting action, or inaction of those organizations. As described above, if incentives are very different, it is possible that other organizations will be less likely to help a new venture be successful. This may especially be true if there is no kind of sharing of upside returns with other organizations. This was recognized in at least one of the interviews and a similar observation was noted when considering how to manage the eventual revenues of a new venture when many groups contributed to its success. This interdependent structure of support was represented in the way benefits from the venture were distributed in Company A.

"The revenue would be split across the business as well. But this is what takes careful coordination. There is often... well... you can get into difficulties with priorities. That is also why you need the Senior VP level of ownership and leadership around the ventures so that he can cut through some of the normal kinds of hassles."

This interviewee points out that financial incentives (typically, bonuses tied to revenues) need to encourage interdependence and collaboration, but also points out that these incentives need to be aligned up and down the organization. This was also the point in a previous example with the conflict between the corporate venture capital investment and the competing internal research group. They had conflicting incentives that were not addressed by the process.

Another perspective on incentives was shared by the venture manager from Company G. The parent organization's model for compensation was effective, but traditional. The venture needed something different. Not because of inherent risk/reward tradeoffs, but because of talent shortfalls. The new venture needed to attract and keep a new set of people with different skills that were very in demand at that time. This population of employees was being courted by every internet start-up and stock options with high returns were commonplace for these types of individuals. Management used incentive options in the stock of the wholly owned venture to attract and keep employees and then provided the liquidity for the options by floating a portion of the venture's stock on the public markets. This helped to retain some employees by creating a competitive compensation arrangement.

Overall, incentives are tricky. The lessons from those in the interviewed companies match well with some of the references that suggest common incentives (Day et al., 2001) and not with others (Quinn, 1985). The key to understanding what is appropriate for any given venture is to really look at what behaviors are likely to be encouraged if done one way or another. This will be strongly affected by the key organizational dynamics and cultural influences that permeate the organization.

3.4 Summary of the Venture Signature – Version One

The application of signature analysis to corporate entrepreneurship via the "venturing signature" provided interesting results. Many of the venture signature's features aligned well with the major factors that practitioners discussed. But there were also areas in the signature where no consistent patterns emerged or practitioners didn't feel strongly about the importance of those elements. The visual representation of the various venture signatures (as collected in the first quarter of 2005) shown together in Figure 4 does reveal some high-level patterns that differentiate between successful and mixed results at this point in time and is an interesting snap shot of their current approaches.

As the discussion throughout this section supports, the view that a static venture signature, or "snapshot", of a firm's venturing system at a point in time is not sufficient by it self to fully understanding the reasons why each of the approaches either works or doesn't. Two things are needed to strengthen the venture signature.

- 1. The history of the venturing efforts for the organization. What has the venture signature looked like at several points in the past? How has it changed? How do the past efforts affect the current and future efforts?
- 2. The underlying dynamics of venture with respect to organizations, people, partners, etc. The signature itself doesn't reveal the dynamics, only a snapshot of the state of the dynamics system at that point in time.

4.0 Venture Signature – V 2.0

4.1 Introduction

In the discussion that follows the concept of the venture signature is extended to include the underlying dynamics of corporate entrepreneurship. Understanding how the venture signature evolves over time and the dynamics that influence that evolution is the primary focus. A "top ten" dynamics of corporate entrepreneurship is also proposed and discussed. Finally, four questions that every corporate entrepreneur should know the answers to are provided.

4.2 Approach

Given the results from the application of the first venture signature three improvement strategies are considered. Each will be discussed.

- 1. <u>Go deeper:</u> The venture signature (version one) was too high-level and not constructed mathematically. Develop a more detail-driven venture signature that draws heavily upon "raw data" rather than starting with the high-level features from the background literature. Use quantitative measures and current signature analysis techniques to rigorously analyze the data to extract relevant signatures
- 2. Go broader: The venture signature (version one) was constructed at the appropriate level, but it missed some important features that should be included. After a further review of the interviews and additional reference material, more feature-level categories should be added to flesh out the venture signature.
- 3. <u>Go dynamic:</u> The venture signature (version one) tried to be an overall representation of the firm's approach to venturing. It was supposed to capture the important factors and their interconnections. A static signature doesn't capture all

the important dynamics. Instead of this, the venture signature should be considered a "snapshot". It is a sample at a moment in time of the overall dynamics of corporate entrepreneurship occurring within the firm. The venture signature should be combined with a set of dynamic models that describe the interactions with firms around corporate entrepreneurship.

4.3 Discussion

The first way to potentially improve the venture signature concept would be to "go deeper" and build the signature based on more primary data. This would incorporate many more factors and include a much more rigorous mathematical analysis to extract features and patterns. This approach would be similar to the work presented by Miller and Friesen (Miller & Friesen, 1978) but would be focused specifically on corporate entrepreneurship. Detailed questionnaires and observational studies could be employed to capture detailed data with structured and repeatable measurement scales. Much more detailed quantitative analysis of the results could then be employed to reveal the various venturing signatures in the data. Those patterns could then be grouped based on performance of the venturing effort. The best combinations of features could then be compared with poor performing patterns and lessons extracted.

Will the results of a more detailed signature analysis provide the deeper understanding that enables lessons to be transferred to other organizations, in other situations? Can everything of interest be measured in a way that can be then processed using a method such as this? The results of the first pass effort on the venture signature suggest that pure pattern recognition will be interesting, but will not be sufficient to capture lessons from one firm and apply them elsewhere. A set of detailed patterns captured from other firms may be interesting but are only moderately useful looking forward. This is consistent with the typical applications of signature

analysis to characterization and matching known patterns. They can be used to break up the overall universe of signatures into company approaches that are similar, but questions will still remain. How can it be applied to the next situation? Can these lessons be used to do something new, or can then only be used to copy what others did? Without more understanding of why events unfolded as they did, future efforts can only copy the actions of others and hope for the best.

Dr. Bill Clarke, Executive VP and Chief Technology and Medical Officer at GE Medical recently discussed a similar situation in his business. He described the challenges with ongoing efforts in genetics-based disease screening. Many companies are developing genetics-based screening for diseases such as cancer. These products make use of the fact that some people are predisposed to different kinds of cancer based on their genetic make-up. Therefore, if the gene sequences of susceptible people are known and if every individual is matched against those gene sequences then individuals that are more at risk for cancer can be identified before any disease manifests itself. This is a signature analysis approach. Dr. Clarke pointed out that the real problem is not with the matching but lies in determining what to do as a result of a match. What should be done in the situation where a patient has the genes for cancer but has not yet developed any sign of it. Should doctors preemptively try to treat (sometimes with aggressive medicines and surgery) a disease that has not yet emerged? What if this is done and the patient never contracts the disease? Was this due to the preemptive treatment or the fact that they just never got it? The problem is that there are still some other unknown factors which affect whether someone gets the disease or not. Dr. Clarke pointed out that just because the individual has the same gene signature doesn't mean the patient always gets cancer. There is still a stochastic aspect of this. There is a correlation, but not a complete understanding of causality. This makes

aggressive action as a result of the pattern matching a potentially unwise course of action. Proactive treatment may not the right response. Perhaps what should be done instead is for those individuals to be monitored much more closely for solid early data on the emergence of cancer than the normal population. As a result the testing may be more of a warning device than a result that can be directly acted upon.

The static venture signature concept shares the same dilemmas. The static signature analysis concept provides some useful indicators about good sets of features, it also is at best correlation and says nothing about causality. Without all the important factors included pattern matching will likely still fall short of the goal. And more importantly, without a theory as to why these patterns lead to success or failure the conclusions will not be nearly as useful. The venture signature approach is still good for a first step in grouping like corporate entrepreneurship styles, but deeper understanding then comes from understanding why the particular choices were made and why those choices then led to success or failure. If the data for such a signature can be routinely captured, perhaps it can be used as an early warning, or an alert, that signals that an organization may be developing attributes that are barriers to corporate entrepreneurship. If so then closer examination and monitoring could be started to head off the potential problems. This is potentially an interesting area for further exploration.

The second approach to improving the static venture signature is to include more high-level features. Rather than going deep, the recommendation is to go broad. Several areas were identified in the interviews that were not included in the initial static venture signature. Combining these areas with additional ones from the reference material could provide more factors to include. Some of these factors might be the following:

<u>Environmental factors</u>: The outside business environment was not considered in the static venture signature and has been reported to have a large impact on many aspects of corporate entrepreneurship. Examples of the detailed factors would include:

- Current strength of the business measured by analyst ratings or the firm's stock
 price relative to historical levels and current benchmarks.
- The action of competitors or overall industry health as in a Porter's five forces analysis (Porter, 1980).
- The external view of the success of current and past corporate entrepreneurship efforts by the firm.

<u>Historical factors</u>: The original venture signature ignored an organization's history except for those aspects visible in the culture of the organization. The interviews suggested, that it's often the stories about the past experiences of the firm that can have a significant influence on what ventures are explored and those that are considered "off-limits". Examples of potential venture signature factors in this area include:

- Capturing the venture signature over-time as a way to develop a historical view.
- A factor could be developed to measure the organization's track record for corporate entrepreneurship. This could include successes vs. failures and most recent trend.
- It could also include the recent internal view of venture performance. How do insiders feel about the success of the corporate entrepreneurship efforts?

<u>Cultural factors</u>: The initial venture signature included a "culture" section but it should be extended. Culture is in large part an outcome of the organization's history. This would be an important addition. By understanding more aspects of the organization's culture its impact on

venturing success can be understood. This may shed some light on why particular choices made by one group lead to success while others stumble in similar circumstances. In addition, the similarities and differences in the cultures of the parent organization and the new venture should be included.

This approach builds on the findings from the interviews and extends the venture signature approach so that it is more complete. While this would be a valuable addition, it is still a signature analysis and pattern matching approach with the same limitations as previously discussed.

Finally, the third approach recognizes that the challenges with corporate venturing are not static. There are always forces acting on systems that will cause the outcomes to change. Interestingly, only a few of the reference materials focus primarily on any organizational or behavioral dynamics related to corporate entrepreneurship. One of the few examples is Burgelman (Burgelman, 1984). Figure 5 depicts how corporate strategy, an organization's structure, the induced behavior, autonomous behavior, and the strategic context of the corporation affect each other over time.

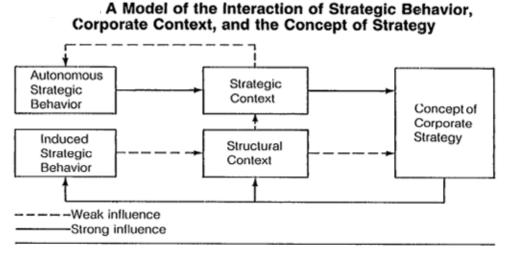


Figure 5: A diagram of the interactions between espoused corporate strategy, induced behavior, and autonomous behavior. (Burgelman, 1984)

Burgelman describes that an organization's strategy (its goals, beliefs, and vision) strongly shapes the organization's structure and processes as well as the behavior of most of the people in the organization. However, when autonomous strategic behavior (for example, a corporate entrepreneurship activity) takes place and is successful, the results begin to change the corporation's strategic context. They begin to change the situation and rules within which the overall strategy which was developed. As this strategic context changes, the corporate strategy must also change in response. Burgelman proposes that the strategy will change to accommodate the successful autonomous actions making them part of the mainstream strategy. This in turn affects the organization's structure and policies and the behavior of the rest of the corporation. This creates a reinforcing dynamic within the organization and changes occur. These dynamics of change have also been described as "Enacted Systems" effects by consultants and researchers such as Peter Senge and Wanda Orlikowski, both from MIT. Peter Senge's book The Fifth Discipline (Senge, 1990) is a useful references and combines system dynamics approaches with how organizations can change and evolve.

While Burgelman doesn't include all the interconnections that may drive this dynamic, his work suggests that understanding the underlying dynamics of an organization can be a very powerful lens through which to view events. The third improvement concept for venturing signatures builds on this idea. It recognizes that there are underlying dynamics in all aspects of corporate entrepreneurship. The static venture signature is simply a visible "snapshot" of the state of that dynamic system.

This approach takes the application of signature analysis idea back to its roots. The signature analysis techniques used for missile identification looked at "snapshot" features (size, shape, emitted frequencies) but also relied on time dependent data (speed and trajectory) which

were also processed into features and used for decision making as well. In the venture signature the time-based elements were not originally included. Instead of trying to incorporate everything about an organization's history into the signature directly, the signature can be considered a snapshot, which can instead be taken repeatedly over a period of time to view the dynamics. Time dependent features can then be extracted from this signature history as it changes over time. Together, the static and temporal features in a venture signature will provide a better view of how the underlying dynamics of the firm's corporate entrepreneurship system is operating.

4.4 Dynamics of corporate entrepreneurship

Building and testing a complete dynamic venture signature, with all the important causal diagrams, the appropriate venture signature, and data collection processes is well beyond the scope of this analysis. However, a process for doing so will be laid out and an initial pass through that process will be performed. This provides an example of what is being proposed and an early evaluation of what the results of such an effort could look like. The basic process is simple to describe.

- Based on interviews with corporate entrepreneurship practitioners and published research a set of models describing the dynamics in play within most corporate entrepreneurship programs is to be developed. This would include examples of reference modes (Sterman, 2000) as well as the causal diagrams for major dynamics.
- A venture signature that includes the important inputs to the dynamics (like "settings") and the current state of some of the most influential features in these dynamics will be developed. A way to measure the identified inputs and features that can be repeated over time will be created as well.

The process starts with understanding the dynamics of corporate entrepreneurship. The field of system dynamics can be most useful for analyzing these dynamics. System dynamics can be a used to help examine the mental models behind the actions that will either positively or negatively affect the success of corporate entrepreneurship efforts. A good initial reference on system dynamics is <u>Business Dynamics</u>: <u>Systems Thinking and Modeling for a Complex World</u> (Sterman, 2000).

A complete assessment of <u>all</u> the dynamics affecting corporate entrepreneurship could be much too complicated to be useful. There will be a subset of the dynamics that will be most important and these will drive the majority of the reference modes (outcomes). The goal of the dynamic venture signature is to include the core set of dynamics for an organization as a fundamental part of its makeup. This will help efforts to look at how corporations approach venturing and their resulting success or failure.

A subset of important dynamics can be identified by examining the appropriate reference modes most observed in corporate venturing environments. Some examples are shown in Figure 6 through Figure 8. These examples have been created based on interviews, references, and other general sources. People familiar with corporate entrepreneurship will easily recognize these reference modes.

These figures show several typical reference modes for both the individual ventures (Figure 6 and Figure 8) and for the ongoing venture process of a firm (Figure 7). These are some of the readily visible results of corporate entrepreneurship programs and ventures. Each set of reference modes focuses on one dimension that is typically focused on in assessments of corporate entrepreneurship. The underlying dynamics of corporate entrepreneurship are responsible for the range of behaviors.

Theoretical Reference modes for Corporate Ventures

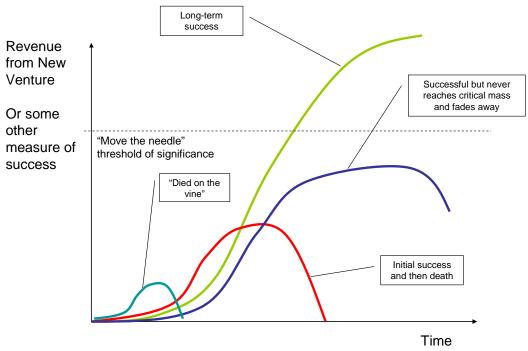


Figure 6: Examples of theoretical reference modes for specific corporate ventures - "move the needle"

Theoretical Reference modes for Corporate Ventures

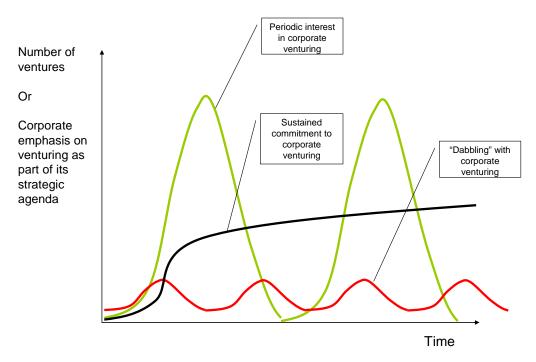


Figure 7: Examples of theoretical reference modes for corporate venturing processes – venture process magnitude

Theoretical Reference modes for Corporate Ventures

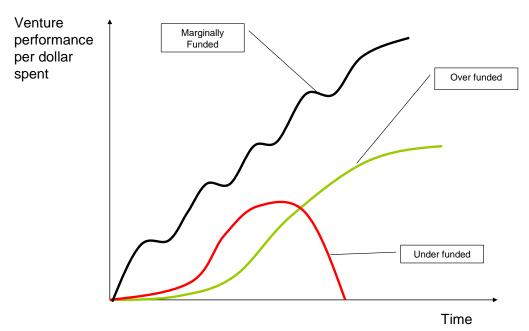


Figure 8: Examples of theoretical reference modes for corporate venturing - performance per dollar spent.

The relative strengths of the various reinforcing and balancing feedback loops in these dynamics for a given firm play a significant role in determining which reference mode the particular results will approach.

What dynamics drive these outputs? Table 3 is a list of many of the dynamics found in the published research, the interviews, and other general sources. There are potentially many more and a larger list of dynamics could be generated. Further reading of the Literature Review and Analysis (Section 9.0) could add further to this. At the end of each section in the review are a list of recommendations, trade-offs, and dynamics (RTDs) that were observed in the readings. They were used to generate Table 3, but they may be very useful starting points for identifying other interesting dynamics as well. A process which includes interviews with more corporate entrepreneurs would be a potential way to see if shared mental models for these dynamics exist (or don't).

Category	Source	Name
Goals	I, R	How do the objectives of parent organizations and their new ventures become misaligned?
Goals	R	Why is it so hard to keep a culture of change and innovation active in a company?
Goals	R	Why is goal creep so common in venturing activities?
		Why does the organization's cultural attitude towards change and new projects greatly impact the success of
Goals, Culture	R	corporate entrepreneurship efforts?
		Why in downturns only lead to new directions after top management changes? Often new efforts cannot start
Goals, People	R	until senior management can let go of past strategies.
Goals, People,		The state of the s
Incentive	R	What pressures on senior management affect corporate entrepreneurship?
Goals, People,		Think procedure on come management anote corporate entropronouroup.
Incentives	R	Why do previous efforts in corporate entrepreneurship often get cancelled when new management arrives?
moonavoo		The provide choice in corporate out open current get current with new management univer-
Goals, Strategy,		
People	R	Why do many firms behave so conservatively in their venturing efforts?
Incentives	R	Why do senior management incentives driven by "The Street" change the focus and commitment to venturing?
Incentives	i	Why do generous incentives for internal entrepreneurs have mixed results?
moonavoo		Dynamics of isolation. Separation allows the venture's culture to evolve. Goals change making the new venture
Organization	R	more isolated from the parent organization increasing the likelihood of conflict and potential for cancellation.
Organization	I, O	What organizational factors keep ventures from reaching sustainable size?
Organization,	1, 0	Why do conflicts arise between managers of existing businesses and new ventures resulting in the failure of the
People	I, R	venture?
Organization,	1, 11	Why does the Not Invented Here (NIH) syndrome kill promising new ventures? How do "corporate antibodies", or
People	I, R	"organ rejection" behaviors grow and destroy new ventures?
Organization,	,, , ,	The state of the s
People	I, R	Why don't divisions in a corporation work well together?
Organization,	1, 1	Why don't divisions in a do portation work well together:
People	R	Why does middle management in particular have difficultly with corporate entrepreneurship efforts?
Organization,	11	With does madde management in particular have difficulty with corporate emergence and provide a control of the corporate emergence and the cor
People	0	Why do technology led organizations often struggle to create sustainable, new businesses?
Organization,	0	Why do technology led organizations often struggle to create sustainable, new businesses:
People	l,	Why is it so difficult for organizations to stop mediocre or poor ventures?
Organization,		with it so difficult for organizations to stop mediacre or poor ventures:
People	0	Why do the same organizational dynamics lead to success in one industry and fail in another?
People	I, R	Why would the CEO's level of support for corporate entrepreneurship change?
People	I, R	What affects senior management support for corporate entrepreneurship?
Георіе	1, 1	Why don't employees in established companies become more entrepreneurial when there is a need for business
People	R	growth?
People	I, R	What entrepreneurial training will people do of their own accord if they are inclined to do any?
People	R	How does a corporation drive out entrepreneurs?
People	R	Why is it so hard to grow skills in entrepreneurship within an established firm?
Гооріо		Why is the Social Transaction Oriented manager so much more able to change the firm's internal dynamics of
People	R	venturing though actions and connections and make ventures successful?
Гооріо		Why does strong senior management championing of specific ventures vs. a venturing process lead to poor
People	I, O	results?
People	I. O	Why does a dedicated venturing process team lead to better venturing?
People	0	Why is entrepreneurial training not widespread in corporations?
Гсоріс	0	How does a focus on Venture "fit" constrain venture opportunities which in turn shrinks opportunities for success
Process	R	and the quality of ideas which is followed by further narrowing when in trouble?
1 100000		Why aren't appropriate stage gate process criteria applied to ventures when management understands the
Process	R	challenges with new ventures?
Resources	R	Why does giving a new venture all the resources it needs sometimes lead to failure of the venture?
Resources	R	Why does having either too much or too few resources put a venture at risk?
		Why is it so difficult to select appropriate strategies from a full range of options and maintain the skills and option
Strategy	R	set overtime? Success and failures both seem to lead to specialization.
- alogy		Why do strategies diverge between parent and venture and why does this often create difficult problems for
Strategy	R	ventures?
		The growth of complementors in an ecosystem venturing strategy affects success and continued commitment to
Strategy	R	venturing but there are many factors "external" to the firm to be considered.
Strategy	R	How is affecting change accomplished within the organization and what affects a venture's ability to do so?
Strategy	R	The dynamics of venture overconfidence and the lack of idea flow or experience early in a venturing program.
Strategy	R	How do "corporate antibodies", or "organ rejection" behaviors grow and destroy new ventures
Strategy	R	The challenges of opportunity, realized size, and time to maturity of the venture vs. pressures on the parent.
Strategy,		The second of the pulling second of the pulling of the following of the pulling pullin
People	I, R	Why does past history with corporate entrepreneurship drive current choices?
Strategy,	.,	The same partitions with corporate entropronouteinp unite outront elleres:
People	I, O	What keeps corporate entrepreneurship from being every employee's daily job?
Strategy,	., 🤝	The needs see per all of more or
People	I, O	Why is past experience so strong an influence on today's venturing choices?
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Table 3: A list of questions that highlight potential underlying dynamics that may be starting places for examining the core dynamics underlying corporate entrepreneurship. (R=Research, I=Interviews, O=Other)

4.5 Three selected causal models

To get a feel for an analysis of this sort several models of a few of the dynamics underlying particular reference modes were generated and discussed.

CEO support has been defined as a "Must Have" but what will affect a CEO's willingness to support corporate entrepreneurship activities? The dynamics of CEO support will be one of several contributors to the "visible" reference modes shown in Figure 6 though Figure 8. One possible causal diagram of the dynamics of CEO support for corporate entrepreneurship and venturing activities is shown in Figure 9. There are three primary sets of reinforcing and balancing loops. The first are the loops in the bottom right which are called "Move the Needle-R" (revenue), and "Move the Needle-P" (profit). At their most basic levels these are the loops that reinforce the venturing activities based on the venture's growing success.

It begins with CEO commitment, which leads to organizational commitment and the appropriate staffing and resourcing of the ventures. There are of course many levels of commitment by the CEO or other players in the system. They are not binary, yes or no, commitments. These ventures, after a significant delay, may result in additional revenue. The reason for calling them "Move the needle" loops comes from the next part. One of the challenges with ventures in general is that they start off as small business opportunities even though they may have a larger long-term potential. In many cases the small revenue increase due to the venture is not noticeable at the highest levels of the corporation. This dynamic is captured and if the resulting perceived revenue impact is positive (even though small) the result is a positive (but small) impact on the CEO commitment to venturing. Unfortunately, if the perceived impact is too small little reinforcement will occur. There is the potential that because there are significant delays between dollars invested and revenues achieved that a negative

feedback based on the lack of immediate success of the venturing activities could result and in turn pressure the CEO to lower his/her commitment to venturing. This is an example of "worse before better" dynamics that will be affecting the pressures on the CEO.

Another major loop is "Street pressure". Due to the differences in delays between Wall Street feedback (on a quarterly, sometimes daily basis) and the returns from venturing revenues (which could be years) there will be pressure from industry analysts to "focus" or reduce venture funding if the corporation is not meeting expectations. "Why spend money on this risky long-term thing?" Likewise, there is the potential for "budget pressure from existing operations" if the gap between the requested dollars for ongoing business and the dollars invested there is large. It doesn't really matter if the gap in funding is due to the amount of money being spent on ventures or not. The perception may be enough to drive this loop. This can be another source of feedback putting pressure on the CEO to reduce the commitment to venturing (or at least the budget) which could start a "death spiral" for the efforts through slow starvation.

These loops are an example of how these influences occur. Nonetheless they identify some interesting dynamics that must be considered when looking at how a venture program operates. Depending on the relative strengths of these various loops for an organization the summary effects of these dynamics will change and so will the best course of action for a venture. Some additional observations result from this diagram.

• The dynamics captured here would say that minimizing the time to profitability for early ventures is critical to building momentum. Early wins will be critical. This may also mean that learning on the job for the venture teams may not be the best course of action if it slows the team's ability to achieve early success.

- Starting small is a reasonable approach. Delays will lead to a low "move the needle" impact, but at the same time the negative impact of the "pressure from the street" and "budget pressure" will be minimized because the dollars invested are small as well.
- One of the interviews stressed the need for "interesting points along the way" as an additional loop to influence the various players based on <u>milestone</u> successes vs. only revenues or profits. When revenues are zero and/or there are losses from the new venture, additional feedback loops like this could strengthen commitment.
- This diagram also points out that, in at least a first pass analysis, there are no major loops that will easily grow a CEO's commitment to corporate entrepreneurship and venturing projects. The dynamic forces in loops would tend to reduce CEO support. This may mean that a CEO must be a "believer" in the value of corporate entrepreneurship and have the patience to weather the "worse before better" effects that occur before the "Move the needle" loops strengthen. If not, their ongoing support could be difficult to maintain.

This thought process leads to the conclusion that some careful thinking about how to get the positive dynamics going (vs. the negative ones) must be done. Understanding these dynamics up front means that early danger signs can be recognized and new feedback loops to support and grow senior management commitment can be added if necessary.

Another example of the dynamics of corporate entrepreneurship was mentioned in the background research. These are problems associated with over and under funding a venture (or any project for that matter) (Figure 8). A causal diagram is shown in Figure 10. There are four basic loops to this dynamic. The innermost loop captures the effects of under-funding a venture. The gap between the actual funding and the actual needs creates a shortfall which could lead to

taking shortcuts because there just aren't enough resources. This in-turn could lead to increasing the number of milestones missed which lowers the probability of success and then lowers returns. This performance will then affect the new resources applied, closing the loop. The next loop shows the dynamics of relative differences, or perceived differences between the new venture and other existing projects. If there are gaps in the funding for other projects, concern over spending on the competing new venture will increase, in-turn decreasing the support for the new venture by others in the corporation. This will affect the chances of success for the venture. The outermost two loops are the dynamics that affect the venture managers. If the difference between the actual funding received and the funding that the venture manager thinks they need is large, a committed venture manager will be pressured to go find additional support from others in the corporation to help them meet his or her promises. This outreach can have the positive impact of getting other people in different organizations to learn more about the new venture, encourages the venture manager to find ways to generate partnerships, and gives others the opportunity to contribute to a potentially exciting opportunity. These all have the potential to increase support and buy-in for the venture. If, however, the perceived gap is small, or even negative (the project is awash with money), there may be some incentive to increase the scope and goals of the project which may impact the performance negatively by taking on too much, having too vague a goal, or staying isolated from potential partners. Overall, it is the relative balancing of these four loops which will affect what happens when projects are funded. The choices made by venture managers will be influenced by these dynamics and the danger of over/under funding may or may not be serious depending on these relative weights found in the particular organization.

A third example of the dynamics of corporate entrepreneurship within an organization is related to training. Training came up in the interviews and three specific, and very different, approaches were described. The first was a high-profile, proactive training program in entrepreneurial skills over a dedicated six month period. It was targeted to individuals selected by senior management and concluded with a presentation to the corporate executive committee. The second was a customized, group-focused training program arranged when needed by the venture teams themselves. It was reactive to the specific needs of each team in terms of content and training. The third was an individual-driven training program. It supported the training needs of individuals as determined by them and relied on the organization's existing culture of entrepreneurship and "self-starting" to encourage the behavior. Each program is unique and each is reacting to differences in the relative strengths of the various loops in the dynamics of each firm. A potential model for these dynamics is shown in Figure 11. This is a simplification of all the dynamics that play into employee motivation and performance and illustrates how approaches to training might need to be different based on the firm.

There are four basic loops in these dynamics. The primary reinforcing loop is achievement driven excellence. Work performance is driven by the recognition received which motivates the individual to perform even better. This is modulated by two additional loops. The first is the organizational recognition loop affected mostly by the gap (or lack of) that develops between the organizational goals and the achievements made. The other is the personal goals set by the individual. A gap in personal achievement increases the motivation to do better. (The organizational goals and personal goals are treated as exogenous variables for this causal diagram.) The final loop, which is the one of primary interest in this section, is the training loop. This model focuses on the challenges for the self-directed training system. The individual's

interest in training is driven from their perceived need for additional skills to improve the work performance. This is driven by personal ambitions (or goals) and the skills that are perceived as important to advance in the company. This last input may be the most important in this case. If the firm is interested in entrepreneurial behavior then it would of course support training in this area for its employees who ask for it. However, as this causal diagram shows, both the employee's personal awareness of a skills gap and the types of skills that successful people in the company demonstrate are critical. If one of these is missing or reflects skills other than entrepreneurial skills then it is unlikely that employees will <u>spontaneously</u> consider training in entrepreneurship. This is a real potential problem for the firm that chose the self-directed training process. The right environment and role models exist if the company is expecting a population of employees to focus on developing entrepreneurial skills.

Of course there are many more dynamics that will be important to understand for any given organization. These are only three of the potential ones. But just from these it can be seen that various best practices and successful strategies found in corporate entrepreneurship could emerge from these underlying dynamics as they vary from company to company.

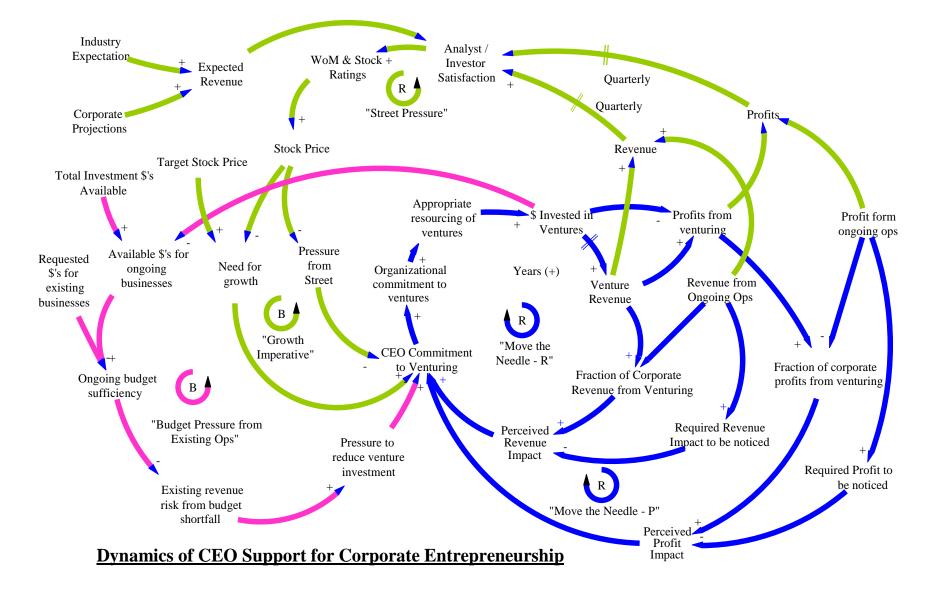
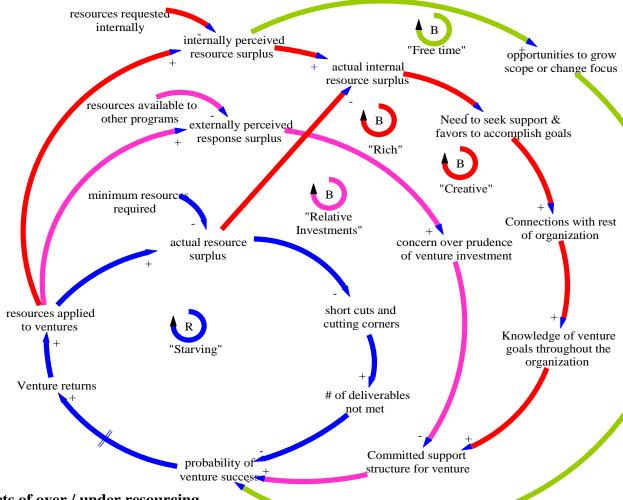


Figure 9: Example of the possible dynamics of CEO Support



Dynamic effects of over / under resourcing

Figure 10: Dynamics of over and under funding venture projects

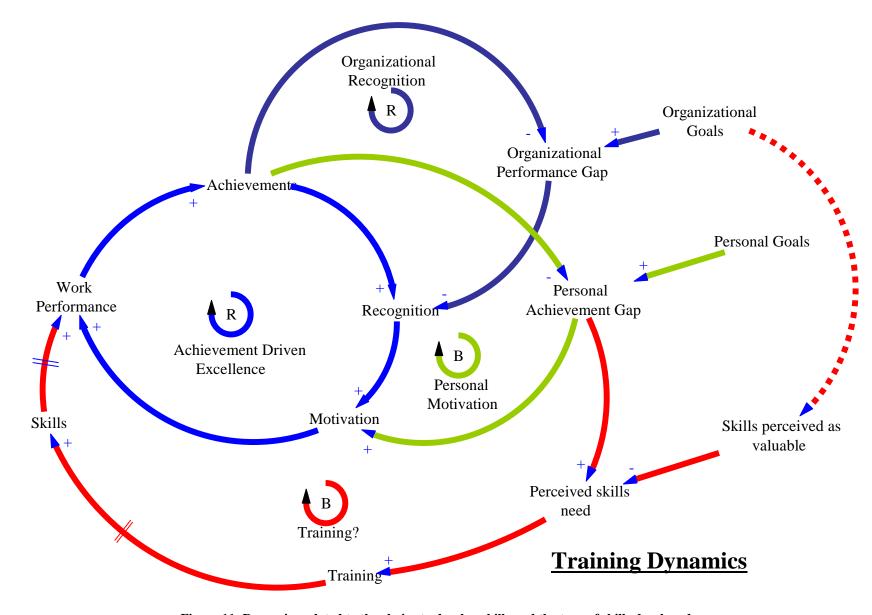


Figure 11: Dynamics related to the choice to develop skills and the type of skills developed

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4.6 Dynamic Venture Signatures

With a set of dynamics modeled, the dynamic venture signature becomes two things. One, it is a list of the important inputs (or settings) for these dynamics, and two, the current state of the required internal variables and additional "control knobs" which together define the relationships between the elements of the system.

Figure 12 shows schematically what the Dynamic Venture Signature (DVS) includes.

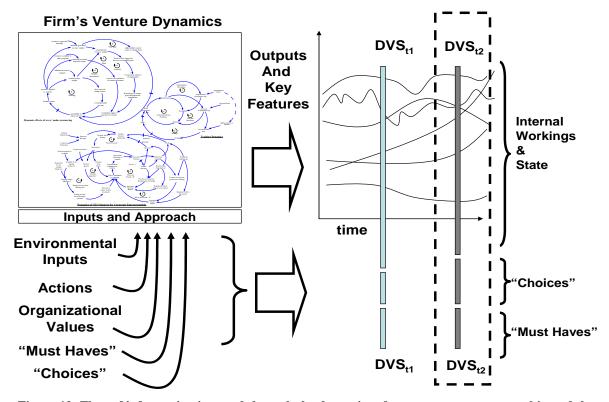


Figure 12: Flow of information into and through the dynamics of corporate entrepreneurship and the resulting dynamic venture signature made up of "internal workings and state", "choices", and "must haves".

The DVS is shown sampled at two different times (DVS $_{t1}$ and DVS $_{t2}$). It consists of the visible measured outputs and the states of the real world dynamics found in the firm combined with indicators of important required input elements and organizational choices. These three parts together make up the Dynamic Venture Signature.

The DVS can be broken into three parts. They are the "Must Haves", the "Internal workings" and the "Choices". The "Must Haves" are three high-level elements that need to be in place for corporate entrepreneurship efforts to be successful in the long run. The "internal workings" are important parameters which describe the current state of the dynamic system. The "Choices" are those things that a venture manager or senior management champion will have under their control. Understanding how the dynamics of the organization affect corporate entrepreneurship will help make sure that the "Must Haves" can be achieved for the long-term and appropriate selection of the other polices and structures, the "Choices", can be made based on the current state of the system. Based on the results of the interviews and review of the references the set of "Must Haves" and "Choices" is shown in Table 4.

The dynamics of corporate entrepreneurship are primarily used to identify the important internal measures in a firm that reflect its state with respect to corporate entrepreneurship so they can be sampled and measured over time. In Figure 12 the dynamics are shown as contributing to the outputs. One very interesting use for these dynamic models is to use them to predict how a firm's venturing approach could evolve given the inputs to the firm's corporate entrepreneurship system. They could also be used to predict if a venture "configured" in a particular way is likely to succeed. This analysis could be done for several scenarios and the range of outcomes examined.

The dynamic venture signature version 2.0 which combines the underlying dynamics of how the organization and corporate entrepreneurship works with a signature which provides a snapshot of the system shows a lot of promise. Further work is needed in this area to develop the set of core causal models, create the detailed venture signature collection tools and processes, and then complete additional primary research to test the concept further. But it can be

envisioned how a series of DVSs could be used to produce a corporate entrepreneurship "dashboard" or scorecard to be used for status or even early warning.

Must Haves	Defined venturing process		
	CEO / board sponsorship of the process		
	Process owner (individual or team)		
	Goals for venturing clearly defined		
	• Culture supportive of change		
Choices	• People		
	Organization structure		
	Incentives		
	• Strategy		
	 Source of venture ideas 		
	• Training		
	• (and more)		

Table 4: Summary of the breakout of factors for corporate entrepreneurship into "Must Have" and "Choices" categories. The "Must Haves" are a required starting point and the variety of options within the choices can be made based on an understanding of the dynamics of corporate entrepreneurship for the specific firm.

4.7 "Top Ten" dynamics of corporate entrepreneurship

Top 10 Dynamics of Corporate Entrepreneurship

1	"Corporate antibodies" or "organ rejection" where various elements of the		
	parent organization destroy the new venture.	Organization,	
2	History of corporate entrepreneurship successes and failures drive current	History, and	
	choices without analysis.	Goals	
3	Diverging strategies between parent and new ventures leading to eventual	30415	
	venture failure or no synergies between parent and venture.		
4	The forces on senior management which drive variation in support for		
	corporate entrepreneurship		
5	Difficulty with growing and nurturing entrepreneurship skills within an		
	established firm	People	
6	Middle management barriers / difficulty with corporate entrepreneurship	respie	
	efforts		
7	Difficulty of maintaining a culture of change and entrepreneurship in a firm		
8	Challenges with over and under funding a venture	Risk and	
9	Firm conservativeness in venturing	Dynamism	
10	The effect of industry structure, competitiveness, and firm position on	External	
	venturing success		

Table 5: The Top-10 dynamics of corporate entrepreneurship based on literature study and interviews with current corporate entrepreneurship practitioners.

Table 5 contains the "top ten" most important dynamics of corporate entrepreneurship based on the insights gathered in this work. Given the literature review, the interview discussions, and other observations these are the core dynamics which appear to have significant impact on the system and over the reference modes and elements of the venture signatures studied. They are ranked using frequency of "discussion" (in interviews or publications), size of the impact on corporate entrepreneurship efforts, and the difficulty of affecting change or adding, strengthening, changing critical dynamic loops as the selection criteria.

With the dynamic venture signature tuned to capture the relevant state of these dynamics and a process by which this sensing is done regularly a firm will be better positioned to understand where its venture activities may be going and what it might be able to do to steer them better. Companies must examine their current venture activities in light of these dynamics and ask themselves:

- 1. Does the company know how these "top ten" dynamics play out for them?
- 2. What are the specific forces in these dynamics that are driving the primary reference modes for this firm?
- 3. Can the important signals be identified and measured to characterize the firm's dynamics and to be used to see early signs that something is changing?
- 4. What policies, or knobs, are available to the firm to strengthen its corporate entrepreneurship efforts?

5.0 Conclusions

This thesis has explored the idea of applying signature analysis techniques commonly used for signal and image processing to a broad set of factors which influence the success and failure of corporate entrepreneurship efforts. Previous studies have focused on portions of the corporate entrepreneurship challenge while in this work the technique of signature analysis was applied in an effort to establish a more encompassing "venturing signature". The venture signature tied together many previously separate findings together and assembled "good sets" of practices to be emulated. The proposed venture signature was generated from a careful study of reference material, and interviews with industry practitioners were conducted to fill out the venture signatures for a number of companies. The interviews (conducted with eight corporations) produced a number of valuable insights on the venture signature concept, corporate entrepreneurship in general, and the dynamics of corporate entrepreneurship in various established companies.

As a result it was determined that the venture signature helps get a big picture view of the firm's current style at a point in time. This can be used in couple of ways focused on using the venture signature as a sensing and early warning tool.

- The static venture signature can be assembled periodically for a particular firm.
 This will indicate whether the current approach to corporate entrepreneurship is drifting form its intended style. It can provide early warning.
- 2. It can be used together with a database of patterns to look at an organization's approach to corporate entrepreneurship and determine if it fits any known signatures. This may provide results such as, "73% of firms with this signature

had moderate success in this industry". Or perhaps a more useful result might be, "1% of firms with this signature were successful".

Refinements to the venture signature along the lines suggested in improvement strategy one or two (deeper or broader) could be done first and followed with an extensive industry or company surveys and interviews to build the required database of venturing signatures to enable this.

However "pattern matching" alone doesn't provide the causal links between what a firm does, why it does them, and why those efforts were successful or not. These causal links are the critical parts to learning and applying the results to other situations. The <u>Dynamic</u> Venture Signature addresses this.

To assemble a dynamic venture signature the initial venture signature concept was refined and augmented with systemic models of the underlying organizational dynamics of corporate entrepreneurship. System dynamics techniques are employed for this purpose and several example dynamic models were explored.

Coupling the Top 10 dynamics of corporate entrepreneurship to the ability to sense and analyze the important factors within a firm has several benefits.

- It captures causality and why a combination of policies may work for one company but not another.
- It produces a framework that can be extended to a working model of corporate entrepreneurship. This can be used to examine the specific venturing style of the firm.
- It can be correlated to past performance and reference modes
- It can be used to explore future performance for specific venturing or venturing processes. A scenario approach can be used to look at possible futures.

Overall, this thesis has developed:

- An extensive survey of published research on corporate entrepreneurship was completed and summary recommendations, trade-offs, and dynamics (RTDs) are identified for several major groups of influential factors. (Section 9.0)
- A static venture signature based on the concepts found in signature analysis has been proposed and assembled as a way to pull together key factors from across the research into one profile. (Section 2.0)
- The best practices and recommendations from interviewed corporate entrepreneurship practitioners have been gathered and discussed. Their approaches have been assembled as venture signatures and are compared with each other and the published research. The static venture signature and basic signature analysis for corporate entrepreneurship is discussed. (Section 3.0)
- A dynamic venture signature for corporate entrepreneurship is proposed which
 includes an understanding of the underlying organizational dynamics and connects
 them to lessons learned, best practices, and a reformulated venture signature. (Section
 4.0)
- Some of these dynamics are described in more detail as examples of how the combination of the casual diagrams and the venture signature can provide a more complete picture of corporate entrepreneurship approaches which can be learned from. (Section 4.0)
- Finally, a proposal for how to approach further analysis in the dynamics of corporate entrepreneurship. (Section 4.0)

As a result, the following conclusions were reached:

- The overall corporate entrepreneurship reference material is quite broad and extensive.
 There are a lot of very good lessons learned and important factors described in this literature. However, the summary recommendations reached in many references often conflict with each other.
- The venture signatures from successful companies shared common attributes, but were also very different in others. When probed, corporate entrepreneurship practitioners often talk about their approach being appropriate for "the way their firm works". At the same time, both interviews and references reveal a number of consistent dynamics that exist no matter what the firm. This suggests that a better understanding of these underlying dynamics which drive success and failure of corporate entrepreneurship should be the primary and the venture signature is a snapshot of that dynamic system at a point in time. The "must haves" include: a defined venturing process, CEO / Board of Directors sponsorship of process, a process owner (individual/team), goals for venturing clearly defined, and a corporate culture supportive of change. The rest of the decisions typically described with

respect to corporate entrepreneurship are choices that each firm must make based on how the dynamics within their organization balance.

• To help in determining these choices a Top Ten Dynamics of Corporate Entrepreneurship are proposed. With this list, venture process managers and venture leaders can look for how these dynamics uniquely affect their organization and tailor their approach and the policies employed. They can make better selection of the settings for the "choice" variables. The recommendations and trade-offs also found in the literature review can provide ideas for this.

6.0 Next Steps

There is more work to be done to pursue this application of system dynamics and the Dynamic Venturing Signature. Next steps could include the following.

- Explore the "Top Ten" dynamics further. Does a set of common, core dynamics of corporate entrepreneurship exist across firms? Are the Top Ten dynamics the right ones? Are there others? Fewer?
 - Build out causal diagram for these dynamics that play into the appropriate reference modes.
 - o Identify key balancing and reinforcing loops
 - Survey and interview groups in corporate entrepreneurship roles and see if these are common dynamics with their experience
 - o Assemble "test" Top Ten
- How can the data for a dynamic venture signature be captured regularly?
 - o Is this another set of important attributes on a balanced scorecard?
 - o Does it provide other useful measures of innovation competency or health?
- Take the top conflicts in the recommended actions and best practices and see what organizational and personal dynamics may be leading to the various potential outcomes.
 - Verify the reference modes and build further models to correlate them to real company histories.
 - Test these critical dynamics with corporations to see if the dynamics they exhibit in these areas are the same or different.

- Determine how the various tools and policies that could be used for fostering corporate entrepreneurship would affect the dynamics or be consistent with or not consistent with different types of organizational cultures.
- Can monitoring the changes in culture and organizational dynamics provide leading indicators of the success of corporate entrepreneurship or provide signals that corporate entrepreneurship efforts need to react to in order to stay on a path for success?
- Take the listed recommendations, trade-offs, and dynamics from the literature review
 and build the set of dynamics and required cultural background to help pick the right
 implementation strategies.
- Explore each of the core areas in more detail. Identify specific best practices and determine and explore the dynamics they are intended to address.
- Develop a step by step process for assessing the culture and organizational dynamics
 of an organization and then the process for mapping the choices to outputs from that
 assessment. Develop a process for producing the strategy.

7.0 Closing Thoughts

In summary, the Dynamic Venture Signature approach is promising and provides a useful way to capture and communicate the important systems that affect corporate entrepreneurship. With an understanding of how the common dynamics are uniquely enacted in a firm the appropriate set of influencing factors and processes can be chosen that will reinforce the feedback loops that lead to corporate entrepreneurship success and downplay those that lead to failure.

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9.0 Literature Review and Analysis

9.1 Introduction

The next several sections will focus on reviewing many of the best thoughts and recommendations for tackling the challenge of corporate entrepreneurship that have been published. This examination will provide the foundation for the development of a dynamic view of corporate entrepreneurship and the discussion of the unique venturing signatures that emerge.

This analysis is organized into several sections. First, is a brief look at the definition of corporate entrepreneurship. This helps provide a "big picture" and context for the more focused sections. A definition is identified for the purposes of this paper. Then a set of significant factors influencing corporate entrepreneurship are identified followed by a number of sections where each factor is examined in more detail.

For each factor the basic challenges are reviewed and previous work is explored with an interest in identifying important factors that influence the dynamics of corporate entrepreneurship. It is of particular interest to note conflicting recommendations and trade-offs. Those situations where different studies came to different conclusions point to interacting factors that can be very important. Also in each section some of the best practices explicitly mentioned in previous work have been highlighted. These recommendations are also important factors to consider in the development of a dynamic view of corporate entrepreneurship.

Most often, the image that comes to mind when the word 'entrepreneurship' is mentioned is a small, independent, start-up. It's a small business out on its own, with a new product or offering that "will change the world", and staffed by an energetic and passionate team pursuing their vision the best way they see fit. But start-ups are not the only kind of entrepreneurship

taking place. Significant entrepreneurial endeavors can also be found inside existing corporations. Starting new things inside, or at least "belonging to", existing companies is often more difficult than one would think. They must exist in the presence of past success, proven approaches to growth (every company had to start somewhere and do something right to grow to the point where these questions get asked), and a wealth of experienced leaders all of which contribute to the challenges. Garvin provided the following description of the challenge: "Some problems", wrote Laurence J. Peter, the business humorist, "are so complex that you have to be well informed just to be undecided about them." (Garvin, 2004b) Top-line growth is one of those, especially when it comes to creating new businesses within large complex companies. The challenges are vast, and it's difficult to know how or even whether to move forward.

9.2 What is corporate entrepreneurship and why do it?

Many definitions of corporate entrepreneurship have been proposed but they all focus on a couple of core ideas: the birth of new businesses from within an existing business, or the strategic renewal of an existing business. In either case something new from something old. "... Corporate entrepreneurship may be viewed more broadly as consisting of two types of phenomena and processes: (1) the birth of new businesses within existing organizations, whether through internal innovation or joint ventures/alliances; and (2) the transformation of organizations through strategic renewal, i.e., the creation of new wealth through the combination of resources." (Dess et al., 1999). The rationale is that corporations undertake venturing in order to improve their overall business situation. It's an interesting subject and many studies have been conducted to understand it at a deeper level. What motivates corporate entrepreneurship efforts? The results range from environmental drivers to senior leadership changes. Miles and Covin (Miles & Covin, 2002) make the point that in the end, corporate entrepreneurship is pursued to

specifically address the basic pillars of strategic advantage described by Porter (1980,1985). Porter says that leadership and differentiation are critical. Corporate entrepreneurship is seen as a way for the business to renew its efforts in addressing them. Hopefully, the effort results in an improvement in the performance of the overall business. This also has been studied but unfortunately, results have been mixed. There are a number of studies such as those done by Zahra and Covin (Zahra & Covin, 1995) that analyze the link between corporate entrepreneurship and value creation. They sought to measure performance in an effort to look at how much payoff is achieved for the effort employed.

Some authors have added interesting additional elements to their definitions that are worth noting. Kuratko (Kuratko et al., 1990) found Vesper to be particularly interesting. Three major definitions of corporate venturing behavior are:

- 1. Creating and deploying a new strategic direction
- 2. Sponsoring and delivering based on initiative from below in the organization
- 3. The creation of autonomous businesses. (Vesper, 1984).

Covin and Miles (Covin & Miles, 1999) agreed and added a small twist:

- 1. An "established" org enters a new business
- 2. Individuals champion new product ideas within a corporate context
- 3. An "entrepreneurial" philosophy permeates an entire organization's outlook and operations.

The bottoms-up "sponsoring" or "championing" of ventures and the "entrepreneurial philosophy" permeating the organization indicate elements of the "start-up mentality" but also being able to leverage resources (talent, investment dollars, supply chain, etc) available in a corporation.

Authors have tried to organize their observations into distinctive forms of corporate entrepreneurship. Covin (Covin & Miles, 1999) found four forms is shown in Table 6.

Some Key Attributes of the Four Forms of Corporate Entrepreneurship

Form of Corporate Entrepreneurship	Focus of Corporate Entrepreneurship	Typical Basis for Competitive Advantage	Typical Frequency of New Entrepreneurial Acts*	Magnitude of Negative Impact if New Entrepreneurial Act is Unsuccessful
Sustained Regeneration	New Products or New Markets	Differentiation	High Frequency	Low
Organizational Rejuvenation	The Organization	Cost Leadership	Moderate Frequency	Low-to-Moderate
Strategic Renewal	Business Strategy	Varies with Specific Form / Manifestation	Less Frequent	Moderate-to-High
Domain Redefinition	Creation and Exploitation of Product-Market Arenas	Quick Response	Infrequent	Varies with Specific Form, Manifestation, and Contextual Considerations

^{*} New Entrepreneurial Acts for:

- Sustained Regeneration: A new product introduction of the entrance of a new (to the firm) but existing market
- Organizational Rejuvenation: A major, internally focused innovation aimed at improving firm functioning or strategy implementation
- Strategic Renewal: The pursuit of new strategic direction
- Domain Redefinition: The creation of a new, previously unoccupied product/market arena

Table 6: (Covin & Miles, 1999) characterization of four primary forms of corporate entrepreneurship and the characteristics of them.

Thornberry (Thornberry, 2001) boiled it down to six major themes. They are:

- 1. corporate entrepreneurship is the "creation of something new"
- 2. corporate entrepreneurship requires new resources or changes in the pattern of behavior of current allocation
- 3. corporate entrepreneurship creates learning in creation and implementation
- 4. corporate entrepreneurship is intended to deliver long-term economic benefits

- 5. the "new thing" is predicted to be better than the existing business
- 6. corporate entrepreneurship implies an increased risk because the "new thing" is unproven.

Zahra (Zahra, 1999) recognized that corporate entrepreneurship is primarily a knowledge or learning endeavor. The corporate entrepreneur creates the knowledge required to build new competencies and revitalize old ones. It is therefore strongly linked to a corporation's ability to both learn and unlearn.

These highlight several of the characteristic factors that describe the ways that venturing is pursued. They also show the apparent need to simplify these complicated endeavors and classify them by a small set of dimensions.

These factors, and others that are perceived to be important, will be examined as a set of dynamic, interconnected and interacting levers. The question to be understood further is: Why does an organization choose to pursue one form or another? What impact will changes in factors have on the choices made? How do these factors interact?

Combining several views of corporate entrepreneurship leads to an operational definition. Corporate entrepreneurship is the creation of "something new" from the "materials" of an existing corporation, but probably supplemented from within or without, with the intent to improve and grow the overall business. As such it must stretch and reshape the existing company, changing capabilities and assets, affecting new and old parts alike. Corporate venturing is not a one-time activity but an ongoing, holistic, entrepreneurial way that a business grows and evolves.

9.3 The challenge of corporate entrepreneurship

Data show that the majority of new businesses fail. Garvin's analysis found that over the 1970s and 80s that roughly 60% of small businesses failed in the 1st six years. (Other data show that this is optimistic.) With the added support of a large corporation (HR, legal, manufacturing, sales, R&D, etc), corporate ventures (internally generated start-ups or joint-ventures) only did slight better. (This study equated failure as divesture or closing operations) (Garvin, 2004b). To confuse matters more, other studies (and significant anecdotal evidence) show that corporate "support" actually impedes the progress of start-ups. Guth (Guth & Ginsberg, 1990) references results showing that venture-backed start-ups, on average, reach profitability twice as fast and are two-times more profitable than corporate start-ups. While this may not be a fair comparison due to many reasons, it does reflect the common findings that the barriers to venturing created by a corporation outweigh the benefits. The limited success of corporate venturing groups is just as disheartening as the results of their projects. Kanter references an estimate by Zenas Block that 80-90% of corporate venturing groups are failures (Kanter, 1989). Their activities lead to the venturing group either being absorbed into the strategic planning function, the team members become venturing "analysts" vs. venturing "activists", or early success encourages the new business to consume the venture group leaving no one to work towards the original goal of ongoing venturing and renewal.

It should be possible, with all their resources and talent, corporations would be better at venturing than this. (Schumpter, 1942) observed that "Corporations should have the resources and financial freedom needed to invest in risky projects." The unique challenge it seems is to shelter the innovative activity from the pressure of ongoing operations (Sharma, 1999) and the challenge of investing in the future while operating in the present. Many agree that the

"corporate baggage" gets in the way. This sounds simple enough to address. Surely there are some straight forward answers. Unfortunately however case studies and publications are filled with examples demonstrating how much more difficult it really is.

A high-level model that is particularly interesting describes the evolution and survival of start-ups in terms of their resources, processes and values and why this makes renewal difficult. (Christensen & Overdorf, 2000). All start-ups (corporate or independent) begin with basic resources needed to get going. As they mature, independent start-ups live or die based on the processes and values established by their founders and early leaders. The authors explain that the failed start-ups either could not establish the required processes and values, or the processes and values put in place by the founders were not appropriate and were <u>deadly</u> to the organization. The very fact that a start-up survives and evolves into a major corporation means that the processes and values in existence have proven to be suitable for the business at hand. The problem arises when a group within the context of these resources, processes and values wants to do something different. "Innovation is hard... capable people set out to work within organizational structures whose processes and values weren't designed for the task at hand." (Christensen & Overdorf, 2000) These incompatibilities, more often than not, lead to failure.

Along these same lines, Starr and MacMillan say that all the barriers are attributable to the: climate, structure, culture of the firm and the behavior of senior management (Starr & MacMillan, 1990). Thornberry (Thornberry, 2001) articulated the following list of challenges and pitfalls that face corporate entrepreneurs:

- 1. Corporate entrepreneurship can require big changes in culture and systems
- 2. Not allowing for or celebrating mistakes that generate learning

- 3. Not knowing what you want from corporate entrepreneurship
- 4. Not having or being able to grow entrepreneurs
- 5. Upper and middle management can be barriers
- 6. Having part-time entrepreneurs is bad (if something is worth doing, it is worth doing full-time)
- 7. Not having the required skills, the "art of the deal" and getting people, resources, and energy together and focused
- 8. Knowing one's own strengths and weaknesses.

Figure 13 and Figure 14 show a number of additional causes for failure taken from a variety of cases.

The note in Figure 13 is <u>very</u> important. It identifies the heart of the challenge in studies of corporate entrepreneurship. The reported reasons for failure are not consistently indicators of success or failure. In some cases the reported reasons for failure were present in successful ventures. For example, Figure 13 has both "too much money allocated" and "too little money allocated" listed. This indicates what could be a different balancing act or trade-off in the decision-making surrounding how to go after the venture. Trade-offs such as these indicate that interesting dynamics lie under the surface. A checklist approach will not be suitable for a complex system of this type. There are some larger influencing factors or some sort of dynamics that are not captured in the lists of do's and don'ts. Questions to be explored are: What are some of the additional factors? How do combinations of factors, or certain sets of choices that lead to success or failure when looked at as an interactive set? How do these indicators interact dynamically and evolve over time?

Reported Reasons for Venture Failures by Corporations

- •Lack of an entrepreneurial manager
- •Political problems within the corporation
- •No top management corporate sponsor (or loss of same)
- •Corporate controls too tight
- •Change in parent company emphasis to cost cutting
- •Venture shifted to operating division too soon
- •Not enough money allocated
- •Too much money allocated
- •Too much corporate overhead allocated too soon
- •No clear charter or mission for the venture
- •Venture management changed too frequently
- •Venture management not changed when necessary
- •Venture team inexperienced in the market served
- •Venture managers recruited from too high a level
- •Venture managers recruited from too low a level
- •Too much corporate red tape

- •Insufficient delegation to venture management
- •Venture too different from present business
- •Venture choice ill advised because of influence of proposer
- Wrong distribution channels used
- •Venture too small, company lost interest
- Failure to read market reaction correctly or report it
- •Irrelevant compensation for venture management leading to a loss of key management
- •Failure to achieve market share early
- •No company support during early nurturing period
- •Change in market and economic conditions
- •Venture not in response to market need
- •Change in company top management
- •Financial controls too general resulting in throwing in more money and large losses

NOTE: There have also been outstanding successes where many of these elements have been present

Figure 13: An example of the kinds of reasons given to explain corporate venture failures. (Block, 1982)

Managerial Challenges and Pitfalls

Experimentation

Institutionalization **Validation** Scale-Up **Exploration** · Lack of clear • Poorly designed tests • Inability to secure • Failure to leverage market / customer · Lack of clear needed resources existing firm resources / information decision criteria • Improper pace systems • Technical • Poor fit with • Unrealistic • Inadequate executive ambiguity traditional metrics expectations sponsorship • The "move the Difficulty • Lack of supporting Failure to find an needle" effect overcoming the firm's infrastructure organizational "home" • The improper use "dominant logic" • Inadequate controls Management of analogies · Escalation of succession issues • Technology in commitment Lack of process search of a market discipline

Figure 14: A processes-based list of venturing challenges (Garvin and Levesque, 2004)

Other examples of common trade-offs often discussed are balancing short-term vs. long-term investments and, balancing the venture's freedom vs. corporate controls and processes.

Short-term vs. long-term:

Many studies (for example (Miles & Covin, 2002); (Garvin, 2004b)) show that the time to positive returns is 7-8 years, the time to the desired ROI is 10-12 years and few to none of the ventures (at least those studied) were profitable in the first two years. Time frames to maturity like these require "patient money" which, as we know, is often difficult to sustain in the changing corporate environment. Empirical evidence of the lack of "patient money" is visible in the life span of both internal venture units and corporate venture capital funds which tend to short – on average 4-5 years (Garvin, 2004b).

Freedom vs. corporate controls:

A fundamental dilemma is between freedom and control. Often management procedures and techniques for established businesses are inappropriately enforced on new ventures (Starr & MacMillan, 1990) and corporate entrepreneurs find themselves unable to bend or break these rules in order to do the right things for their ventures. This issue is described as "... the conflict between large companies' needs for stability and order to ensure coordination and disciplined execution, and new businesses' needs for flexibility and experimentation to ensure fresh, innovative approaches" (March, 1991). Specific examples of the kinds of bureaucratic barriers to venturing were enumerated by Quinn (Quinn, 1985). The list included: top management isolation, intolerance of fanatics, short-time horizons, rigorous accounting practices, excessive rationalism, excessive bureaucracy (exhibited as slow speed for decisions and action), and inappropriate HR policies and incentives. Corporate bureaucracy is a consistent theme throughout the research. It has been described as "... the inability of managers to deal

effectively with key dilemmas encountered in locating, seizing, and then methodically navigating a creative idea through the bureaucratic maze" (Sharma, 1999). A more process oriented view of this same problem is that, "... knowledge about new markets for new products in established firms is a more complex process than in start-up firms. The structures and processes in place to manage <u>established</u> products (do not result) in knowledge of <u>new</u> opportunities" (Dougherty, 1990).

There are of course people issues as well. They range from the lack of the right skill sets (Starr & MacMillan, 1990) to a lack of entrepreneurial orientation (EO), incentives, and corporate culture. Sharma interpreted this set of dilemmas in a more people oriented manner saying: "it's not so much bureaucracy but rather a lack of experience or judgment at reconciling new ideas in the context of preexisting interests."

In the end, there are many kinds of failure modes for new ventures. These are just a few of the challenges that emerge when trying to start something new within an existing organization. The next sections will begin with a look at how sets of factors have been organized by others. To begin this analysis the significant organizing categories must be determined.

9.4 Strategic factors, preferred processes, and breadth of recommendations

As one can imagine, many factors can have an influence on corporate entrepreneurship. A review of existing publications has identified many observed factors. Key factors were extracted from the identified challenges and common themes in the recommendations of many studies. Dess describes three high-level categories for these strategic factors (Dess et al., 1999). They are: Strategies, Structures, and Processes. Figure 15 from Guth (Guth & Ginsberg, 1990) shows one way that corporate entrepreneurship has been positioned in the context of a larger set of factors that influence it. This particular example was the organizing principle used to describe

a set of articles covering various aspects of corporate entrepreneurship. It shows one way that the various subjects fit together. The three major inputs: environment, strategic leaders, and organization conduct/form influence each other and have an effect on corporate entrepreneurship. Organizational performance, the primary output, will be affected by successful corporate ventures but also in turn influences the ongoing nature of the corporate entrepreneurship activities. The connections between factors shown here hint at high-level, causal loops that could drive the dynamics of corporate entrepreneurship.

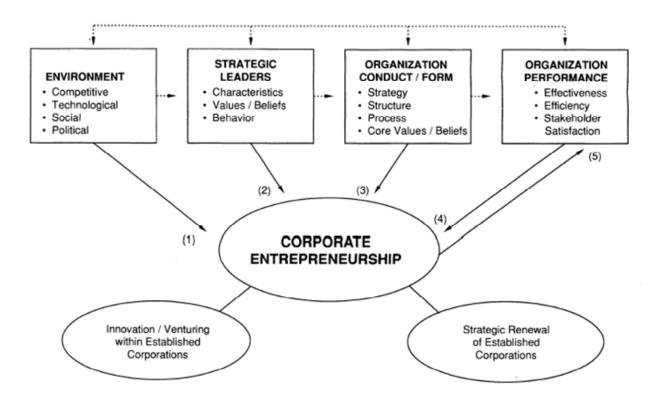


Figure 15: A way to look at corporate entrepreneurship in the context of some influencing factors (Guth & Ginsberg, 1990).

Another way to examine corporate entrepreneurship for important factors is to look at it as a process that is enacted by an organization. An example of this approach is from Hornsby (Hornsby, Naffzinger, Kuratko, & Montagno, 1993). Here the primary factors identified are: the characteristics of the organization, the characteristics of the individuals involved (but primarily

the venture manager), the event which leads to a decision to try venturing, the decision making processes, the planning and testing of ideas, the availability of resources, the ability to overcome obstacles, and finally the way the venture is implemented.

Hornsby et al. propose a basic flow, or interaction, between these factors. Figure 16 shows the authors' proposal for how the primary factors influencing corporate entrepreneurship interact. Once again, while providing some good high-level categories for deeper review this also hints at the interrelatedness and dynamics of corporate entrepreneurship that could lie underneath.

An Interactive Model of Corporate Entrepreneurship

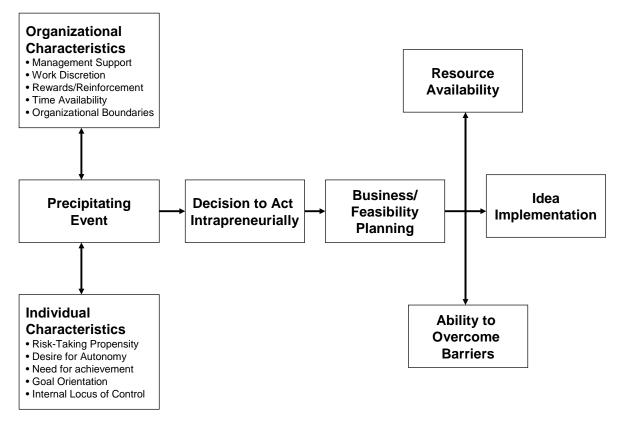


Figure 16: A process view of corporate entrepreneurship showing several factors which shape strategies and outcomes of the efforts. (Hornsby et al, 1993)

The survey of the existing papers, cases, and high-level frameworks lead to a shorter list of important features. These are the ones to be explored more deeply in the following sections. They are:

- Goals
- Strategies
- People
- Processes
- Resources
- Organization
- Source of Venture Ideas
- Culture
- Incentives
- Environment

In each section, findings from previous research and recommendations from case studies will be reviewed. Throughout, interesting issues and dynamics are highlighted. In many cases a brief summary and list of recommendations are also included.

9.4.1 Goals

As in any project, being specific about the goals for corporate venturing is critical. Goals are sometimes confused with strategy. For this document, goals are the end-state to be achieved while strategy is how to arrive at that point. Previous work shows that goals for a corporate entrepreneurship effort need to be well defined and well understood to avoid confusion and the eventual collapse of the effort.

There are many potential goals for corporate entrepreneurship but most often management hopes that venture activities will be a way to promote and sustain competitiveness. "... Corporate entrepreneurship is engaged in to increase competitiveness through efforts aimed at the rejuvenation, renewal, and redefinition, of organizations, their markets, or industries. Corporate entrepreneurship revitalizes, reinvigorates and reinvents. It is the spark and catalyst

that is intended to place firms on the path to competitive superiority or keep them in completely advantageous positions" (Covin & Miles, 1999). The desire for "reinvigoration and renewal" is almost universal in firms undertaking corporate entrepreneurship efforts, but as a goal, is very "squishy". This can make it very hard to do in practice.

One of the most common challenges with goals is that high-level goals with mixed messages can easily set an effort on a path toward failure. "What went wrong? Our research indicates that the biggest mistake companies made was setting up venturing units with mixed objectives and mixed-up business models" (Campbell et al., 2003). Organizations can exhibit this mixed objectives problem from the outset and this confusion is a major cause of venturing problems. Clarity, specificity, and focus are very important to the success of any venture. In addition, what is perhaps more common is that the team's goals evolve over time. "Goal creep" has been recognized as a danger sign in projects of all sorts. This happens in many ways. One common way is becoming more conservative. "As a radical innovation system evolves, the temptation is to migrate away from the original objective of developing longer-term but higherrisk big hits. Instead, pressure to perform mounts, causing many systems to retrench to aligned shorter-term projects in order to show results" (O'Connor & Ayers, 2005). This is driven by an organizational dynamic magnified by the imbalance between long-term goals and the short-term pressures of the business, or more specifically, the needs of the venture vs. established business. Another example of goal evolution is that many times programs originally designed to "harvest" a corporation's intellectual property or other assets for purely financial returns evolve into efforts in new business creation; a goal the teams were not designed or staffed for. The "harvest team" experiences the excitement of new ventures enabled by the assets they are selling or licensing and figures that they could build a new business just as easily. (Campbell et al., 2003) To have

higher chances for success goals must be structured appropriately, remain clear, and the implications of changes to the goals must be understood.

A tool that can help an organization think through its goals more clearly was proposed by Hickman and Raia (Hickman & Raia, 2002). Their "four perspectives of innovation" framework is shown in Figure 17. It focuses on helping an organization think though its own capabilities and the strategic scope of the goals to be pursued in order to avoid some of the failure modes previously discussed. Each of the "perspectives" in their framework is in essence a different, specific goal that venture activities could be aimed at. It is important to be clear about the specific goal because, as the rest of Hickman and Raia (Figure 18) shows, there will be different organizational and operational implications based on the "perspective" chosen. Using such a framework can help in specifying goals and understanding the implications of these goals more clearly. The fact that different approaches are suggested for different conditions indicates why some ventures can go wrong. They can fail when they are all treated the same but required some unique attention or approach. If management aims toward one goal but has the organization and systems designed for another, it is setting up the venture for serious problems in the future.

The authors make the point that based on the type of goals there will be unique processes, people, spaces, etc that will be assembled to achieve them. This is highlighted in the notion of their "Path to Grow" and the notes in Figure 17.

Four perspectives of Innovation (Hickman / Raia – 2003)

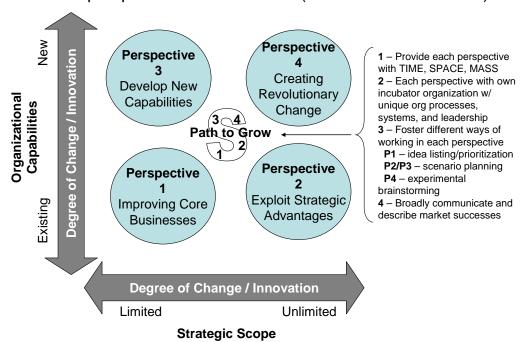


Figure 17: Hickman and Raia (2003) proposed a framework to think about setting goals for a new venture effort.

Hickman, Raia	
(2003)	Four Innovation Perspectives

	Perspective	Focus	Key Strengths	Potential Weakness	Examples	Organization
P1	Improving Core Business	continually enhance, refine, and improve primary business through product/service-line extensions, new and improved product/service variations, more convenient packaging and delivery, and other product/service modifications.	rapid implementation and relative cost efficiency	market myopia and inadequate responses to market and competitor changes	Frito-Lay's 3D and WOW snacks, Microsoft's Windows XP, and Ford's 2002 Thunderbird	dependence on in-house
P2	Exploiting Strategic Advantages	Dramatically broaden the scope of strategic thinking to find new product/service categories, market/customer segments, usage	Relatively low risk investment for potential high return and strategic value/cost leverage.	Relative ease of duplication by	Coleman's backyard gas grill, Subway Sandwich's weight -loss campaign, and Federal Express' Home Delivery Service.	
P3	Developing New Capabilities	Substantially expand the company's capabilities through the acquisition or development of new technologies, talents, services, and business enterprises.	Long-term customer advantages and brand/loyalty leverage	Investment cost and implementation time	Time-Warner's merger with AOL; Sam's Club's online auction, travel, and garment personalization services; and Hewlett-Packard's acquisition of Compaq.	Use of outsourcing, acquisitions, joint ventures, strategic alliances, licensing, and franchising
P4	Creating Revolutionary Change	Transform the future of the business enterprise by introducing new business models and groundbreaking organizational forms, and by creating new industries and markets	First mover advantage and heightened competence in creative destruction	Lack of urgency and high risk of failure/irrelevance	Nokia, Starbucks, and Amazon.com	Reliance upon perpetual outsourcing and virtualism (virtual teams, virtual solutions environments, virtual alliances).

Figure 18: Hickman and Raia's advice and examples for investigating venturing goals.

Some examples of goals from recent cases are: The IBM Emerging Business Opportunities program (Nunes, 2004) is focused on "...identifying new businesses that would develop into scalable growth businesses with significant recurring revenue streams." Nokia Venture Organization (NVO) describes their goals in a slightly different way. "NVO functions as an accelerator; it speeds up the development of ideas. New businesses that can run on their own leave NVO." (Day et al., 2001) Nokia adds some additional criteria to their goals that venturing opportunities must have the potential to reach \$500M-\$1B in size and be profitable in 4-5 years. Both of these examples formulate goals for new business creation in X years to return \$Y. This is a common way for goals to be defined for corporate entrepreneurship efforts. In fact it's interesting that even in the 1970's many large companies used \$1B as the target size for ventures (Exxon and Dow) while others used \$100M as their targets (RCA,3M). With similar targets used 30 years later it implies something about the nature of the targets. It's improbable that these ventures really need to achieve these thresholds for some business reason; most likely these goals are just "big numbers".

In summary, a survey of published material shows that the goals should be specific and clearly communicated as they will impact many other decision throughout the corporate ventures attempted. Changes to goals are often necessary, but those changes need to be formerly recognized. They should be evaluated to know if the organization can achieve them. Beyond the particulars of any one venture goal, there is a more fundamental, perhaps more cultural, attitude that must also be developed. It may simply be that "...if a company wishes to continue to be entrepreneurial, it must convince everyone that <u>change</u> is the company's overriding goal" (Stevenson & Jarrillo-Mossi, 1986). Developing a culture that supports the need to be

entrepreneurial, to seek out new opportunities, and to welcome change may be the most important and most difficult goal to act on.

The implications of goal selection, changing or evolving goals, poorly communicated goals, or goals that are not agreed upon will all be considered in the analysis of venture dynamics. Determining the way to achieve these goals falls into choices in strategy.

Goals - Recommendations (R), Trade-offs (T), and Dynamics (D):

- R: Clear, long-term vision beyond simple economics is required. (Quinn, 1985)
- R: Successful firms seem to do more radical and frequent venturing vs. long-term periodic ventures. (Guth & Ginsberg, 1990)
- T: Are you investing "patient money" for the long-term or are short-term returns required to get something started and build support? (Kanter, 1989)
- T: What are the specific goals for return: Short (1-3 yrs), Med (4-5 yrs), Long (6-9 yrs), strategic (10+ yrs) (Garvin, 2004b)
- T: Are you pursing white space (between organizations), grey space (across organizations), or other strategic areas in your venturing activities?
- T: Will your new venture's business goals be the same as the originating organization's or new and different?
- D: The organization's cultural attitudes towards change and new projects will greatly impact the success of corporate entrepreneurship efforts.
- D: The goals for a corporate entrepreneurship effort will be influenced by changes in the strength and types of pressures felt by senior and venture management.

- D: Downturns only lead to new directions after top management changes. (Guth & Ginsberg, 1990) Often new efforts cannot start until senior management can let go of past strategies.
- D: Sustaining a culture of change
- D: Handling "goal creep"
- D: Long-term goals and short-term pressures

9.4.2 Strategies

Strategy (or tactics, depending on the timeframe) is perhaps one of the most studied topics found in the existing literature. Each reference examines a different set of factors to understand their influence on the outcome of the corporate ventures of all kinds. Each author seeks to provide a set of actions or decision criteria to be used in making better strategic choices. This provides a rich set of material from which lessons can be learned and relevant dynamics of corporate entrepreneurship can be extracted.

Strategy can exist at several levels. There are many tools for developing business strategies which include:

- Industry Analysis Five Forces (Porter, 1980)
- Competitor Analysis Four corners analysis (Porter, 1980)
- A resource-based theory of competitive advantage (Grant, 1991)
- Technology and industry S-curves and industry evolution (Abernathy & Utterback, 1978; Foster, 1986)
- The Delta Model (Hax & Wilde, 2001)
- Balanced Scorecard (Kaplan & Norton, 1992)

- Analyses of uniqueness and complementary assets
- And many, many others.

Any venturing opportunity should take advantage of these tools to help make informed decisions. In addition, there are also frameworks specifically targeted at corporate entrepreneurship which may be particularly useful. These frameworks, several of which are discussed in the following section, deal specifically with helping venture leaders weigh their options when initiating corporate entrepreneurship activities. The misalignment of strategies between organizations or within an organization can be very important to understand particularly in corporate entrepreneurship when new things are being experimented with. This will also be discussed.

What can go wrong?

To begin examining strategies employed by corporations it helps to start with a brief look at how strategies can go wrong and reasons why corporations can fail to make good strategic choices. Dealing with uncertainty is difficult in any situation. Dealing with entrepreneurial uncertainty in a corporate context may be particularly difficult as the normal corporate tools employed may not be effective. Often without a well developed strategy or a framework for decision-making, organizations will "manage as they go". The "corporate inertia" keeps them on their current trajectory. Sull (Sull, 2004) observed a couple of potential reactions to uncertainty. Corporations may avoid the uncertainty all together and ignore the opportunities (or needs) that appear. On the other hand, firms could get "lost in the trees" and perpetually firefight. They could move from one crisis to another without a clear direction or a "view of the forest" that would help them move towards their long-term goals. Sull (Sull, 1999) described this problem as "Active Inertia". He observes that the problem isn't that the corporations are blind to the challenge, nor are they powerless or incapable of coming up with a strategy. Corporations

recognize the need for action and they do act. The problem is, they just don't do the right things. In many cases, this results in the corporation continuing to move along its present course, sometimes hurting the organization tremendously. Four of the hallmarks of Active Inertia are:

- A corporations strategic frames become blinders
- Processes harden into routines
- Existing internal and external relationships become shackles
- Values harden into dogmas

So what does a corporation need to do to avoid these problems and develop and implement a strategy capable of achieving explicit growth goals? The consistent advice is for corporations to explore and employ a range of corporate entrepreneurship strategies as part of a situationally dependent approach to corporate entrepreneurship. Dess suggests "... a key benefit of corporate entrepreneurship may be to push organizations to employ a range of strategies, often in unique combinations and to strive to be a strong performer in all of them" (Dess et al., 1999). The range of venturing options includes internal development, acquisitions, joint ventures, venture capital, spin outs, and more. Of course, choices must be made. It will likely be difficult for corporations to consider all the options, all the time. But, it is possible for all the potential strategies to be reviewed and the most appropriate chosen. It is important to match strategies with the needs of the opportunity and capabilities of the organization. Choosing the wrong strategy for the specific opportunity can lead to unsuccessful ventures and disappointing stories. "It was an unfamiliar area", Mr. Fields says of the giant company's view of his five year stint as an in-house entrepreneur, "and the lack of strategic fit with Allied's business haunted us." (Gupta, 1987).

In addition, there can be principle/agent problems as well. Strategies can diverge between a parent organization and its offspring. Differences can create situations where each organization's interests, plans, even views of current goals, are no longer consistent. This potential for divergent strategies between the parent and the new venture can be a critical dynamic.

A strategy begins with the CEO and Senior Management:

Determining how to choose a venturing strategy can be difficult. There is plenty of advice about what to consider. The strategy advice starts by focusing on what those at the top need to know. Miles and Covin (Miles & Covin, 2002) advise CEOs to manage the various venturing methods together as a set. Senior management needs options. CEOs need to understand the trade-offs between the various options, when to employ each one, and how to ensure that the corporation can coordinate the expertise in each area. The CEOs goal is to ensure that the corporation can match the specific attributes of the particular opportunity with the most appropriate strategy for the current circumstances. The implication is that the more options available to an organization the better the corporation will be at matching the opportunity with an appropriate method and not be artificially constrained in the process. This requires active support of senior management to organize for and support these interactions.

Another part of corporate entrepreneurship strategy is choosing sources of ideas. Linder (Linder, Jarvenpaa, & Davenport, 2003) also suggests managing this holistically. There are three questions that senior management needs to be able to answer when considering venturing and innovation.

1. What is the organization's overall innovation strategy including goals, desirable domains, and end-products?

- 2. How will inside and outside sources be managed in order to execute the innovation strategy, and what key sourcing principles will guide decisions in this area?
- 3. How will the organization manage both internal and external sources of innovation to ensure that business goals are achieved?

Similarly, Block (Block, 1982) is very concerned about matching venture formats with the company culture and suggests that an iterative process is needed to figure this out. The prerequisite questions that need to be asked are:

- What are the risks involved in this venture and can we afford to take them?
- What are the sources, skills, and knowledge required for this venture and can we supply them?
- How do our values, goals, and attitudes differ from those required to support the venture and can we adapt?
- What are the timing requirements for launching this venture and can we meet them?

Questions such as these for senior management provide the basic background for analyzing the problem. They provide the inputs to the strategy decisions, but much more is needed. To facilitate the process many researchers have proposed frameworks for structuring the decision-making. There are of course a number of ways to examine this and a sample of frameworks has been reviewed. These frameworks include:

Familiarity Matrix - (Roberts & Berry, 1985)

Six needs for new ventures - (Koen, 2000)

Ally or Acquire? - (Roberts & Liu, 2001)

Four forms of corporate venturing - (Miles & Covin, 2002)

Various forms of venture units - (Campbell et al., 2003)

Three ways corporate venturing works - (Iansiti et al., 2003)

Four approaches for growth - (Nunes, 2004)

Four models for radical innovation - (O'Connor & Ayers, 2005)

These frameworks will be described and compared in the rest of this section. Important to this analysis is looking at how the authors use specific features to differentiate between strategic choices. In addition, several of the frameworks will be "added together" to look at how the recommendations fit together. Some short observations from the case studies will follow.

The first of the frameworks is Roberts and Berry, the Familiarity Matrix. Based on an empirical study the authors proposed a framework for choosing the optimum entry strategy for a new venture. In this framework, the authors consider a broad range of possible venturing styles and propose a way to choose. It is based on two factors which they found to be correlated to the success or failure of the ventures studied. The two factors are: the organization's familiarity with the new venture's market and the organization's familiarity with the technologies or services embedded in the venture's products. The authors found the appropriate venturing strategy for various combinations of these factors based on historical success. Figure 19 shows how, as unfamiliarity increases in markets or technologies, the more effective ventures should become partnerships with others that have the needed expertise. As unfamiliarity continues to increase the recommended strategies include arms length investments which should be structured for knowledge or skills gathering. The pluses and minuses of each approach are listed in Figure 20.

Optimum Entry Strategies

		Joint Ventures	Venture Capital	Venture Capital
			or	or
	New		Venture Nurturing	Venture Nurturing
	Unfamiliar		or	or
			Educational Acquisitions	Educational Acquisitions
Factors		Internal Market	Internal Ventures	Venture Capital
ヹ		Developments	or	or
Б	New	or	Acquisitions	Venture Nurturing
et	Familiar	Acquisitions	or	or
Market		(or Joint Ventures)	Licensing	Educational Acquisitions
Σ				·
		Internal Base	Internal Product	"New Style"
		Developments	Developments	Joint Ventures
	Base		or	
		(or Acquisitions)	Acquisitions	
			or	
			Licensing	
		Base	New	New
		Dase	Familiar	Unfamiliar

Technologies or Services Embodied in the Product

Figure 19: The Roberts, Berry - Familiarity Matrix (1985) showing how familiarity with market factors and the technologies or services embodied in the product relate to preferred entry strategies.

Entry Mechanisms: Advantages and Disadvantages

New Business Development Mechanisms	Major Advantages	Major Disadvantage	
Internal Developments	Using existing resources	Time lag to break even tends to be long (an average eight years) Unfamiliarity with new markets may lead to errors	
Acquisitions	Rapid market entry	New business area may be unfamiliar to parent	
Licensing Rapid access to proven technology Reduced financial exposure		Not a substitute for internal technical competence Not propriety technology Dependant on licensor	
Internal Ventures Using existing resources May enable a company to hold a talented entrepreneur		Mixed record of success Corporation's internal climate often unsuitable	
Joint Ventures and Alliances Technological/Marketing unions can exploit a large/small company synergies Distribute risk		Potential for conflict between partners	
Venture Capital and Nurturing Can provide window on a new technology or market Unlikely alone to be a magnowth		Unlikely alone to be a major stimulus of corporate growth	
Educational Acquisition	Provide window and initial staff	Higher initial financial commitment than venture capital Risk of departure of entrepreneurs	

Figure 20: Strengths and weaknesses of the various entry strategies found in the Roberts , Berry Familiarity Matrix (Roberts and Berry, 1985)

The framework provides useful criteria for choosing a high-level strategy. It also reinforces the recommendation that a corporation needs to be proficient at many of the methods to be able to match the appropriate option for the situation. One can imagine that if some venturing options are not available to the corporation then, depending on the opportunity, some less optimal path might need to be followed. There are several options in each cell which indicates that there may be other criteria that are also important to the firm when making these decisions.

Another set of factors include: (1) the corporation's venturing objectives and (2) corporate management's needs and biases in venturing situations. Miles and Covin (Miles & Covin, 2002) suggest that there are four primary styles of venturing that vary in their appropriateness based on these two dimensions. The four forms are shown in Figure 21 and the mapping of strategic requirements to the four venturing styles follows in Figure 22. Miles and Covin suggest that the specific combination of the type of high-level goal with management's need for control, the availability of resources, and the corporation's risk tolerance will lead to different preferred choices.

Summary Definitions of the Four Forms of Corporate Venturing

Form of Venturing	Defining Characteristics		
Direct-Internal	New ventures are funded without financial intermediation (directly through the operating or strategic budgets) and developed within the domain of the corporation by corporate employees.		
Direct-External	The corporation, without using a dedicated new venture fund, acquires takes an equity position in an external venture.		
Indirect-Internal	The corporation invests in a venture capital fund designed to encourage corporate employees to develop internal ventures. The venture capital fund typically originates and operate within the corporation and is managed by corporate employees.		
Indirect-External	The corporation invests in a venture capital fund that targets external ventures in specific industries or technology sectors. The venture capital fund may originate outside the corporation and be managed by persons who are not corporate employees, or the fund may originate within the corporation and be managed by corporate employees.		

Figure 21: Definitions of the four proposed forms of venturing from Miles and Covin (2002).

Potentially Appropriate Forms of Corporate Venturing in Various Corporate Clients

	Corporate Venturing Objectives			
Corporate Management's Needs & Biases	Organizational Development & Cultural Change	Strategic Benefits/ Real Option Development	Quick Financial Returns	
Need for Control of Venture				
High	D-I	D-I, D-E	D-E	
Low	I-I	I-I, I-E	I-E	
Ability & Willingness to Commit				
Resources to Venturing				
High	D-I, I-I	D-I, D-E, I-I, I-E	D-E, I-E	
Low	I-I	I-I, I-E	I-E	
Entrepreneurial Risk Accepting				
Propensity				
High	D-I, I-I	D-I, D-E, I-I, I-E	D-E, I-E	
Low	None	I-I, I-E	I-E	

Figure 22: How the dimension of corporate venturing objectives and corporate management's needs and biases. (Miles and Covin, 2002) Key: <u>Direct/Indirect – Internal/External</u>

A deeper look at the results of the analysis shows that a number of important recommendations emerge. Each of these recommendations are shown in an annotated version of Figure 22 mapped to their location in this decision space (Figure 23) and are summarized as the following:

- a) For quick, financial returns External (E) venturing is recommended.
- b) If the corporation's goal is "Organizational development & cultural change," the general recommendation for <u>all</u> ventures is to do them <u>Internally (I)</u>. This is to enable the organization to immerse itself in the ventures and to internalize the learning and experiences. Over time this will enable the cultural change to occur. Without doing these ventures internally, change will not permeate the organization.
- c) If the need for control is <u>high</u>, then <u>Direct (D)</u> venturing is suggested.
- d) If the need for control is <u>low</u>, then <u>Indirect (I)</u> venturing can be appropriate.

- e) If strategic benefits / real option development (new business development) are the goal and the corporation is comfortable with committing only <u>limited</u> resources and taking <u>limited risk</u>, then the recommendation is to use <u>indirect</u> methods of venturing, mostly to limit downside exposure while still providing some access to the opportunity.
- and the corporation is comfortable with committing significant resources and assuming risk then all options are at the organizations disposal. This analysis suggests that, if a corporation is willing to wait long enough and spend enough then they have the potential to use any of these basic forms successfully. But, we know this is wrong from the Roberts/Berry (1985) work just reviewed. As familiarity decreases so does the likelihood of success. Combining the two frameworks and dimensions may provide additional valuable insight.

Potentially Appropriate Forms of Corporate Venturing in Various Corporate Clients

		Corporate Venturing Objectives			
Corporate Management's Needs & Biases	I	Organizational Development & Cultural Chang	Real Option	Quick Financia Returns	
Need for Control o	f Venture		1		
High	(c)	D-I	D-I, D-E	D-E	
Low	(d)	I-I	I-I, I-E	I-E	
Ability & Willingnon Resources to Ver High Low Entrepreneurial Ri Accepting Propensity High Low	nturing	mit D-I, I-I I-I D-I, I-I None	D-I, D-E, I-I, I-E I-I, I-E (e) (f) D-I, D-E, I-I, I-E I-I, I-E	D-E, I-E I-E D-E, I-E I-E	

Figure 23: Miles and Covin (2002) with the various entry strategies labeled and highlighted.

If the Miles and Covin (2002) framework is combined with the Roberts and Berry Familiarity Matrix it enables more dimensions to be considered in a coordinated manner. The results are a decision matrix that combines the two dimensions of familiarity with an understanding of corporate venturing objectives and a corporation's need for control, resource availability, and tolerance for risk taking (some elements of the culture of the organization). This combination of knowledge, goals, and culture create a more rounded set of factors which may help make the implicit decisions about choosing one method or another within a cell more explicit. There are of course many additional criteria that could be combined to make this even more comprehensive. For example, a new venture is New Familiar on both the market and technology axis. The empirical evidence shows that internal ventures, acquisitions, or licensing are the preferred ways to enter into this venture. By including the additional dimensions suggested by Miles and Covin (2002), the choice of entry strategy could be refined further. In this case, the additional goals of the organization could be considered. If organizational development and cultural change are most important then internal development is important and internal ventures or licensing could be preferred. If, on the other hand, a fast financial return is more important, then acquisition could be the preferred entry strategy.

Optimum Entry Strategies (Robert, Berry) combined with Four Forms of Venturing (Miles, Covin)

	•					
		Joint Ventures	Venture Capital	Venture Capital		
		(D-E)	(I-I,I-E) or	(I-I,I-E) or		
	New		Venture Nurturing	Venture Nurturing		
	Unfamiliar		(I-I,I-E) or	(I-I,I-E) or		
ទ			Educational Acquisitions (D-E,D-I)	Educational Acquisitions (D-E,D-I)		
ç.		Internal Market	Internal Ventures	Venture Capital		
ä		Developments	(D-I) or	(I-I,I-E) or		
Market Factors	New	(D-I) or	Acquisitions	Venture Nurturing		
<u>Ř</u>	Familiar	Acquisitions (D-E)	(D-E) or	(I-I,I-E) or		
<u>a</u>		(or Joint Ventures)	Licensing	Educational		
2		(D-E)	(D-I)	Acquisitions (D-E,D-I)		
		Internal Base	Internal Product	"New Style"		
		Developments	Developments	Joint Ventures		
	Base	(D-I)	(D-I) or	(D-E)		
	Dase	(or Acquisitions)	Acquisitions			
		(D-E)	(D-E) or			
			Licensing (D-I)			
			New	New		
		Base	Familiar	Unfamiliar		
			i aiiiiiai	Offiaifillai		

Figure 24: The combination of the Roberts-Berry Familiarity Matrix for optimum strategy for entry and Miles and Covin (2002) four types of venturing based on other organizational needs. [Direct/Indirect – Internal/External]

Technologies or Services Embodied in the Product

There are of course many additional criteria that could be combined to make this even more comprehensive. Additional factors important when choosing an appropriate venturing strategy have also been observed by Campbell et al. (2003). Their work focused on the typical high-level goals, or missions, of a number of venturing units and their results. They show that the results were not very promising for corporations trying to use internally-based entrepreneurship for renewal. "...One common objective – the creation of substantial new businesses and growth by incubating a portfolio of promising new ventures - was found to have no successful business model. The other four objectives and their associated business models

demonstrated reasonably high degrees of success." The different styles (or strategies) used by Campbell et al. fell into a couple of basic categories and their success rates from the study are shown in Figure 25:

- a) <u>Venture Capital:</u> This can be either for what the authors call, Ecosystem Venturing, Innovation Venturing, or Private Equity Venturing but all will seek financial return with varying degrees of "strategic" goals as well.
- b) "New Leg" Venturing: These are efforts directed at creating a new business unit.
- c) <u>"Harvest" Venturing:</u> These efforts primarily focus on creating cash returns for internal assets.
- d) <u>Mixed Objectives:</u> Organizations without clear goals invariably shifted focus and were all unsuccessful in this study.

These are interesting categories and each of these styles will be discussed briefly.

"Ecosystem venturing is appropriate when an existing business depends on the vibrancy of a community of complementary businesses and the entrepreneurs in the community do not have sufficient support from existing suppliers of VC. This normally occurs when an area is so new that the VC industry has yet to focus on it." (Campbell et al., 2003) To be successful EcoSystem venturing must maintain focus through strong performance measures and tight coupling of the venture unit to existing businesses units. This is necessary to ensure that the external investments are those that continue to be complementary to the exiting business. The major pitfall for ecosystem venturing is losing focus and investing in a wider stream and seeking greater autonomy. The unit needs clearly defined sectors to invest in and the appropriate combination of financial and strategic goals. An example of Ecosystem venturing is Intel Capital's investments in start-ups that could help make Intel's systems more attractive make their

operations run better, or who may, at some point, grow to be high volume users of Intel products in the future.

Success Rates for Different Types of Venture Units

The venture units studied were categorized by objective – the percentages that fell into each category are indicated below. Each unit was deemed successful or not on the basis of its financial performance, strategic achievements, the comments of the managers interviewed and the judgments of the research team.

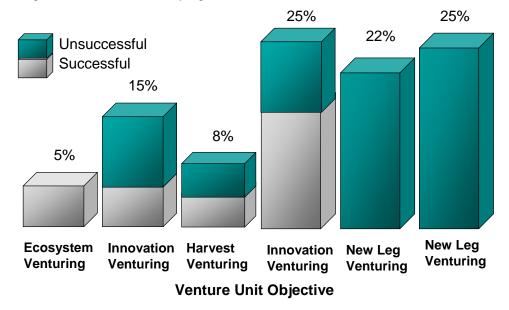


Figure 25: Success rates for various types of Venture Units based on their overall goals. (Campbell et al., 2003)

"Innovation Venturing" on the other hand seeks to use the methods of the venture capital industry to undertake improvements in functional activities such as R&D. The authors describe the most common pitfall with this method as the "cultural change" pitfall. The flaw "is to view the unit as a way of addressing a general concern about a lack of entrepreneurial spirit in the company rather than to improve the effectiveness of a specific function." To be effective this effort should focus on <u>particular improvements</u> and report to the senior management of the function to be improved. Taking on the challenge of "cultural change" simply by doing some additional entrepreneurial activities is not recommended. Change requires something more.

"Private Equity Venturing" is the third of the venture capital related styles and is appropriate only in very limited circumstances. To be successful the corporation must have at team that behaves just like any other VC group and should have at least similar access to the flow of deals as independent venture capital or equity companies. It must stick to financial returns for the investment as well. It must be "fully separated" from the company, be a closedend fund, staffed with seasoned mangers from the private equity industry, and those experts must be evaluated and rewarded just like external private equity experts if the corporation hopes to keep them. The typical failure modes are: thinking that "anyone can do this", misjudging the timing and skills required, forming a second rate team, and overpaying for poor projects. "Strategic" goals are not recommended as their outcomes are hard to measure, but poor investment results are much easier.

"Harvest Venturing" is all about turning "existing corporate resources into commercial ventures, then cash". This is done by selling or licensing out corporate resources such as technology, brands, management skills, and fixed assets. The reported challenge with this type of venturing unit is "goal creep". The team starts off with the "cash" goal, but soon becomes interested in creating a new business themselves after being exposed to all of the ideas and opportunities they contribute to by selling assets. This can be a problem for two major reasons. One, the skills required for harvesting assets vs. creating a business are very different and, two, according to the authors, creating a new business is a flawed approach from the beginning.

The final type of venture, "New Leg Venturing", is described as "flawed" by this study. This is the development of new, independent business units within a corporation. Why has "New Leg Venturing" performed so poorly in the companies studied by this team? This study has

identified a number of interesting challenges that contribute to the low probability of success for these types of ventures. They include:

- 1. <u>Selection of the venture:</u> The authors have observed that managers only feel the need to start a new venture when the obvious internal growth paths in adjacent businesses are blocked for some reasons. This can lead to selection bias and even the best projects identified for venturing will have a low probability of success
- 2. Organization Structure: Having the new business be separated attracts little attention from the core business and can limit synergistic opportunities and developing a shared understanding and commitment to the venture. Connections across the corporation are of critical importance.
- 3. Organizational Conflicts: Once promise is shown in the new business, or it threatens existing businesses, it starts to get shortchanged by funding and political processes. The corporate "antibodies" emerge to strangle the new business. This is an all too common dynamic.
- 4. <u>Time to Return-on-Investment:</u> Building a successful new business does not happen overnight. The time commitment necessary is often longer than the typical corporation's business cycle that can lead to financial and focus pressures to quit investing before the venture is ready for payout. This is the "patient money" challenge and another important organizational dynamic to be factored in.

With the additional observations from Campbell et al included into the decision making framework for optimal entry strategies some further insights are observed. Concerns about "new leg" venturing highlight a number of areas where several additional factors should be considered in choosing a strategy which stem from the eventual organizational destination for the ventures.

The grey boxes in Figure 26 highlight the approaches that may be targeted as "New Leg" ventures. For these cases it is important to recognize whether the goal is new business unit creation or integration into an existing business. Depending on the long-term goal, management can take specific actions to address the four failure modes highlighted. Countermeasures can be planned into the strategy from the beginning which would require bringing more cultural attributes and organizational dynamics into the strategy thought process. If these failure modes are going to be difficult to handle in the current targeted organization then other appropriate venturing choices or structural changes could be considered.

Optimum Entry Strategies (Robert, Berry) combined with Four Forms of Venturing (Miles, Covin) and Success Rates (Campbell et al)

	New Unfamiliar	Joint Ventures (D-E)	Venture Capital (I-I,I-E) or Venture Nurturing (I-I,I-E) or Educational	Venture Capital (I-I,I-E) or Venture Nurturing (I-I,I-E) or Educational
ភ			Acquisitions (D-E,D-I)	Acquisitions (D-E,D-I)
Market Factors	New Familiar	Internal Market Developments (D-I) or Acquisitions (D-E) (or Joint Ventures) (D-E)	Internal Ventures (D-I) or Acquisitions (D-E) or Licensing (D-I)	Venture Capital (I-I,I-E) or Venture Nurturing (I-I,I-E) or Educational Acquisitions (D-E,D-I)
	Base	Internal Base Developments (D-I) (or Acquisitions) (D-E)	Internal Product Developments (D-I) or Acquisitions (D-E) or Licensing (D-I)	"New Style" Joint Ventures (D-E)
"[ould lead to New Leg" venturing	Base	New Familiar	New Unfamiliar

Technologies or Services Embodied in the Product

Figure 26: Combination of Familiarity Matrix, Venturing styles, and venturing unit success rates. The overlay of familiarity, goals, and risk attitude provides some more to consider when thinking about a strategy for corporate entrepreneurship.

To this point only three of the many frameworks for strategy choices have been examined and interconnected. There are many others and additional dimensions and detail should be considered.

Another interesting framework considers several choices which are often considered only later in the lifespan of the venture. It focuses on the eventual destination of the venture as either a spin-out or integrated part of the parent and whether the venture should be a leader or follower in the market. It is related to the discussion of "new leg" venturing and highlights some additional factors that may contribute to doing that well. By recognizing that the style and destination of a venture may change ever time some additional factors can be considered up front in the decision process. To the extent it is possible anticipating these changes can improve the selection process.

This framework recognizes that the eventual outcome of most spin-outs or external ventures (those that are at least moderately successful) is acquisition by the originating corporation. Given that observation, Iansiti (Iansiti et al., 2003) proposes that there are three ways to approach a venture which is differentiated by organizational structure and the timing of market entry. They are:

<u>Separated-Integrated:</u> The venture is initially separated as a spin-out or external start-up but is eventually reintegrated in the future by the parent. It is spun-out originally to give it the room and flexibility it needs to grow. Over-time, the opportunity and the synergies with the existing business mature and it is worth more to the parent organization back inside. However, challenges around risk, costs, and cultural issues upon integration all make this challenging and the authors conclude that the initial benefits to separation may not be worth it in the long-run.

<u>Integrated – Leader</u>: This is an internal venture seeking to create new opportunities and promote the development of a new market or type of offering. Risks with this approach are that it can take a very long-time and a lot of the investments made by the lead corporation may be for the "greater good" of the developing industry. There is a "free-riding" problem where these efforts will help competitors as much as the lead corporation itself. This is one of the problems with the first mover dilemma. One of the worst possible outcomes is that significant investments are made and the market opportunity never truly materializes.

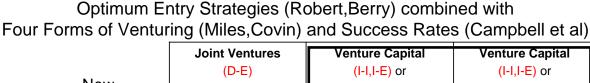
<u>Integrated – Follower:</u> The essence of the integrated follower strategy is for the corporation to <u>recognize</u> the potential opportunities and to <u>begin</u> knowledge gathering and preparation investments in a measured way. But the corporation does not yet aggressively enter the market. The strategy advises keeping the long-term investments small and doing all the work necessary to understand what it will take, from beginning-to-end, to succeed at the emerging opportunity when the time is right. When the opportunity is emerging, then a concerted effort, led by the top, is made to aggressively pursue the venture.

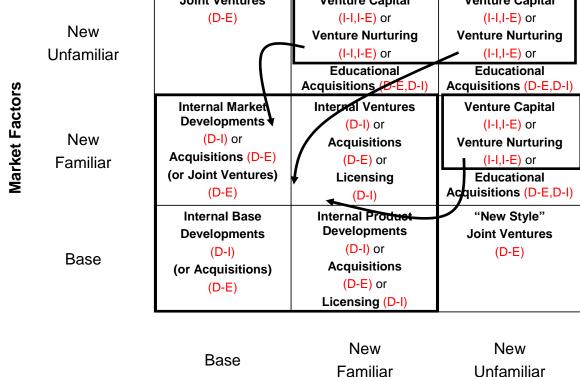
The integrated-follower strategy can be "particularly effective when an innovation appears to be disruptive but its viability is uncertain." In this case, the corporation may start internal research activities in this area, but closely monitor the evolution of the opportunity to look for signs as to standards winners or if demand is really there. As long as the corporation using the Integrated-Follower strategy is closely observing the market and is ready to move aggressively when the time is right they can be successful. The authors point out that:

• Few innovations change a market overnight. Leading firms in the industry have time to follow if they are paying attention and make the decision to move.

- The corporation must use the time leading up to the entry point wisely to study and understand what is needed to enter the market successfully.
- The corporation must move aggressively from the top down when ready.

Laying this framework on top of the previous ones highlights that the external ventures may evolve to internal ventures over-time (Figure 27). The implications of this will be important to consider from the beginning when setting up the details of the venture. In addition, while a particular style of venturing may be the most appropriate the timing and aggressiveness of pursuit of that venture may depend on additional "environmental factors" as well.





Technologies or Services Embodied in the Product

Figure 27: Research shows that many times those ventures that started out as external ventures eventually migrate to internal ventures. Understanding that from the beginning can help make the appropriate strategic and operational choices from the beginning.

The combination of multiple frameworks reveals a number of insights. First, the number of factors that together can influence how to chose a best venturing strategy can be quite large and interdependent. Second, as more factors are brought together the need to understand the unique dynamics of an organization grows because finer-grained decisions are being examined. And third, there is potential for the various ways of looking at the strategic choices to be pulled together in a fairly consistent way. The various frameworks are not totally aligned with one another but looking at a set of them together does provide some additional value.

. The final frame work to be looked at specifically matches venture strategy with the evolutionary stage of the industry. The Roberts/Liu framework (2001) establishes criteria for venture entry strategies based on which industry technology phase (Utterback, 1994) the new venture finds itself in. Adding it to the previous options considered adds an additional, environmentally focused, factor to consider. The Roberts and Liu discuss the differences in alliances, mergers, and acquisitions based on whether the industry is in the fluid, transitional, mature, or discontinuities phases.

Of course there are many additional frameworks that could also be added and only a few were discussed in detail here. In the end, it is clear that the choices of basic strategy given in these frameworks are still subject to the need for careful analysis and customization to the situation the organization finds itself in. Together all of these dimensions and the interplay between them begin to form a detailed set of criteria that reflect the complicated and dynamic nature of the problem. Viewing corporate entrepreneurship in a firm as an evolving, dynamic system and thinking of these layered criteria as a way to address these dynamics helps.

In addition to these general frameworks, a number of company specific studies provide additional interesting frameworks for thinking about strategies for venturing. For example, IBM's Emerging Business Opportunity (EBO) system focuses on providing four paths to long-term success that each of the EBOs can choose from as they learn more about the opportunities. These choices largely differ in terms of the go-to-market channels used (Figure 28). It is interesting to note that many of the initial EBO's described in both published papers and case studies (Garvin, 2004; Nunes, 2004; Schlender, 2003) have led primarily, in IBM's language, to New Practices for IBM Global services and Accelerating Product Extensions into new markets with a few New Products mentioned. No new, separate business units have been created up to this point as far as can be determined.

EBO: Four Approaches for Growth

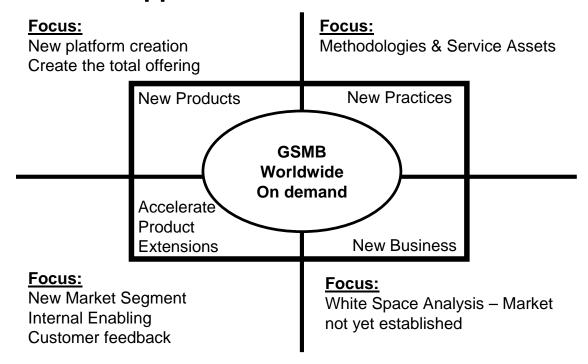


Figure 28: Four potential long-term paths for IBM's EBOs. IBM Research has four approaches for growth based on market demand, technical capabilities and resources. This system gives emerging business opportunity (EBO) the flexibility to grow into new products, practices, businesses, or to improve existing products, depending on how the EBO evolves.

A empirical study of a set of cases (O'Connor & Ayers, 2005) highlights four models for corporate entrepreneurship, that they have called Radical Innovation. These are a result of a

longitudinal study of the strategies that a number of corporations are using. These are a combination of goals and approach. In each of the following styles choices based on the types of criteria previously discussed would need to be made. These strategies are:

- 1. Focus on competency and technology readiness: This strategy seeks to keep the innovation pipeline full in order to increase the odds that some innovations will hit the right market at the right time and be successful. This is sort of a "supply-side innovation strategy". A number of venturing approaches may be needed to "cash" the breadth of options generated.
- 2. <u>Top down, strategy-driven approach:</u> This is driven by the CEO and CTO and a focused team who pick the next markets and opportunities and build the teams and entry strategies to match the circumstances. This is the "central planning" approach.
- 3. Execution driven Business Units: In this strategy the business units themselves are responsible for developing the new businesses and ventures. Senior management provides the incentives and management coaching to help make these efforts successful. This is similar to "distributed venturing".
- 4. Organizational or Rational Approach: Incubation in this strategy occurs in a central R&D group. This is where the innovations are created and mature. There is an R&D oversight board to help connect and steer the new ventures to market. This could be called "structural" venturing.

Each of these styles has been successful in various corporations participating in the study. Each consists of a different combination of organization and process. The breadth of strategies employed reinforces the observation that the choices made by firms have significant situational

dependence that there are interactions both between factors, and an organization's culture and dynamics.

One last study provides advice for "things to think about" when choosing a corporate entrepreneurship strategy. In many ways this approach is similar to the advice that would be given to an external entrepreneurial team (Koen, 2000).

- 1. Choose ventures based on market needs not technology capability.
- 2. Expect corporate ventures to be difficult and to take longer than four years to have positive returns.
- 3. Maximize venturing success by choosing ventures in favorable markets. You cannot forget to examine the attractiveness of the industry and the attributes of the customer's demand when entering new markets.
- 4. Choose products that are proprietary. In other words, have strong control over the ability of others to appropriate of the uniqueness of your product. Minimize the spillover of intellectual property and know-how assets to competitors.
- 5. Enter markets aggressively. Have the appropriate investment intensity and marketing strategy to gain market share.
- 6. Choose ventures where there is a good strategic fit. Some of the models described previously may be useful in determining that fit based on the dimensions that the corporation feels has the most impact on the success of the venture.

These are good rules of thumb to also be considered when looking at the strategy for venture entry and the associated timing.

The breadth of recommended strategies, factors, and failure modes discussed in this section is quite large. In the case here the primary factors explored in the material reviewed were:

- Familiarity of the organization with venture technology and markets
- The corporation's needs and biases (aspects of the corporate culture)
- The objectives of the venture (change, strategic benefits, or financial returns)
- The desire to lead the development of a new market or to follow

A few others were discussed as well, but in the end, the choice of strategy is very dependent on the details of the situation, the culture of the organization, and the dynamics of corporate entrepreneurship that the organization finds most influential on its success. This agrees with Christensen and Overdorf (Christensen & Overdorf, 2000) who point out that at their most fundamental level the important factors reduce to the resources, processes and values of the organization. These are the controllable factors that upon examination provide the reasons why some corporation's strategies result in entering new markets successfully while others sit on the sidelines or fail. But also indicates that the level of complexity and detailed set of factors that need to be included in an analysis of venture opportunity is quite large and goes beyond simple advice based on a couple of dimensions. The dynamic context within which these choices operate cannot be ignored.

Strategy - Recommendations (R), Trade-offs (T), and Dynamics (D):

 R: Start small with specific milestone process. Large ventures can be "Too rich" and waste time and money. (Kanter, 1989)

- R: Don't start small. It can limit upside potential, give competitors time to respond, and return may be expected sooner. There is a tendency for "premature withdrawal"
- T: Either start ventures small, with modest resources and "under the radar" or make them large, well funded, and highly touted form the beginning. (Kanter, 1989)
- R: Demonstrate value to the mainstream businesses. (Kanter, 1989)
- T: The venture's business is linked to existing business or completely independent.
 (Iansiti et al., 2003) (E.g. Kodak management said its ventures could not be dependent on existing business and vice versa.)
- T: Successful corporate entrepreneurship hinges on a firm's ability to combine structural approaches that focus on efficiencies, process and "fit" with strategic approaches that emphasize quality and effectiveness. Balance these. (Dess et al., 1999)
- R: Iteration speed is critical. Progress depends on the number of experiments per unit time. Be small and fast with experimentation. (Quinn, 1985)
- R: Employ a mix of venturing mechanisms and look at how to use them at the appropriate time and as part of an overall strategy. (Roberts & Liu, 2001)
- T: Pursue "New Leg" (new business group) venturing or eliminate it as an option. (Campbell et al., 2003)
- T: A few ventures or many at once. How many ventures can be managed and supported at the same time? If one wants personal management attention for ventures then only a limited number will be possible. In contrast, a strong

- process-driven approach with venture leaders on their own (more independent) may sustain many more ventures at the same time.
- T: Do the ventures include business opportunities that span the complete value chain or are they targeted at specific points in that value chain and as bit players?
 (Sharma, 1999)
- D: Ability to select appropriate strategies from a full range of options and maintain the skills and option set overtime when successes and failures may lead to specialization.
- D: Diverging strategies between parent and venture
- D: The growth of complementors in an ecosystem venturing strategy affects success and continued commitment to venturing but there are many factors "external" to the firm to be considered.
- D: Affecting change within the organization and what affects a venture's ability to do so?
- D: The dynamics of venture overconfidence and the lack of idea flow or experience early in a venturing program.
- D: How does goal creep grow?
- D: How do the Not Invented Here, "corporate antibodies", or "organ rejection" behaviors grow and destroy new ventures
- D: The challenges of opportunity, realized size, and time to maturity of the venture vs. pressures on the parent.

9.4.3 People

"People" is the third of ten major categories of factors affecting corporate entrepreneurship that will be reviewed. So far goals and strategy for achieving them have been discussed. With the goals and high-level strategy understood the focus can change to developing an understanding of the types of people and their skills needed.

You can't run a business without good people. Often the first factor considered by venture capitalists when assessing venture opportunities is the strength of the management team not the quality of the business idea or opportunity VCs "seek the people first and then businesses for them". Many suggest that this principle should be applied to corporate ventures as well. But, "...there is no evidence that this is applied in corporate venturing. If anything, the evidence seems to be that the kind of people who make good entrepreneurs are [either] screened OUT of corporations or FIND their way out of them" (Block, 1982).

The impact the right people will have on a venture cannot be overlooked and there are many important "people factors". Guth and Gisnberg (Guth & Ginsberg, 1990) highlight a few people related factors in their overview of corporate entrepreneurship. These include:

- a) Management styles of top managers affect the level and performance of new corporate ventures
- b) Mid-manager effectiveness at building coalitions and higher support for venturing opportunities
- c) The education and diversity of skills found in the organization

More specifically, these people challenges include: leading the corporate team with oversight of venturing activities, leading and guiding the venture team itself, finding entrepreneurial-minded people, matching people with particular ventures, addressing special

entrepreneurial and training needs, and managing the interaction of individuals and groups that within and between the venture and existing business organizations.

In this section, the "people factor" will be explored in more detail. It will be examined from several broad categories. First, the role of senior management and the required skills and areas of focus will be reviewed. Next, the recommended attributes of a venture manager will be examined in detail. Third, the importance of people skills for connecting across organizational boundaries will be explored. Finally, finding and growing entrepreneurial skills within a corporation will be examined.

Leading the entrepreneurial effort is challenging. Top corporate sponsorship is often said to be critical to the success of a venturing effort. The personal attention and commitment of senior management to venturing as an ongoing process (or to specific ventures) sends signal which are critical to the success of the new ventures.

To make this happen, the leaders of such efforts must be "highly complex thinkers" observes (O'Connor & Ayers, 2005). Special skills are required in a manager in charge of the corporate venturing process in order to deal with:

- Simultaneously managing their group, managing others competing for the same resources (e.g., Strategic Business Unit leaders), and managing senior leadership's expectations
- Simultaneously managing for the future and balancing the practical needs of the present.

O'Reilly and Tushman (O'Reilly & Tushman, 2004) point out that an "ambidextrous organization" needs ambidextrous management. Specifically, management must have "sensitivity to the needs of combining different businesses" and a recognition that this is critical

to making venturing successful. Not all senior management is ready or capable of balancing all that is required. Senior managers therefore need to find venture managers more skilled in this area. Senior management sponsorship of new ventures has been recognized as critical to their success. Senior management is often identified as critical to integrating new and existing businesses. Powerful sponsors are needed for the overall venturing efforts and specifically for each individual venture as well (Kanter, 1989). This doesn't imply that senior management needs to initiate new ventures. O'Connor and Ayers (2005) also observe that "Mid-level management can successfully initiate the development of a radical innovation system if the group explicitly works toward sensitizing senior management about the importance of radical innovation to the company's renewal or growth." In this case senior management still needs to be on-board and championing the efforts, but the initial steps in creating the effort need not come from the top.

A final role senior management needs to get right is the choice of venture manager which is of particular importance. In the IBM EBO case Garvin (Garvin & Levesque, 2004) says that the venture leaders must be hand picked by senior management (including the CEO) and publicly praised for their contributions to the corporation to provide the needed legitimacy and credibility in order to succeed. Additional studies suggest that the senior managers should look for the "inside-outsider" (Sull, 1999). These are successful leaders from smaller divisions, international operations, or staff functions. Finding these people can be one of the most important things senior management does because "inside-outsiders" have the potential to be objective about the strengths and weaknesses of the company and the ventures proposed (Sull, 1999). Senior managers must also ensure that the leaders chosen to shepherd the new ventures have the entrepreneurial skills and attitude required. Block suggests that compensation schemes can be

used to help senior managers find the right people. He recommends the ventures be structured so that there are "opportunities for significant financial gain, and, if possible, for personal investment but also with opportunities for loss which will tend to sift out non-entrepreneurial people" (Block, 1982).

A challenge then for management is recognizing individuals who might excel in a new venture role. What are the specific attributes required? These questions have been researched and a number of authors have proposed answers. IBM describes its EBO leaders as "change agents". They need to be capable of breakthrough thinking, forward looking and innovative. They also need to be good at developing customer insights (Garvin and Levesque, 2004). Zahra (Zahra, 1999) describes these leaders as "sensemakers". These leaders identify, spot, and interpret emerging knowledge. They also will also "proactively seek to overcome the fragmentation of knowledge within the corporate entrepreneurship effort." They strive to continue to create the sense of "groupness" by actively communicating and transferring knowledge to other parts of the organization. This seems particularly important because often support, in many forms, is required of other organizations in order to ensure the success of the new venture. Wide reaching, yet targeted, communication of learning to these partners will be important to growing sustainable support. Key skills include: trust, persuasion, the effective use of social capital, and the ability to resolve conflicts. As described above, these individuals tend to be energetic, deal with uncertainty well, and are respected leaders. Block describes venture manager skills to include: strong results orientation, high achievement needs, high degree of independence, reasonable charisma, high self-discipline, high tolerance of ambiguity, and luck. Contrary to what one might expect, research has shown that entrepreneurs are not necessarily "high-rollers" but, in many cases, are a "surprisingly risk adverse lot" (Mullins & Forlani, 2005).

These attributes describe the "ultimate leader". Many would say that someone with these characteristics would succeed at any project! Perhaps the most important part is that these leaders must have a variety of top-notch skills. "A-team" players need only apply given the challenges of corporate entrepreneurship.

As highlighted, individual personal attributes are important. Pinchot (1985) in Intrapreneuring reflected on the importance of the drive and commitment of entrepreneurial individuals when he said that "... individuals will 'champion' new ideas from development to complete profitable reality". According to Pinchot it is the individual that will drive the process from beginning to end and that is what makes ventures successful. There are many more specific attributes that have been suggested as critical success factors as well. It is interesting to note that some of recommended attributes conflict and create a set of trade-offs.

The experience of the entrepreneurial leader is important. There is conflicting advice on what kind of leader should be selected to run a venture. The cases describing IBM's successful Emerging Business Opportunities (EBO) program (Garvin and Levesque, 2004) indicates IBM's focus on identifying venture management from the pool of experienced leaders who have proven themselves at leading large existing businesses. They say that they are looking for these leaders to bring a well-honed, results-oriented view combined with experience with tough financial controls to the start-up process. In a similar way, Iansiti's analysis of the eSchwab venture identified that the efforts were led by "highly respected senior executives from Schwab" and many of the additional personnel were experienced Schwab employees moved to the new venture (Iansiti, 2003). This view of personnel selection can be summed up by a rule of thumb shared by Alex d'Arbeloff, founder and former CEO of Teradyne. He says that a key lesson he learned from Peter Drucker was that one should, "do new things with old people and old things

with new people". In other words, new ventures should be led and staffed by people who are already experienced with the existing business rather than bringing in new people or putting less experienced people into those roles. There are a number of implied reasons for this. Experienced people "know the ropes". They have the internal network of peers and relationships and they have been burned before. All of these experiences can help one run a new venture. Experience can help when selecting whom to engage. They know the system a how to use it. New people on old (existing) projects get additional structure and support from within the system. They get the hands-on experience with a mature business. They get the opportunity to use their own network of relationships throughout the existing businesses of the corporation. This recommendation makes good sense.

On the other hand, instead of experienced senior management championing and leading new ventures others have proposed that different attributes are required and they may be found in people from other parts of the organization with different experiences. If fact, many suggest that "it takes a different kind of manager to start a new business than to run an old one" (Block, 1982, p.30) Kanter's analysis resulted in three common compelling characteristics of successful venture leaders. They were: (Kanter, 1989)

- 1. those who could handle the high uncertainty of ventures
- 2. those that brought a high level of intensity to the tasks,
- 3. those that liked having autonomy.

This model is at least somewhat contradictory to IBM's and Schwab's criteria described above. A question for further examination is why this is so. What other factors interact with these that can make both options successful for different teams?

Other researchers don't focus on specific skills or talents as much as where in the organization the venture manager comes from. They suggest that mid-level management can be the right ones to champion entrepreneurial endeavors (Burgelman, 1984). Similarly, Dess (1999) reported that, "Pioneering firms have also found that by empowering autonomous employees at lower organizational levels, they not only improve access to fresh ideas and first hand knowledge of customers, but also reduce costs previously associated with induced, top-down methods of management." (Kanter, 1982, 1989). Perhaps the debate should be much more about how the leader can learn the critical parts of the new business while <u>unlearning</u> the ways the existing business that are no longer appropriate.

A particularly interesting view of the required skills came up in several different studies focused on what Starr and MacMillan (1990) called "Social Transaction Oriented (STO) Skills" or might be called coalition and network building skills of the venture manager. They observed, "Entrepreneurs and some intrapreneurs are particularly skilled at using social transactions to parsimoniously secure start-up resources [and] that this capability is particularly beneficial to start-ups." They observed that STO managers build their social assets by: 1) sharing information, 2) solving others problems (or allowing others to help them solve problems and become committed to their success as a result), 3) giving and receiving favors, 4) creating opportunities for people to demonstrate skills and competencies. This was one of the critical skills described as IBM's approach to people. "Because of the distributed reporting nature of IBM... successful managers get things done through negotiation and collaboration, rather than through hierarchical (formal) authority." (Garvin and Levesque, 2004) A STO manager will spend more time on building, nurturing, and maintaining internal and external networks and co-opting resources and legitimacy for their efforts than more "administratively oriented" managers. "As a result... [the]

STO venture manager will: suffer fewer resource shortages; have ventures with lower asset intensity; have ventures with lower fixed cost/revenue ratios; achieve cash and profit breakeven in shorter time; have greater survival rates; and have a greater ROA." (Starr & MacMillan, 1990). The STO venture manager may also have some advantages dealing with the inevitable issues with conflicts of resources and the eventual threat of replacement that new ventures pose to existing businesses. They may also have the relationships established that will limit the impacts of jealously of the kind mentioned by Kanter (1989), "A New England Electric mainstream manager spoke about his envy of a newstream executive, "I'm jealous of George Sakellaris because he has a fun company to play with." Management of interaction is critical. Establishing the new venture in such a way that others can't help but support and offers them a piece of the success is a winning combination.

The combination of all attributes described above creates a very demanding set of people requirements. It is clear that finding people with all of these talents is not an easy thing to do. It is also likely that if these people can be found, they will most likely be successful in whatever they are doing now. They will be in demand. In addition to use these types of skills successfully it's likely that the leader must also be excited about the venture. This means that most likely a venture manager needs to be recruited, not assigned, from within or outside the company (Block, 1982). They must be personally "invested" in the venture to join up. Finding people like this in a corporation is not easy. As the previous quote from Block (1982) suggests, the corporation may lack these kinds of individuals.

To assist in this area, some research has looked at what can be done to increase the chances of having "the right" individuals in the corporation. One way to strive for as diverse a team as possible so that there is a mix of skills and knowledge, but this must be traded off with

more difficulty and decision-making and gaining consensus with such a team (Zajac, Golden, & Shortell, 1991). Another way is by defining and operating internal personal development processes. In some cases, personal development takes the form of explicit consulting and mentoring for those leading new venture opportunities. IBM Corporation's senior strategy personnel do this for their EBO leaders (Garvin and Levesque, 2004). Others report that corporations start-up more explicit training focused on entrepreneurship. Some examples include sending people to training at university programs such as MIT's Entrepreneurship Development Program, or tailored programs like those offered by Babson College (Thornberry, 2001). Increasingly, corporations develop their own internal training programs. An example was described by Kuratko (Kuratko et al., 1990) consisting of six, four-hour modules. While not an extensive program, it is a start and much more than many companies offer. The themes were:

1) An introduction to intrapreneuring; 2) Personal creativity; 3) A review of intrapreneuring literature and cases; 4) An assessment of the current corporate culture; 5) Business planning methods and tools; 6) Action planning methods and tools.

In conclusion, people skills can make or break a venture. It takes two main kinds of people; sponsors and venture leaders. The "right" people must be at the senior management level as sponsors for the venturing process and also at other levels including leading the ventures themselves. The published research describes the venture manager as a highly skilled and savvy leader who understands how to work through networks. The exact skills required will depend on the particular needs of the venture. Firms are beginning recognize the need to find and grow the required skills internally and provide training to help.

Recommendations (R), Trade-offs (T), and Dynamics (D):

- T: Diversity of venturing team. Very diverse (more ideas and breadth of skills) vs. more similar (easier decision making and speed). (Zajac, 1991)
- T: Staffing a venture from internal people or external people. (Sharma, 1999)
- T: A recruited team with close ties mutual respect and joint goals vs. an assigned team with the right skills (Kanter, 1989)
- T: Approach to corporate entrepreneurship training. Is there a formal process for training teams, for individuals, or is training available but ad hoc, or no training on entrepreneurship.
- T: Selecting people with experience or initiative. This is the dilemma of using senior execs or mid to low level people with a passion for the venture. (Sharma, 1999)
- R: Need management support and willingness to facilitate entrepreneurial projects. (Kuratko, 1990)
- R: Top management creates the value system that supports innovation. This
 includes technical experts at high levels of decision making. (Quinn, 1985)
- T: Location of sponsorship. Is the senior sponsor a sole executive champion (CEO?), a "venture board of directors" with venturing experience, or local, midlevel evangelist? Is there grass roots sponsorship solely by the venturing team or also by internal partners with mutual dependencies? Is there sponsorship at both levels?
- T: Is there committed consistent leadership end-to-end for ventures or does leadership change due to corporate advancement processes? (Kanter, 1989)

- R: Intrapreneurs need time to build the social assets and develop networks. (Starr, MacMillan, 1990)
- R: Build the employee network. Build "venture inertia" through structures, informal relationships, and getting others "plugged in". (Sharma, 1999)
- T: Social transaction strategies used frequently by individual entrepreneurs may be difficult for corporate venture managers (Starr, MacMillian, 1990)
- T: Corporate management skills vs. entrepreneurial management skills (Block, 1982)
- R: Ventures need experts and fanatics; the "possessed" and "obsessed". (Quinn, 1985)
- R: Early identification of entrepreneurs is important.
- R: Risk-taking is required
- D: Growing skills in entrepreneurship within an established firm
- D: The Social Transaction Oriented manager's ability to change the firm's internal dynamics of venturing though actions and connections.

9.4.4 Process

Fourth on the list of major categories of features is the process for venturing. The focus of this section is on the importance of a repeatable approach to venturing and some of the key success factors that make a venturing process work.

"Process" can sometimes be equated to rigid plans, structure, bureaucracy, and inflexibility. It could be seen as a barrier to what would enable corporate entrepreneurship. Findings however show that this tends not to be true. Most agree that routines (repeatable

processes) can be important to ongoing success of ventures of all kinds. The key is that the process needs to be focused on addressing the <u>right</u> questions at the <u>right</u> time for corporate entrepreneurship activities and enable both senior management and venture management to get what they each need to be successful.

Studies show that the small, entrepreneur-inventor will generally avoid formal plans in early stages but proceed step by step making incremental improvements to their product or offering (Quinn, 1985). The entrepreneur recognizes that they don't have it right and that any venture is an experiment. There is ambiguity. There is uncertainty. Things will change and the entrepreneur recognizes that a lot of time spent developing detailed plans based on a lot of assumptions is not an effective use of their time. The best ones however, do tend to apply a step-by-step, methodical approach that is constantly testing and refining the offering until it is something that addresses a "customer pain" in a profitable way. The entrepreneur's approach is designed for experimentation, learning, and iterative refining of the offering, rather than, "operational excellence". Assembling and using such a process effectively has been suggested as one of the critical differentiators between successful and unsuccessful entrepreneurs.

If process matters to the small start-up entrepreneur, perhaps process should matter more for the corporate entrepreneur. Miles and Covin (2002) believe that having a "defined process" looks like a promising indicator of success for corporate entrepreneurship activities. In a corporation there are additional constituencies and rules which a formal process can help connect with. In addition to the venture manager and team, there is senior management as well as management from the existing businesses that must also be considered. One of the venturing challenges is to have a process for corporate entrepreneurship where these two types of individuals with different needs, but hopefully common goals, can interact, measure progress,

address issues, and be satisfied with the results. The corporate entrepreneur desires learning and market experimentation, and corporate management, need to know that the resources are being spent wisely and results are being achieved as promised. This requires a process that provides for learning and experimentation as well as predictability, visibility, and repeatability. The process needs to be designed such that it enables the skills of both corporate managers and entrepreneurs to be used effectively – leveraging each of their strengths. (Block 1982). Perhaps it is their particular process that Nokia chairman and CEO Jorma Ollila is thinking of when he talks about balance and success: "Why have we been a successful company? If you want a very simple answer, it is getting the balance right between innovation and execution. In a technology business, you need a tremendous amount of innovation, but with these volumes and growth, you need to execute or it will kill you. So it is balance. I think we have done it better than anyone else." (Hickman & Raia, 2002).

There are a great number of recommended attributes for a corporate entrepreneurship process. They reduce to a number of key areas that the process should concentrate on. They are:

1. Ongoing double-loop learning (Argyris & Schön, 1978) and critical testing of assumptions. The process should focus on determining "what hinders us from doing what we want" (Sull, 1999). It should help develop a clear understanding of how old formulas for success will hinder responding to changes. It should also facilitate experimentation and rapid learning about the ventures. The process should help reveal the factors (external, market, internal, technical) that will both help and hurt the ventures. To facilitate learning it is recommended that one take an incrementalist approach. Few innovations have come from highly structured planning systems. The

- key is to have a process that features incremental, goal-oriented, interactive learning (Quinn, 1985).
- 2. The process should balance resources between existing and new ventures. The process should allocate resources for innovation strategically by defining broad, long-term actions within and across divisions to achieve the desired vision (Quinn, 1985). The process should then enable senior corporate management to set goals, have visibility, and provide guidance but should also give the entrepreneurial leaders the "room" to do what they need to make the venture successful.
- 3. Innovative corporations "keep their programs flexible for as long as possible and freeze plans only when necessary for strategic purposes such as timing" (Quinn, 1985).
 Even then, once milestones are determined they "leave open" as long as possible HOW those results can be achieved.
- 4. Communication and connections between existing and new organizations should be facilitated by the process. Disciplined reporting systems should be balanced with an entrepreneurial culture of mutual trust and open communication (Sathe, 1985).
- 5. The corporation must recognize is that the process will be different for different phases of the venture. In the Alchemy of Growth (Baghai, Coley, & White, 1999) presents a view of "horizons" to capture this idea. "Each horizon represents a different stage in the creation and development of a business. Each calls for radically different business initiatives. And each poses a different management challenge." Just as different goals will lead to different strategies, different stages lead to different processes being emphasized.

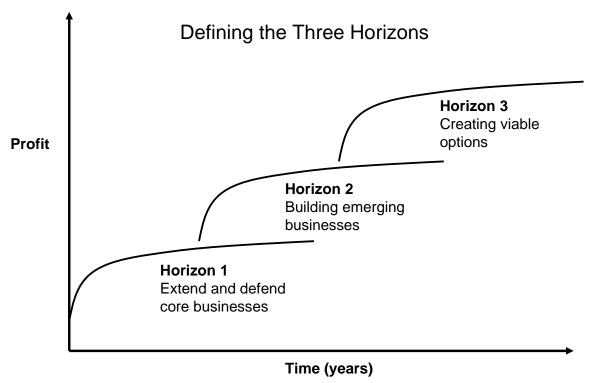


Figure 29: The three horizons of growth articulated in The Alchemy of Growth (Baghai et al.,1999) provide insight into the need for different goals and processes for different kinds of projects within a firm.

Meeting all of those criteria is a daunting task. Linder (Linder et al., 2003) looked at what it takes to establish an organizational process for corporate entrepreneurship. The process should:

- Formulate a <u>specific</u> management team for venture activities. These efforts take
 focus and energy. Give responsibility to specific individuals to make it happen.
 This is the group that will also develop and refine the process, set corporate goals,
 and measure results.
- Develop a defined, milestone-driven process with document templates developed. An example of something like this was the "Venture Manager's Survival Guide" that was developed and shared at Raytheon (Kanter, 1989). Documents like this include do's and don'ts, things to worry about, and advice on navigating the intricacies of the internal and external organizations and control systems.

- Develop a process for handling standard agreements with partners as venturing is not always accomplished by a company in isolation.
- Make sure the process will encourage work across boundaries and match like personnel from different orgs. The process should manage the pace of outputs and most importantly ensure information flow and knowledge creation and capture.
- Encourage recruiting and hiring individuals with multidisciplinary backgrounds.
- Employ team-based incentives to bond diverse working groups.

As mentioned previously, the process will need to have two parts to it. It will include the actions that the senior corporate sponsors of the venture activities will be responsible for and the complementary sequence of actions pursued by each of the ventures themselves. The key is to separate the management/sponsorship tasks from the entrepreneurial tasks. This is important since the senior management is likely to have grown up in the organization and supports the firm's well established "core values". Their intuition may not directly apply to, or even worse be at odds with, the specific needs of the new ventures. It is the role of the middle manager, turned venture manager, to "educate" corporate management based on their own substantive analyses on the needs of the new ventures (Burgelman, 1984). It is senior management's role to understand and help figure out how to meet those needs.

Many of the recommendations suggest that the senior management be organized as a board of directors who are responsible for the overall corporate entrepreneurship process and agreement on the ventures to pursue (Day, 2000; Kanter, 1989). The members should come from across the corporation, especially executives of mainstream business units. The board's job is to "manage the chaos" with <u>guidelines</u> and a basic set of tools. They can administer this by developing and following a process: set goals, select key people, and establish a few critical

limits and decision points. They should seek to minimize control however (Quinn, 1985). In addition, it is the role of the "board of directors" to mentor and support the venture management in their tasks.

A number of real life processes have been examined in corporate case studies (such as the IBM EBO, Nokia New Venture Organization (NVO), and a number of other systems) and other processes have been proposed in academic papers. While the specifics of each process may be different, there are common elements across the set. Examples of these processes are shown in Figure 30-Figure 34.

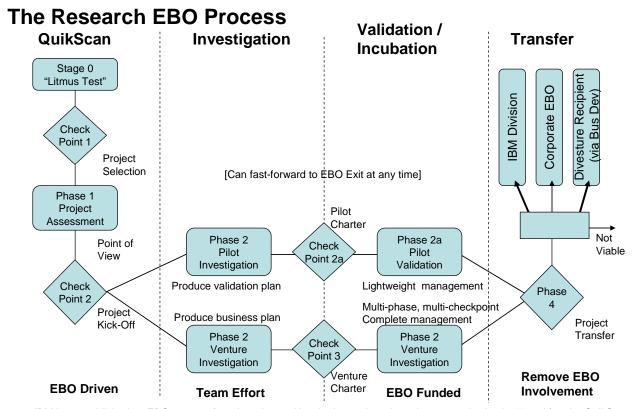
Figure 30 is a simplified view of a generic corporate entrepreneurship process. It identifies just a few stages and milestones dividing the process into discovery, incubation, and acceleration. This is the same basic process as seen throughout most corporations. Many of the processes divide the stages into smaller sections to give them more opportunity to address questions and to give them the opportunity to stop ventures if going awry.

Radical Innovation Capability Oversee Transitions/Interfaces **Discovery** Incubation Acceleration Creation, Evolving the Ramping recognition, opportunity into up the elaboration, business to a business articulation stand on its proposition of opportunities own Commercialization Conceptualization Experimentation Basic Research Technical Focus Internal Hunting Market Learning Respond External Hunting Market Creation Invest /Licensing/Purchase Strategic domains /Invest

Figure 30: High-level corporate entrepreneurship process identified by RPI Radical Innovation research project (O'Connor and Ayers, 2005)

A full radical innovation capability consists of three distinct capabilities, which not only need to be effectively managed, but the transitions and interfaces between these three capabilities need to be well connected into a seamless process.

The published IBM process (Figure 31) has these same basic steps but is more specific about checkpoints and the testing and learning phases they employ. An important part of this is realizing that testing technical feasibility and market feasibility are <u>both</u> needed but may happen at different times.



IBM has established an EBO process for advancing and incubating projects based on strategic checkpoints. After the QuikScan process, the EBO group either produces a validation plan (pilot investigation) or a business plan (venture investigation), depending on the initial assessment. The pilot projects are then monitored to determine whether they will be advanced, while the venture projects continue to develop under close management by the EBO group until they are ready to be transferred.

Figure 31: IBM's EBO process as reported by Nunes (2004).

Figure 32 highlights the steps in the creation of the venture. It's a view of the venturing process from a corporate sponsor's position. Looking at the flow of steps and key roles of senior management in overseeing each of the steps is critical. This view also points out the need for feedback and continued refinement of decisions made about strategy and process. This specifically shows feedback and learning as well as influencing the process. This is an important

loop to be captured in the dynamics of corporate entrepreneurship. For a given organization it may or may not be present.

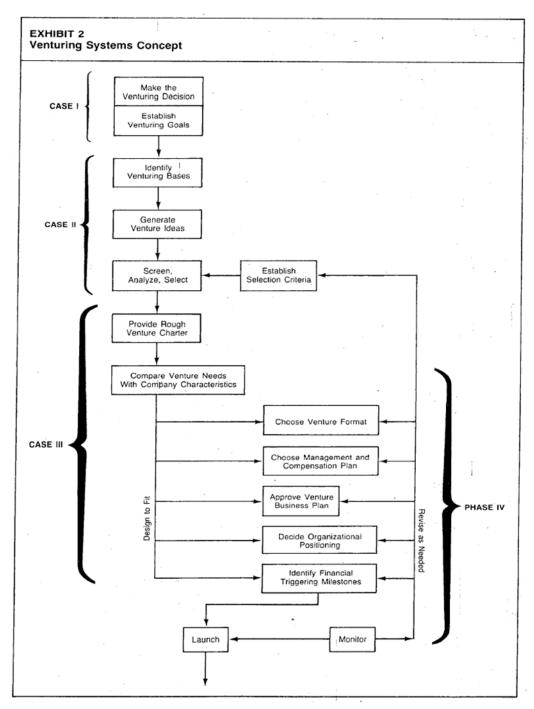


Figure 32: High-level process for thinking about how to set up and manage a corporate entrepreneurship effort from a senior management perspective. Identified as "Venturing System Concept". (Block, 1982)

Once constructed, Figure 33 shows a more detailed, milestone-driven and venturespecific process for the iterative development and learning of the business.

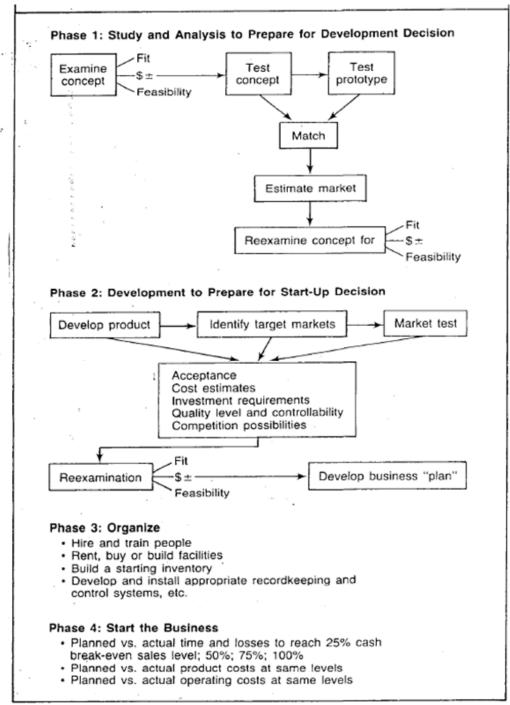


Figure 33: A subset of a corporate entrepreneurship process focusing on the key milestones and iterations proposed as funding events. (Block, 1982)

The notion of "fit" as shown in this process is interesting. The basic process described here is what anyone starting a business might do. The idea of testing for "fit" with the corporate venturing goals is unique to corporate entrepreneurship activities and adds that extra make or break criterion. Fit is important to corporate entrepreneurship. If there is a disconnection between a corporation's preferred style and that of the venture then the corporation must ask itself if the venture should be continued. This is one indication of what can make corporate entrepreneurship harder. A goal for strategic alignment of new ventures will be embodied in the processes used and will limit the ideas to be pursued.

Nokia has a reputation of having a good corporate venturing program. Its high-level process is available on the web (Figure 34). The web page also describes how Nokia pursues venturing.

"While Nokia Business Groups invest in their own new developments, Nokia Ventures Organization develops new business ideas outside the natural development path and current focus of the core businesses. It also facilitates the venturing process across Nokia.

Nokia has a set of tools for efficient development of new ideas. The venturing process provides a reference for all the essential services and tools, enables the set-up of a successful new business, and speeds up venturing. We develop the ideas into ventures using limited resources to ensure that the venture will be launched with the right team in the right operational mode and organization.

Externally Nokia has invested into early stage venture capital fund Nokia Venture Partners and mid- to late-stage venture capital firm Nokia Growth Partners to get venture rates of return in addition to real-time market feedback about new technologies and business models." (www.nokia.com accessed 2005-03-04)



www.nokia.com (2005-03-04)

Figure 34: High-level sketch of the Nokia Venturing process as published on its web site.

To elaborate further on what makes a "good" corporate entrepreneurship process, elements of the above processes were combined with other research results to create a model process. A prototypical process discussed in Sull (Sull, 1999) forms the basis of the "best of breed" discussion found in Appendix A. Figure 30-Figure 34 show several views of potential processes. Similarity of these processes is indicative of similar problems and management needs regardless of the originating organization.

At heart, the corporate entrepreneurship process is a simple stage-gate process. It's not a revolution, it's a staged process (Sull, 1999). In addition, multistage processes give senior management more control of what is happening. This is a real options based view of the investments to be made. The real options analysis process values the benefit of learning or letting the future unfold before committing the next stage of capital to a project. Since entrepreneurship,

corporate or otherwise, is so much about the exploration and learning, the use of clear stages and having the "option" to continue or close-up a venture based on what's learned is understandable. Beyond its use for pure funding choices, a staged approach can also motivate a team to achieve results. Multi-stage commitments mean that smaller amounts of capital are made available more frequently as milestones are achieved. "There is nothing like hunger to motivate the team to clear the next hurdle quickly." (Kanter, 1989)

As discussed previously, the process for the ventures themselves needs to be focused primarily on learning what will make the venture successful in the market. Examples include: learning the business needs, learning if customers like the offering, learning how to compete, and learning how to run a company. Successful new ventures are able to apply speed and learning to quickly refine the offering. One way for the new venture to learn more quickly is to have a process that supports interaction between technical and marketing people at operational levels of the organizations (within a venture and between a venture and the existing organization) (Quinn, 1985). Perhaps the best way to learn and refine the offering quickly is to test the market with real products for real customers. These efforts are called "in-market experiments" or the "probe and learn" approach (Lynn, Morone, & Paulson, 1996). A clear focus must be placed on doing this well have having experiments with strong "discriminating power" (Garvin, 2004). Poor "discriminating power" can be a major shortfall of many venture experiments. Entrepreneurs change too many parameters at once and in the end the venture management doesn't know why customers did or did not purchase their offering or the key factors that led to the results they are observing. "Managers are best served by an experimental, adaptive approach, probing their markets with prototypes in order to determine what will and will not meet customers' needs, and then revising products and plans in response to the feedback they receive (Weick, 1995). But in

doing so the new venture must be careful to not listen to every whim of the marketplace or reinvent the wheel (Iansiti, 2003).

Recommendations (R), Trade-offs (T), and Dynamics (D):

- R: Success is more likely if there are upfront discussions and acceptance of risk.
 (Miles & Covin, 2002)
- 2. R: Be sensitive to the independent roles of formulation. The method by which an innovative concept or strategic renewal project is introduced in a corporate setting is likely to influence the success of implementation. (Dess et al, 1999)
- 3. R: Process should assess and choose affordable risks. (Sykes & Block, 1989)
- 4. R: Make venturing a "mainstream" function of the business. (Sykes & Block, 1989)
- T: Formal controls of the right type can help corporate entrepreneurship (Antoncic & Hisrich, 2001)
- 6. R: Process should focus on actions that lead to profitability. (Quinn, 1985)
- 7. R: Process should give the venture formal license (the ability to proceed).
- 8. R: Follow the steps a small entrepreneur does to get funding: 1st test validity of the concept (is the business real, is there upside potential?) then 2nd get the right group of people the committed experts.
- 9. T: Is there a defined process or is it ad hoc? (Garvin, 2004) Also described as "seeds" vs. "weeds". (Sharma, 1999)
- 10. T: Process encourages market probing and learning through testing or emphasizes detailed planning and analysis to launch broadly from the beginning. (Sharma, 1999) (Garvin, 2004)

- 11. T: Freedom to use or ignore mainstream internal or partner services depending on the needs of the venture or insistence that the ventures go through mainstream channels for many "shared corporate services". (Kanter, 1989)
- 12. T: Established process at what level in the corporation? At the corporate level or at the individual team level?
- 13. T: Style of support for external partnering is either in the venture organization, available from elsewhere, or not available. The partnering process is either well defined, there are some tools available, or ad hoc. (Sharma, 1999)
- 14. T: Process for managing uncertainty. Jump in and explore, vs. a perpetual fire fight or simply avoiding the uncertainty. (Sull, 2004)
- 15. D: Venture "fit" can constrain venture opportunities which shrinks opportunities for success and quality of ideas and narrows "fit" further
- 16. D: Stage gate process criteria not appropriate for ventures and too much like incremental product development too conservative. Few projects survive the process, only small wins emerge, followed by stricter selection to try and find big winners which reduces the number further.

9.4.5 Resources

Process will help a venturing organization by moving ideas through a predictable and visible set of stages. One (or several) of those stages will include resource decisions. The type and amount of resources that ventures need have been studied as well.

Christensen and Overdorf (2000) identified three types of capabilities that influence the success of corporate entrepreneurship. They are:

• **Resources**: people, equipment, skills, know-how, and money

• **Processes**: patterns of interaction

• Values: standards by which priorities are set

Several of these have been already discussed but an important resource that has not been covered is knowledge and know-how.

A thorough knowledge of your organization's competencies and skills from which can form your "venture bases" is recommended (Block, 1982). And in particular, understanding the extent of the new skills needed for the venture is even more important. Corporate entrepreneurship can be based on new combinations of skills which in turn drive new skill creation and using existing skills in new ways (Burgelman, 1984). Zahra et al. (1999) suggest that understanding knowledge creation and exploitation processes within corporate entrepreneurship activities are one way to understand these needs. Facts can be gathered from recent success and past failures to support new learning. They describe three types of knowledge that should be identified. They are specific areas or tasks, are integrative in nature, and are new ways to exploit technology and integrative knowledge. They describe a primary role of venture personnel, and particularly the venture management, to make sense of the learning and give individual insights meaning by connecting, rearranging, or interpreting them. Management should set the stage for future learning.

A few pieces of advice have been provided for thinking about the financial resources needed for new ventures. Two dimensions to the financials have been reviewed. They are where the resources come from and how returns on ventures could be measured. For IBM's EBO process (Garvin and Levesque, 2004) they said that it is important that the business units have "skin in the game". To make this happen they expect that each future home for a new venture will fund a major portion of the initial start-up. To sweeten the deal the corporate strategy group

who runs IBM's EBO process has an additional pool of money to apply if the business units commit. Corporate support at some level is a common approach to funding corporate entrepreneurship.

Resources, Skills, Knowledge

- Entrepreneurial management
- Industry Knowledge
- Marketing skills
- Distribution methods
- Technology
- Research
- Development
- Physical facilities
- Financial management skills
- Communications systems
- Regulatory information
- Capacity to evaluate performance realistically, etc.

Note: The question is not whether these capabilities are present in the parent company, but whether they can be supplied. Know-how resides in people; the venture may require those people to get the know-how required.

Figure 35: Examples of resources needed by corporate entrepreneurship efforts (Block, 1982).

The next challenge is, of course, determining the financial impact of corporate entrepreneurship on the firm. Dess et al. (1999) proposed two measures of firm performance. Economic Value Add (EVA) is one approach commonly used, but they suggested that Market Value Add (MVA) is perhaps more appropriate for corporate entrepreneurship because it represents the difference between the market value of a firm and the economic value of capital.

In summary, resources are discussed in many places throughout the various other sections as well. Competency, knowledge, skills, and financial resources are often taken for granted, but must be considered in the details of the corporate entrepreneurship efforts.

Recommendations (R), Trade-offs (T), and Dynamics (D):

- R: Think like a small entrepreneur: Focus on low early costs, few over head costs, and "sweat capital"
- 2. R: Employees must perceive the availability of resources to consider starting entrepreneurial activities (Kurathko, 1990)
- 3. R: Scavenge for additional resources (Gupta, 1987)
- 4. R: Market Value Add for examining the potential impact of corporate entrepreneurship (Dess et al., 1999)
- 5. T: Resource acquisition strategy can be "strictly administrative" or on the other end "strictly social transaction oriented". (Starr, MacMillian, 1990)
- 6. T: Use of strategic partners. Your partners are working with many ventures and existing programs or partners are determined as needed by project. (Sharma, 1999)
- 7. D: Effects of over or under resourcing a venture activity

9.4.6 Organizations

The next collection of research focuses on the organizational structures that support the venture and link it to its parent. "Organizations" is the sixth of the ten major categories reviewed. This section will look at:

- The importance of multiple ways to look at an analyze an organization
- The range of typical organizational options and various ways to help select appropriate structures
- The trade-offs between connectedness and independence on new ventures
- A number of specific organizational models and the pluses and minuses of each

The impact of organizational structure on the success of corporate entrepreneurship efforts has been studied extensively and is often one of the first concerns focused on by management. Organized structures are important at two levels; the corporate sponsoring level and the venture level itself. The challenges encountered in defining the organizational structures include the formal structure of the venture, the independence vs. connectedness of the new venture, and to where should the new ventures should report. How is management to decide the best answer? Does it really matter?

The basic trade-off found throughout the discussion of organizational structures for new ventures within existing companies is how integrated will (or should) the new venture be with the mainstream business? A range of possible structures have been examined over the years and have been reviewed in strategy. As a reminder, they range from completely separate spin-outs, to joint ventures, to matrixed or flexible organizations, to wholly integrated, internal venturing structures embedded within existing businesses. Probably the only advice on this particular choice is "it depends". There are so many specific details underneath the surface of decisions to structure an organization in one way or another that good rules can be hard to extract. Of the "three lenses" that can be used to examine organizations (strategic, political, cultural), the strategic lens has been applied most often in research (Ancona, Kochan, Van Maanen, & Westney, 2005) Without an integrated study of the other two lenses some important influencing factors are perhaps missed.

The importance of the political lens can be found in the recommendations that emphasize the need for connectedness, coalition building, communication and social transaction oriented (STO) management styles. The suggestions reveal that the way ventures succeed is by understanding how the corporation gets work done outside the formal structure and processes.

Gaining an understanding of both the parent organization and new ventures will be very useful insight for venture management. Likewise, developing a view of the underlying culture of the parent and its differences/similarities with the cultures of each of the ventures will also be helpful. If these diverge too much future integration can prove to be difficult. If they remain too similar the venture may be doomed by the "blinders" passed down to it from its parent.

Block (1982) makes a number of observations and recommendations. He addressed the trade-offs that emerge when determining the needed independence between the venture and the parent corporation. Both need flexibility and a separate identity. But, in most cases the new ventures and the existing corporations evolve closer together over the long-term rather than becoming completely separate organizations. Some of Blocks observations are:

- A new venture needs to be protected from the negative characteristics of the company
 which may hamper it. These include internal resource competition, decision delays,
 and requirements to use common services which may not be appropriate for the
 venture.
- Likewise the corporation must be protected from venture-induced damage to its reputation, conflicts with customers, and excessive downside risks from the venture (for example: losses and cash drain).
- Recognize that in most cases the venture will eventually be moved closer to the
 mainline business. Prepare for that early. Create the incentive links from the
 beginning to smooth the transition.
- Integration will eventually occur, but a common error is to integrate too quickly, before the venture can survive within the corporate ecosystem.

Sometimes just the process of deciding the best course of action for the positioning of
new ventures inside or outside the corporation can cause internal conflicts which lead
to program failure. This observation comes the closest to getting at the political and
cultural challenges involved with venturing.

As the discussion of the three lenses points out, most if not all of these goals can be achieved no matter what the <u>formal</u> structure. The political views and cultural views must be managed together with the formal structure to achieve the desired outcomes.

Beyond the structure of the venture itself, an additional organization also needs to be present. One recommendation that is mentioned frequently is the need for a corporate organization of some kind focused on corporate entrepreneurship. The O'Connor and Ayers (2005) study of corporate venturing, what they are calling radical innovation, has drawn the conclusion that, "... there must be a dedicated group responsible for making radical innovation happen. An organization cannot accomplish radical innovation solely on the basis of having an 'innovative culture'." Even Nokia which has a reputation for sustained business renewal and an innovative culture has a dedicated venture group of this type. Nokia Venture Organization (NVO) is a corporate level organization that is responsible for identifying and pursing new venture ideas that fall outside existing business charters, but still reside within Nokia's strategic scope. The central organization is needed in order for Nokia to explore the "white space" opportunities that emerge because they, by definition, fall outside of any other group's responsibility. Many corporations share this view and construct (Day et al., 2001). They have placed this group in corporate strategy (IBM) or constructed a separate group at the corporate level (Nokia). Often these dedicated groups are very lean and leverage resources from throughout the corporation.

Given that a group with the job of establishing and managing ventures exists, how do they choose the best way to structure the specific opportunities? A number of studies have proposed frameworks to look at how to think about organizational questions for new ventures in a more holistic fashion.

One framework, proposed by Burgelman (1984), focuses on a range of possible structures differentiated by where they fall on dual axes of "operational relatedness" and "strategic importance". This is in some ways similar to the Roberts / Berry "Familiarity matrix" (Roberts & Berry, 1985) (discussed in the Strategy section of this document). Burgelman's nine box matrix is presented in Figure 36.

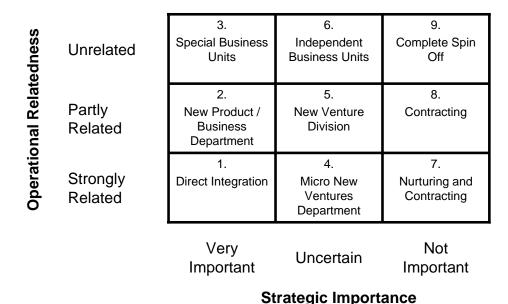


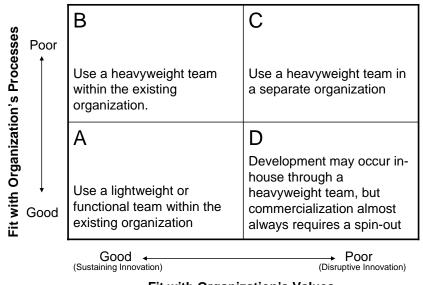
Figure 36: Potential organizational structures for new ventures distributed among the two dimensions of operational relatedness and strategic importance. (Burgelman, 1984)

Burgelman argues that the greater the strategic importance, the tighter the parent organization will "need to" control the venture and that changes the acceptable formulation of the venture structure. Likewise, he is concerned about how related the venture is to the existing operations. Opportunities for either synergies or distractions will exist and will have an impact on suitable structures. An organization should carefully consider these possibilities and their implications.

Burgelman notes that for the extreme positions in this framework the choices are straight forward and sensible. It is the space in the middle where strategic commitment and relatedness are unsure or unclear that careful thinking must be done. It is here where venture exploration is particularly important. Exploration is largely to learn enough about the venture to determine into which positions the venture really should move to over time. Burgelman suggests that the center of the matrix is an unstable position and focus should be applied to learning enough to move the venture to the appropriate corner.

More recently Christensen and Overdorf (2000) looked more specifically at "organizational relatedness". They are focused on what appears to be a smaller set of venture opportunities – those that are all considered <u>strategically important</u> – and are providing guidance on how integrated the venture team should be and how large or formal its structure should be. They divided the organizational relatedness into two dimensions (Figure 37). They are (1) the new venture's fit with the existing organization's <u>processes</u>, and (2) fit with the existing organization's <u>values</u>.

They use the notion of a heavyweight team (Clark & Wheelwright, 1997) as the preferred structure for projects outside those that are the most closely matched (quadrant A in Figure 37). They suggest a process of pulling the relevant people out of the existing organizations and drawing a "new boundary" to surround the team.



Fit with Organization's Values

Figure 37: Christensen and Overdorf (2000) model for making organizational structure and connectedness decisions for new ventures

Christensen and Overdorff have concluded that if the new venture is a poor match with an organization's values then it must be done through a spin-out. The implication is that the likelihood of changing the values of a corporation is low. This also has implications on "instilling an entrepreneurial spirit" as a goal for corporate entrepreneurship activities. Likewise, if the venture's process needs are different than the existing business', then the use of a heavyweight (organizationally self contained) team is appropriate as a way to isolate the venture's new processes from the rest of the organization.

Another example takes a slightly different approach than these two frameworks focuses on the efficiency of operational transactions needed to make a business run. Dess et al. (1999) looked at proposals of this sort. They explored the advice to use the "transaction costs" incurred in the course of running the business to decide what to integrate into the new venture. It has been recommended that organizations should integrate everything necessary to minimize their operational transaction costs. The point where the operational transaction costs are minimized then defines the boundary of the business' organizational structure. If the interaction across the

value-chain is high this can lead to very high integration of new ventures with all of their value-chain and especially with the parent organization. While high levels of integration will minimize transaction costs it may not provide the level of independence and flexibility needed to give the venture room to explore and grow as described previously. Dess points out that perhaps instead of an absolute measure of transaction costs a better measure is the relative transaction costs with respect to the ventures competitors. As long as the new organization structure provides a transaction costs advantage over its competitors then that may be a good stopping point.

None of these examples of ways to determine the best structure for corporate entrepreneurship is suitable for all situations. Points along the continuum from completely separate to fully integrated will be explored next. A common recommendation is to make sure the venture has a separate and identifiable location, physically and organizationally (Kanter, 1989). But, how much separation is appropriate?

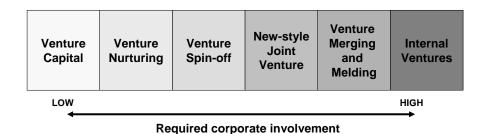


Figure 38: The spectrum of venture strategies will require different organizational appraoches. (Roberts, 1980)

Towards the low corporate involvement or the "independent" end of the range of possible structures are venture spin-outs. Spin-outs can be an effective organizational structure for creating the required independence and insulation between the corporation and the venture that is often desired. It allows the venture to have its own business processes, culture, incentives, and approach to the business. It is the most "start-up-like" of the structures. Iansiti (2003) studied a

variety of spin-out new ventures and concluded that strong separation has many early advantages.

O'Reilly and Tushman (2004) found four common structures for ventures (Figure 39).

Organizing to Innovate

In our examination of 35 different attempts at breakthrough innovation, we discovered that businesses tend to apply one of four organizational designs to develop and deliver their innovations. More than 90% of those using the ambidextrous structure succeeded in their attempts, while none of the cross-functional or unsupported teams, and only 25% of those using functional designs, reached their goals.

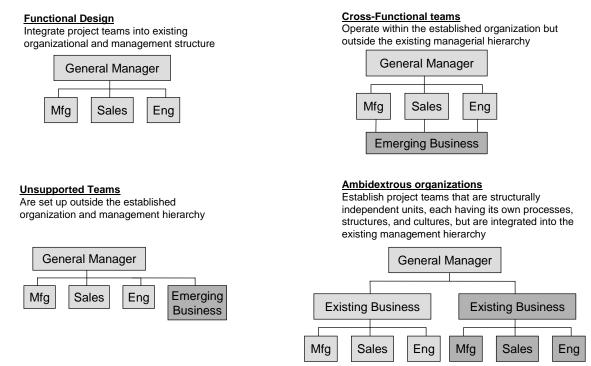


Figure 39: The four primary structures identified by O'Reilly and Tushman (2004) including their recommended structure the "ambidextrous organization" where integration between the existing and emerging businesses occur at the general manager level.

They prefer the Ambidextrous Organization (AO). It is a separate organization with all the needed capabilities wholly contained within it, but structurally linked into the existing organization though a senior, general manager. (The team should be linked informally elsewhere throughout the organization up and down if other advice is to also be followed.) They prefer the AO because they feel it is the best at dealing with resource competition between the new venture and the existing business units. When organized in an AO form management needs to ensure itself that the new venture will not be forced to compete for resources with profitable, established parts of the business. Being separate and largely independent allows the venture team to explore

new options without significant supervision and enables the team to focus because there are fewer non-venture related distractions. Because the AO is largely self-contained there could be a benefit to speed of decision making vs. the likely bureaucracy found in the old part of the business.

There are negative effects of separating new ventures as well. To begin with, Iansiti also observed that separated innovators almost always need to be reintegrated at some point in the future. His results showed that approximately than 75% of spun-out ventures are eventually reacquired by the parent organization (Iansiti, 2003, p. 60). In these cases, the uniqueness of the start-up's goals, personnel, processes, and culture with respect to the parent made assimilation just as difficult when it was time as any other acquisition. There was a missed opportunity to recognize that the venture will likely return and to work towards making that easier. He recommends that more intermediate organizational forms for venturing should be pursued given the high occurrence of eventual reintegration. It was suggested that the eventual integration be planned for up front.

When compared to a spin-out, the AO is a step in the direction suggested by Iansiti but is not without challenges. It is not completely independent on the organization chart, but it is independent for all operating purposes. It is an example of the reporting structure that Dess (1999) previously expressed concern about. By minimizing the required interaction with other parts of the organization, the new venture team is insulated from other organizational distractions but is perhaps not taking full advantage of the potential benefits of being in the overall organization. In addition, senior management will need to run two businesses simultaneously. This can be a challenge. The attitude of the CEO and senior management to this endeavor is critical. A danger of separating the new venture entirely is that it can be easy for senior

management, specifically the CEO, to "get the business off his or her plate" and to not worry about it. In other cases the new ventures report directly to the chairman of the board which further separates the venture from the mainstream business. It would also be unlikely that a chairman would have the time or ability to link the parent and new venture effectively. This can be devastating to the venture because when structured in this fashion the old and new businesses only come together at the CEO level or above and if little energy is applied to making the venture successful at that level then the risk of failure is increased. (Christensen and Overdorf, 2000)

Day (Day et al., 2001) shares these concerns with new ventures that are very separate from the corporation. They identified several challenges for the new venture stemming from its isolation. They include: 1) a lack of information flow back to the rest of the organization about how the venture is progressing and what it is learning; 2) the loss of new ideas developed in the new venture but not pursued that are never captured by the parent for the same information flow reasons; 3) the venture is disconnected from the parent's existing customers, technologies, and competition which could provide valuable insights and opportunities; and as mentioned by Iansiti 4) problems with rejoining the mainstream when the time comes as discussed. In addition, they point out that spin-out (or the wholly self-contained new venture such as the AO) is poor because it forces the integration between the new and old to occur at the senior management level which is probably too high a level. At this level, the senior management is trying to concentrate on running the overall business. If they do the natural thing and just allocate their time spent on each business by the amount of revenue, or profits, made by each, then the start-up will get little or no time. Stretching an already stretched senior management team and CEO further with the management of one or more new businesses does not seem feasible. An intermediate structure is

really required to do this. Iansiti (2003) also points out that "isolation deprives innovators of access to some of the most powerful assets it could have at its disposal." Access to additional, established resources is a potential advantage for a new venture springing up within an existing organization that stand-alone start-ups won't have. To structure new ventures in such a way that they don't use those advantages seems short sighted. Iansiti concludes with a track analogy: "...completely autonomous ventures may win sprints, but integration wins marathons, and to remain competitive, companies should avoid the pursuit of short-term gains that will sacrifice the effectiveness over the long haul."

Beyond the academic papers, corporations trying venturing are dealing with this challenge. In order for them to balance the need for independence but still retain the important connections which are valuable to both the new business and the existing ones a number of different approaches have been tried.

For example, IBM's Emerging Business Opportunities (EBO) program takes a more hybrid approach to its structure (Garvin and Levesque, 2004). It tries to get the best of having separate groups and development by the line organizations at the same time. The executive leader of an EBO Venture reports to and is funded by a specific business organization and also reports centrally to the EBO Office in IBM's corporate strategy group (Nunes, 2004). This dual reporting structure enables the management team to give the EBO team distinctive systems, processes, and oversight mechanisms to provide some independence and tools specifically suited to exploring a new business opportunity. At the same time the EBO system links the new ventures to operating divisions by embedding them. The leaders of the projects and the staff working on them have conventional reporting relationships up through the operating units. To these folks, the EBO project doesn't look different than any other project they might be on. This

arrangement seems appropriate for IBM because it is already a heavily matrixed organization and the dual reporting structure helps to get people from the existing businesses and the EBO Office simultaneously engaged in the new business. Iansiti's (2003) findings support the IBM approach. He believes that the integrated approach uses resources more efficiently, leveraging the skills, assets, and the infrastructure of the parent organization. To make this work well the right management attention must be maintained (in both organizations) and the team in place must be capable of removing roadblocks. The IBM structure seems to address both of these well. When done well, Iansiti found that "integrated operations were roughly three times as productive in terms of revenues per employee and revenues per marketing dollar (than independent ones)." (Iansiti, 2003, p.60).

Another set of case examples have been documented in the RPI Radical Innovation project (O'Connor and Ayers, 2005). They describe that they have found seven organizational structures employed by different corporations. They revealed three in the most recent report. The others are to follow. The three are:

- Idea Generator: Typically led by the CTO, this group is responsible for internal and external searching for new ideas, exploring and incubating them, and then working to transfer the growing business to existing business groups if promising. A board consisting of representatives from across the corporation selects businesses to pursue. This arrangement is effectively an independent organization doing the new ventures linked to the existing business by a management board.
- 2. <u>Self-similar Model</u>: Corporate R&D and the business units both have venturing units embedded within them. They explore the areas within their charters (the business units have their lines of business and corporate R&D tackles the white space). A

common core venturing board for the corporation guides the two processes. The board has the CTO, Chief Strategy officer, controller and senior management from key areas.

3. <u>Mirrored Model:</u> In this structure, the venturing is done in a separate corporate organization but the incubation is done closely with the business unit the venture is likely to ultimately reside in. The venture organization is concerned with scale-up and the business units are focused on infrastructure, value-chain, partners, and skills.

Each of the cases, there is a separate organization focused on the new venture. For each variant various other organizational and process constructs provide the required integration and "connectedness" needed for the ventures to be successful.

A final example of organizational structure is provided by Dess et al. (1999). They looked at two recommended structures, the modular and virtual organizations, and concluded that perhaps something else, the "barrier-free" organization, that was needed. The modular company focuses on core functional activities and outsources its component and business service requirements to specialists. A modular structure can allow a company to become an entrepreneurial hub adding and shedding parts as necessary to accomplish new ventures.

A virtual organization is a part of a continually evolving network of independent businesses – suppliers, customers, and competitors – that share skills, costs and access to each other's markets (Byrne, 1993). This is even more fluid and dynamic than the modular organization. The boundaries of the virtual organization are vague.

Along these lines, the Barrier Free organization is characterized by less formal structure rather than more. It is described as having few layers of management, small-scale business units, process teams and interdisciplinary work groups, empowered first-line supervisors and non-

management personnel, open communication, close coordination within and outside the organization, interdivisional coordination and resource sharing, and an emphasis on accountability vs. activity. A barrier-free organization is "fluid, ambiguous, and has deliberately ill-designed tasks and roles" (Hirschhorn & Glilmore, 1992). Dess et al. concluded that the "barrier free" organization can be very open to entrepreneurial behavior and starting new ventures. The existing business needs to behave in this way. It can be hard to implement because it can require massive structural overhaul of existing systems to make it work.

A range of organizational factors have been considered in this section. There are perhaps as many different structural responses to enabling corporate entrepreneurship as there are companies trying to do it but formal structure is only one of the important organizational lenses. Perhaps one of the most important factors to understand about organizational selection in corporate entrepreneurship is why a company chooses a given structure. What are the reasons the one approach is better for them than another? The answer to this could reveal important dynamics and influencing factors which might yield further insights into the challenges of corporate entrepreneurship.

Recommendations (R), Trade-offs (T), and Dynamics (D):

- 1. R: Achieving a balance of separation and integration calls for the full range of organizational and leadership interventions; structure as well as management processes, HR policies, and corporate culture.
- 2. T: Location of where venture reports in to. "The normal tendency is to have a new venture report to the division where it will ultimately be lodged usually a guarantee of failure" (Block, 1992) vs. IBM EBO experience.

- 3. T: Physical location of venture team: near or far from the existing business. (Kanter, 1989)
- 4. T: Connections between venture and existing businesses. Strong or weak: physical, organizational, communication.
- 5. T: Staff for a new venture spans existing and venture groups or are they independent teams.
- 6. T: Is the tendency for the venture to build its own or to collaborate? (Sharma, 1999)
- 7. T: Is the venture part of a "skunk works" or is it integrated (Quinn, 1985)
- 8. D: Dynamics of isolation. Separation allows the venture's culture to evolve. Goals change making the new venture more isolated from the parent organization increasing the likelihood of conflict and potential for cancellation.

9.4.7 Source of Venturing Ideas

The seventh area studied in corporate entrepreneurship focuses on the identification of new venture ideas. Finding the "next great idea" is challenging to entrepreneurs of all types. "The advice given to would-be entrepreneurs – 'Find a need and fill it' - might be given to any company (Block, 1982, p25). Block highlights the added challenges facing corporations. The additional filters that are often applied by corporations narrows down the range and sources of ideas quickly and starts to change the discussion from "what customer "pain" points should we address?" to a much narrower "how best do I make use of what I know how to do?".

Many suggest that a good approach to sourcing this must include ideas originating from outside the corporation and not rely simply on internal ideas from research and development or business leaders. (Miles and Covin, 2002; Linder et al., 2003; and many others). Many sources and points of view are also crucial for internally generated ideas as well. One of the lessons

described by Day (2001) is that even for the internal sourcing of ideas Nokia feels competitive ideas are more likely if trainees are exposed to different parts of the company and, employees are rotated through the organization, and reward systems emphasize the greater good. The mix of perspectives and broad knowledge about problems outside the current business contributes to generating more successful ideas.

There is evidence that corporations are transitioning to accessing broader opportunities. Linder et al. (2003) found that, "... the amount of innovation coming from external sources was estimated to be, on average 45% of the total for the companies concerned." This varied by industry with external innovation at 90% in retail and down to 30% in pharmaceuticals and biotech. Linder also defined five primary channels for sourcing innovation and then rated them with respect to six criteria that are important to management teams. The summary of their analysis is shown in Figure 40. This framework has nice attributes and the criteria map nicely to key strategy issues of differentiation, appropriability, scope, and investment.

"Open Innovation" (Chesbrough, 2003) points out that in today's marketplace corporations cannot rely solely on an internal development path for new ideas. "Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas.

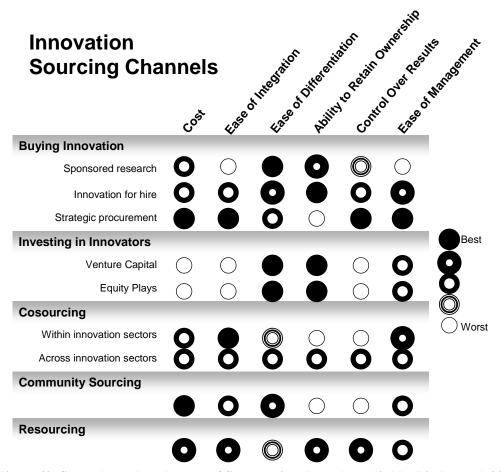


Figure 40: Strengths and weaknesses of five sourcing channels studied by Linder et al. 2003

The Open Innovation Paradigm for Managing Industrial R&D (Chesbrough, 2003)

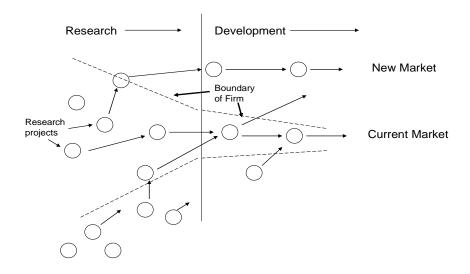


Figure 41: Schematic of the project funnel in an Open Innovation paradigm

They must also use internal and external paths to market. Open Innovation combines internal and external ideas into architectures and systems whose requirements are defined by a business model. The business model utilizes both external and internal ideas to create value, while defining internal mechanisms to claim some portion of that value. Open Innovation assumes that internal ideas can also be taken to market through external channels, outside the current business of the firm, to generate additional value." (Chesbrough, 2003, p.xxiv) He contrasts the former model of Closed Innovation with that of Open Innovation.

Contrasting Principles of Closed and Open Innovation		
Closed Innovation Principles	Open Innovation Principles	
The smart people in our field work for us.	Not all the smart people work for us. We need to work with smart people inside and outside our company.	
To profit from R&D, we must discover it, develop it, and ship it ourselves.	External R&D can create significant value; internal R&D is needed to claim some portion of that value.	
If we discover it ourselves, we will get it to market first.	We don't have to originate the research to profit from it.	
The company that gets an innovation to market first will win.	Building a better business model is better than getting to market first.	
If we create the most and the best ideas in the industry, we will win.	If we make the best use of internal and external ideas, we will win.	
We should control our IP, so that our competitors don't profit form our ideas.	We should profit from other's use of our IP, and we should buy others' IP whenever it advances our own business model.	

Table 7: Goal differences between Open and Closed Innovation paradigms (Chesbrough, 2003)

Using open innovation principles is an approach to accessing further sources of innovation and recognizes the need to have multiple ways to deliver the new business. Chesbrough recommends the following actions to transition from Closed to Open Innovation:

- Take stock of sources of recent innovative ideas for your company and industry.
 Look at major competitors and start-ups.
- Flesh out your innovation roadmap by filling gaps, finding blind spots, creating a Scientific Advisory Board, licensing in external technology, and funding start-ups to fill unmet needs.
- Look for where start-ups are entering and monitor those areas closely for opportunity
- Play poker with your technologies rather than chess. Take some risks.

- Consider the best go-to-market strategy existing channels, or outside channels.
 Avoid the "Not Sold Here" virus. (Figure 42) This is then constrained by the existing systems challenge.
- Increase the velocity of innovation by harnessing university research and linking your
 R&D staff to demanding customers more closely.
- Value the multiplicity of business models for innovation

Another view of how to approach the challenge of transitioning from Closed Innovation to Open is proposed by Linder et al. (2003). They proposed three "organizing frames" to help think about structuring the process of sourcing ideas:

- Consider new business models
- Use Scenarios and "big ideas" to frame and group the internal and external solicitation of bottoms up ideas.
- Examine product domain carefully and have existing business groups list the product they would "like to have" in priority order. (This is in contrast to what they can have when resources, schedule, and skills are applied.)

Alternative Paths to Market (Open Innovation, Chesborough, 2003)

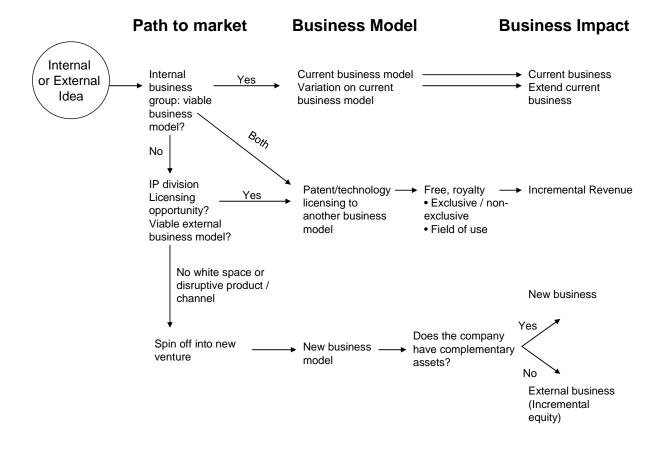


Figure 42: Option decisions to be considered in an Open Innovation paradigm.

The process Linder et al. (2003) recommend has some similar ideas to those presented by Chesbrough (2003):

Buy innovation on the market through "strategic procurement" where the product innovation shifts to vendors. This has also been called extended enterprise by others.

Here long-term relationships with vendors are important as well as their desire to continue to innovate and bring new value to the systems they deliver. There is of course a danger to this as warned in the <u>Innovator's Dilemma</u> (Christensen, 1997). By passing the innovation responsibility to suppliers the firm loses some of its capability

- to innovate in the future. The corporation happily moves up into services and hollows out its core, product development skills.
- 2. Investing in innovators through "equity positions" to both source and learn more about new opportunities.
- 3. Leveraging consortia or co-sourcing efforts especially with regard to deal with government regulation or industries with high barriers to entry.
- 4. Harness the growing trend of community sourcing via open source and community environments.
- 5. Tactical resourcing and the use of temporary or extra talent when needed, on the spot and on-demand.

One of the key points that Linder et al. (2003) make is that the multitude of sourcing channels needs to be looked at as a complete set. They note, "Companies like Lilly set up innovation sourcing channels to meet particular business needs. They match specific sets of sources with their innovation needs in order to manage them as a group, through established processes, rather than as separate and independent relationships."

IBM's is trying to "source external ideas for innovations" based on their "On Demand Innovation Services" program. This program is focused on getting the IBM researchers into challenging customer environments to do two things. First, solve some valuable customer problems that have been solved no where else before, and second, learn more about exactly what customers are trying to do and what they worry about. IBM is leveraging its services channel to do this well. Simply put, "as [IBM] researchers work with business consultants and customers to solve real-world problems, we are better positioned to identify emerging business opportunities."

Look for ideas everywhere, but "... all the search and study in the world will not substitute for the spark of imagination supplied by creative people in an environment where new venture ideas are sought, welcomed... and rewarded" (Block, 1982, p.25)

Recommendations (R), Trade-offs (T), and Dynamics (D):

- 1. R: Small entrepreneurs adopt solutions from wherever they are found. They are flexible, and adaptive. (Quinn, 1985)
- 2. T: Are the innovation sources internal or external? (Chesbrough, 2003)
- 3. T: Market connectedness for ideas: Are they technology push or solution pull?
- 4. D: Not Invented Here Rejection of new venture

9.4.8 Culture

After addressing a number of the most visible categories of factors influencing corporate entrepreneurship the next section looks at the firm's culture and how it affects venturing. Dess et al. (1999) described a three-level view of an organization to help understand the environment for corporate entrepreneurship activities. He defined the levels as the organization's:

- 1. Anatomy (goals and formal structure)
- 2. Physiology (systems and relationships for lifeblood information flows)
- 3. Psychology (shared norms values beliefs that shape the way managers think and act).

The third layer, the organization's psychology, is what has also been called the organization's culture. Defining the "culture of an organization" as a key factor in understanding corporate entrepreneurship can be dangerous. It can appear too early and become a catch-all for a variety of secondary attributes and "hand-waving". Even so, many times "corporate culture" has been blamed for the failure of a new project or effort. "Culture matters because it is a

powerful, latent, and often unconscious set of forces that determine both our individual and collective behavior, ways of perceiving, thought patterns, and values." (Schein, 1999)

Schein describes culture itself as having three levels that go from the visible to the invisible (Figure 43). He describes it as, "... the learned, shared, tacit assumptions on which people base their daily behavior. It results in what is popularly thought of as 'the way things are done around here,' but even the employees in the organization cannot without help reconstruct the assumptions on which daily behavior rests. They know only that this is the way, and they count on it."

Levels of Culture Visible organizational Artifacts structures and processes (hard to decipher) Strategies, goals, Espoused philosophies Values (espoused justifications) Basic Unconscious, taken-for-granted beliefs, perceptions, thoughts, and feelings underlying (ultimate source of values and action) assumptions Source: Schein (1985)

Figure 43: Levels of Culture from "The Corporate Culture Survival Guide", Schein (1999)

The difficulty of course, is getting a good understanding of what the culture really is. Schein describes the elements of a culture (Figure 44) and proposes a series of steps (Figure 45) that can be used to gain a deeper understanding of the important aspects of the organization's culture. This process along with many examples can be found in his book. It's not a simple process but he claims a good first step can be achieved in four hours.

The question that should be posed in the cultural investigation is: What is it about the culture of this organization that either supports or fights against corporate entrepreneurship and

new business venturing? The answers will provide an excellent grounding for making smarter selections on policies and "choices".

What is culture about?

External Survival Factors

Mission, strategy, goals

Means: structure, systems processes

Measurement: error-detection and correction systems

Internal Integration Issues

Common language and concepts

Group boundaries and identity

The nature of authority and relationships

Allocation of rewards and status

Deeper Underlying Assumptions

Human relationships to nature

The nature of reality and truth

The nature of human nature

The nature of human relationships

The nature of time and space

Figure 44: The elements of culture (Schein, 1999)

Deciphering your Company's Culture: A four-hour exercise

- Define the business problem
- Review the concept of culture
- Identify artifacts
- Identify your organization's values
- Compare Values with artifacts
- Repeat the process with other groups
- · Assess the shared assumptions

Figure 45: Outline of Shein's four-hour cultural investigation (Schein, 1999)

In its broadest stokes culture has been identified as important by many research projects in venturing. There could be many ways to think about cultural attributes in the context of venturing. Some examples could be: 1) Open or closed operating style, 2) running a tight ship or

loose one, 3) how much formality or informality, 4) how sensitive is the organization to hierarchy, 5) authoritarian vs. consultative vs. participative style, and 6) reaction to errors and mistakes.

Studies by Zahra et al. (1999) and Koen (2000) are two examples that show how "organization and culture affect funding decisions". In addition they mention that data managers rely on are "synthesized within the prism of organization objectives, resources, and competencies as well as political realities" (in short, the organization's culture). The application of individual mental models and organizational culture affects how decisions are made and how learning takes place.

An organization's propensity for entrepreneurial behavior is one way that culture has been examined for its impact on corporate venturing. Case studies have been used as well as survey instruments to help assess the entrepreneurial attitude or orientation of an organization. It has been found that one the most fundamental actions that entrepreneurial organizations do is to continuously reinvent themselves. The "climate" of entrepreneurship is described in many ways. Antoncic (2001) proposed a set of attributes which many other researchers describe as well.

• Open and quality communication

- For example, a language for entrepreneurship and innovation that is legitimized and different from the language used in standard new product development projects. (O'Connor and Ayers, 2005)
- A lesson from Nokia is that very good business opportunities can arise when people across organizations exchange ideas, info, and experiences. In addition, "The mobility of its managers and a culture that encourages

openness and the sharing of information create market-like information flows within the company" (Day, 2001).

• Existence of formal controls enabling entrepreneurial possibilities

o "Entrepreneurial companies recognize that they have almost unlimited access to capital and they structure their practices accordingly. They let it be known that if their people come up with good ideas, they can find the necessary capital (to pursue them).", Quinn (1985). The appropriate controls and processes around funding projects then enable employees to get access to the resources needed in a repeatable and consistent fashion.

• Intensive environmental scanning

An organization open to what's happening outside. Not insular and isolated,
 may be more likely to see opportunities and see enough to go for (1)

• Management support

Organizations, especially management, that tolerate ambiguity tend to be more successful with corporate entrepreneurship. Many have recognized that entrepreneurship is, at heart, a learning exercise. Block and MacMillan (1985) also point out that "starting a new business is essentially an experiment...", it's not clear exactly what will happen when the experiment is over, but the goal is to find out and learn in the process.

Organizational support

O Zahra et al. (1999) points out that if trust within an organization for entrepreneurial efforts is high then chances of support are higher.

- Nokia relies heavily on personal networks to get new ventures started. People build support for ideas by walking them around and circulating the ideas (Day, 2001). This is true also at IBM and is recognized as an important factor in their EBO process. Part of the rationale for circulating ideas broadly is the feeling that widely known ideas have the best chance for finding a receptive internal environment as they go forward. (For Nokia this works. In other organizations where a culture of support may not be so strong it can be imagined how broad shopping of ideas could also attract unwanted attention and opposition.
- o In addition, there is more opportunity to get further ideas that shape and refine the original ideas.

Values

- The organization must be willing to support the sharing or cooption of resources to aid in entrepreneurial efforts which may likely be more dynamic than regular projects. The formal recognition of "social debts" and members' willingness to participate in maintaining "social assets" could be an indicator of a more entrepreneurial organization.
- No organization is completely homogeneous. A mix of cultures and values will exist. The acceptance of new entrepreneurial ideas throughout an existing organization will also depend on the mix of internal cultures and how the opportunity fits or conflicts with each of those as well. "When new ideas... emerge each subculture is apt to emphasize particular attributes in evaluating the viability of these ideas... Understanding the key values of these

subcultures and recognizing key power brokers within them can spell success or failure of these innovations." (Rogers, 1995)

In summary, the organization's climate of entrepreneurship is deeply affected by its culture. There are many factors that will have an effect and this impact should not be overlooked. Because culture is tacit it is often difficult to separate from other factors. This can make it difficult to see how parent and venture cultures diverge over time leading to conflicts and future problems.

Recommendations (R), Trade-offs (T), and Dynamics (D):

- T: Advancement and reputation comes from running big businesses or creating new ones.
- 2. T: Amount of work autonomy (work discretion) (Hornsby, 1990)
- 3. T: Risk-taking and failure acceptance (Kuratko, 1990)
- 4. T: Communication amount and quality (Antoncic, 2001)
- 5. T: Corporate process and rules vs. more Social Transaction orientated behaviors. Established organizations do not have an asset parsimonious mindset. Process over planning and burdened by formality. There must be resources between the cracks and the ability to get them. (Starr and MacMillan, 1990)
- 6. T: Where does the entrepreneurial approach reside? Firm level, division, groups, team, and individuals?

9.4.9 Incentives

A common management adage is "you get what you incent". This section, looks at how that plays out for corporate entrepreneurship. Designing the right incentives is almost always seen as an important part of ensuring that leaders through the organization make decisions in line with the organization's underlying goals and strategy. In addition, "... theorists stress that any reward system in order to be effective, must consider goals, feedback, an emphasis on individual responsibility, and rewards based on results." (Kuratko, 1990). Just as in any other effort, incentives will be very important in corporate venturing.

There are primarily four levels (kinds) of incentives that must be considered.

- 1. Incentives for senior corporate management
- 2. The leadership of the venture
- 3. The members of the venture team
- 4. The rest of the corporation

The reason why incentives in corporate entrepreneurship can be difficult is that ventures are never entirely stand alone. To be effective the new venture will want to use important parts of the existing resources of the corporation. To help make this happen, the incentives to all of the people involved must be considered. Start-ups need not worry about the inter-organizational compensation issues, but existing businesses definitely do.

Senior management incentives have been the least discussed in the literature. However, a couple of themes do emerge that should be considered. O'Connor and Ayers (2005) point out that, "there is a dearth of senior leadership that is oriented towards the long-term future health of the firm. Compensation systems for senior leadership focus on consistency and growth of quarterly earnings, especially in the US, which tends to focus the CEO on short-term performance metrics. It takes courage and conviction for the senior leadership to spend dollars on long-term, high-risk ventures such as radical innovation initiatives, in the hopes of growing their business five to ten years in the future." As discussed in the people section, the CEO will have a significant effect on whether corporate venturing will succeed. Clearly, providing the

appropriate incentives to a CEO to encourage corporate entrepreneurship is a real corporate governance challenge.

There are two schools of thought on reward systems for corporate entrepreneurs and their teams. They differ mostly in the type, and perhaps magnitude, of the incentives rather than the measures or metrics used to evaluate performance.

Many recommend that the metrics used for determining performance should reflect the needs of a developing vs. stable business. These metrics would be milestone-based. They would include things such as successes in customer engagement, "buzz" creation, partnership development, technology and product demonstrations, customer growth, etc. The goal of incentives for the new venture is to provide "rewards for ultimate achievement and milestones along the way" (Block, 1982). This is in contrast to an existing business that would have incentives much more focused on financial measures such as ROI and profitability.

Others take this a step further. For example, Quinn (1985) encourages management to find special ways to reward innovators and Block (1982) says that "...what cannot be expected to work is a reward system that is similar to that of other managers who are not taking the risk inherent in managing a new venture." Good people are required for venture activities. Without different incentive schemes, why would these people leave their existing positions to take a risk on a venture that may fall flat? Suggestions have been made to incent venture people with significant milestone rewards to a much greater extent or use equity, or equity-like, incentives. This is easier in spin-outs or external start-ups, but mechanisms like "shadow stock" have been suggested as well.

Not everyone devises special incentives for their venture personnel. Day (2001) reports that Nokia Ventures Organizations has the same financial incentives and salary schemes as the

existing business groups. In fact the Nokia approach is specifically focused on the need to align all four groups. They "reward achievement of teams and the whole company not individuals." In addition, Nokia also emphasizes that their NVO provides employees the "opportunity to develop their ideas into businesses." They recognize that the opportunity itself can be a very strong incentive for entrepreneurial minded people. IBM also reports that they employ similar incentives (Garvin and Levesque, 2004) for ventures and existing businesses but they customize the milestones to a new vs. established business as have many others.

Incentives can be used to address some of the connectivity and coordination issues that are addressed elsewhere. In Ciba Vision, senior executives, division and new venture managers alike, had their incentives designed so that they were based on overall performance of the company rather than just their own division. This created an incentive to work together and link the various organizations in a way that tied the new venture into existing operations and supported it growth. In addition, it had the effect of reducing some of the jealousy that can emerge if new venture incentives have significant upside that is not shared with internal partners who have helped it succeed. (O'Reilly and Tushman, 2004)

Recommendations (R), Trade-offs (T), and Dynamics (D):

- 1. T: Same incentive packages as existing businesses or a more "risk adjusted" and venture specific compensation. (Kanter, 1989)
- D: Senior management incentives driven by "The Street" change the focus and commitment to venturing if payoffs from venturing don't change the perceptions of "The Street".

9.4.10 Environment

The final category, "the environment", is potentially a big one, but is one of the briefest. Research in this area seeks to capture the breadth of additional, primarily external, factors that surround and encompass the firm and its venturing activities. Some research has been done primarily from the stand point of what leads a company to start a corporate entrepreneurship effort. The more general environmental factors are mentioned in three primary ways which will be reviewed. First, they are described as a set of external conditions as in Porter's Five Forces (Porter, 1985). Second, particular environmental events have been studied as to the root cause for launching entrepreneurial efforts. Block (1982) described a set of factors affecting timing (Figure 46). Third, the conditions which the venturing activities find themselves operating within are essentially "environmental factors" which are (both internal and external to the corporation) are also discussed.

Factors Affecting Timing

Venture Needs Are Determined by:

- 1. Present and anticipated proprietary position
- 2. Competitive environment present and projected
- 3. Expected duration of the entry opportunity
- 4. Anticipated venture life
- 5. Market characteristics
- 6. Availability of possible venture management team
- 7. The board venture strategy which defines scale, scope, resource allocation, and time requirements

Company Response Capability is Determined by:

- 1. Current and anticipated profitability of existing business
- 2. Current and anticipated cash availability
- 3. Top management attitude toward risk
- 4. How well the company is achieving its goals otherwise
- 5. Competing demands for management attention and time
- 6. Familiarity of corporate management with the new business degree of strangeness
- Presence or absence of venturing policy and venturing goals

Figure 46: Partial list of factors that make up the overall backdrop or "environment" within which corporate entrepreneurship can take place. (Block, 1982)

These factors come from a number of sources but create the overall backdrop for corporate entrepreneurship to take place. A study by Antoncic (2001) showed that increases in technical opportunities and increased demand for new products are two critical factors influencing a corporation's entry into new ventures. Other factors examined in this study which didn't influence the outcomes in a statistically significant way were increased dynamism, industry growth, unfavorability of change, and increased competitive rivalry. Quinn's (1985) observations agree with Antoncic's results that effective technological innovation developed hand-in-hand with increases in customer demand. Zahra (1995) and Guth and Ginsberg (1999) both support the fact that hostile environments tend to increase corporate entrepreneurship. Other factors that have been mentioned are: major shifts in regulation or deregulation and overall industry structure.

One of the more powerful, and perhaps obvious, "environmental conditions" was highlighted by O'Conner and Ayers (2005); the analysts. Industry analysts wield significant power over company valuations and the quarter-by-quarter word-of-mouth about a company's stock price. For the most part, it is rare when analyst assessments support long-term corporate entrepreneurship investments over quarterly numbers. This creates a more difficult environment within which corporate venturing efforts need to work.

One of the lessons that Day (2001) observed at Nokia is that overall conditions that a corporate venture faces internally should not differ from what would be expected in the open market. They specifically contrast the need for oversight and accountability just as would happen in an external VC arrangement, but it should also be free of undue delays, bureaucracy, and encroachment on decision-making and operations.

Environmental effects to enter a corporate entrepreneurship actually are always of interest. But just as interesting is what happens when those conditions are removed. Can a corporate entrepreneurship effort be sustained with some of these factors present? What dynamics and other factors with sustain the activity? What factors will be insufficient?

Recommendations (R), Trade-offs (T), and Dynamics (D):

1. D: Senior management incentives driven by "The Street" change the focus and commitment to venturing if payoffs from venturing don't change the perceptions of "The Street".

9.5 Literature Review – Wrap-up

This review of wide variety of the existing published research was assembled to enable the reader to dig deeper into "what's known". Several observations are noteworthy.

- 1. These general categories seem to be fairly well differentiated. There is some overlap in a few areas, but in general they bucket the materials well. There is of course interaction which can create some apparent redundancies, but this interaction speaks to how complicated corporate entrepreneurship is.
- 2. There is a lot of reading material out there. This review covers a cross section of material, but there is much more out there that has not been included, or even found. The list of sources reviewed is in no way a definitive
- 3. As the Recommendations, Trade-offs, and Dynamics (RTD) sections for each category show there are a lot of best practices and quite a few that contradictions. The assembled list of RTDs should provide an interesting list of things to consider but are likely to be overwhelming on their own. The identified dynamics and the discussion in the Venture

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11.0 Potential Best of Breed Venturing Process

Step 1. Screen, analyze, and select ideas (Corporate Venture Team)

This requires a "venture analysis team" reporting to a senior management level that is not overwhelmed by ongoing operational responsibilities. An ability to focus on venturing and having the <u>right</u> skills is required. Attention and interest from senior management is also required. However, "massive expensive permanent analysis groups are not recommended…" (Block, 1989). They consume a lot of resources that might be better spent on the ventures themselves.

Step 2. Develop a venture charter (Corporate Venture Team)

The venture analysis team should produce a rough charter for each venture which is approved by the senior management team. "The purpose of providing a rough charter by top management is to provide a basis for the plan that will later be developed by the management of the venture itself. It will tend to produce integrated expectations between top corporate and venture management" (Block, 1989, p27)

- a. Quinn suggests that the initial goal or charter should be broad (and somewhat vague) in order to gain political and psychological support from the rest of the existing organization. Being broad at first avoids creating undue opposition to the new idea before a support network can be assembled. This helps a venture team address the critical "politics of survival". (Quinn, 1985)
- b. Determine what corporate resources / processes will help or hurt the venture.

Step 3. Formulate working hypothesis about the new business. (Corporate Venture Team w/ Venture Team Management)

The goal here is to define the opportunity, identify the resources required, estimate the value created, and develop initial plans. The team should make sure that implicit as well as explicit assumptions are captured.

- a. Keep the plans fluid. Milestones should be based on events, not time. In fact the process should at least support, if not require, iterations to the business plans and concepts. Recognize that plans will change. "Things will cost more, take longer, and sell less, than planned for.... New ventures will produce surprises (i.e. variations from plans). They are to be expected, learned from, and used to change assumptions and plans not to produce recriminations" (Block, 1989). Some venture processes have specifically used the changing of the business plan as a very positive key event in the life of a venture or start-up that triggers next steps. The assumption is that since significant changes have been made, the team has now learned much more about how to make their business successful.
- b. Be sure that venture board members, management, and influential leaders have the "right" to have a deviant opinion. Everyone should be able to say what they think. But, for a venture process to run well people must have <u>informed</u> opinions and must do the work to be prepared. Anything else allows "old experience" (which may not be completely applicable) to potentially derail new ventures.

- c. Be sure to identify Deal Killers and Big Bets. The team must know where the risks are in the business plan and show how they are managing those risks.
- d. Determine what the business should be. Demonstrate the technology is capable of achieving the goals.

Step 4. Assemble resources (corporate venture team with venture team)

- a. Recruit and choose people wisely. As experienced venture capitalists will attest to, the management team and key people may be more important than the idea itself.
- b. Stabilize the business before making key hires. Recognize that some jobs will be more managerial than entrepreneurial even in the venture itself. Bringing in management or operations focused people too soon, while still exploring what the business is will frustrate the new hires and the entire team. Time hires appropriately based on skills and current firm needs and the environment.
- c. Outsource the functions that distract you. Focus on the key learning needed and the experiments to be run to quickly understand how the business will, or will not, work. As the team learns, revisit these decisions and update them as appropriate given the new state of the venture.
- d. Build coalitions and support in the organization. Co-opt as much help as
 possible to achieve the ventures goals

Step 5. Run a Staged Process (Corporate Venture Team)

- a. Provide enough resources for the next experiment. Keep the team hungry.
 Only enough resources to reach the next major milestone should be released. Triggers for financing should be events. Apply the benefits of having options to stop if it is not doing well.
- b. Throughout the staged process and reviews make sure the venture managers manage the Deal Killers and Big Bets though good experimentation.
 - i. Ventures must run the experiments
 - They may take any number of forms (partial, staged, holistic) but be clear about what is trying to be learned and do good experiments.
 - Definitely avoid "experimental creep". Define the information required from the efforts and stick to learning those things. Don't be tempted by interesting, but tangential extensions to the experiments.
 - Solid experimental design and data analysis techniques are important.
 - ii. Review the contingency plans and assumptions regularly.
 - iii. Is there a process for monitoring the process of the Deal Killers and Big Bets?
- c. Monitor, track, and coach the ventures

- iv. There are three complementary measures: milestones, financials, and an assessment of business maturity which should be tracked (Garvin and Levesque, 2004).
- v. Milestones should be clear-cut and quantifiable. There should be no ambiguity about achievement (Garvin and Levesque, 2004).
 - Example Short-term milestones: staffing, customer meetings and education, good press coverage
 - Example Long-term milestones: financial success, market share, channel maturity, partner effectiveness, and operating efficiencies.
- vi. These reviews should consist of extensive mentoring and be largely of an exploratory and developmental tone. Organizations that include explicit /formal and separate advising, coaching, and mentoring activities as part of the RI (venturing) systems will have higher throughput through their (venturing) systems than those that do not provide such coaching. (O'Connor and Ayers, 2005) They should also be growing experienced intrapreneurs as well which will only help them in the future.

vii. Reviews should focus on:

- 1. Is the strategy clear?
- 2. Is there an executable model?
- 3. Is the idea winning in the marketplace? (Garvin and Levesque, 2004)

4. How much more money will we need to put in before some starts coming back? (Block, 1989)

Step 6. Expand the business (Corporate Venture Team)

- a. Transition the venture to the next phase focused on growth. This next phase will require different goals and different skills. IBM called this phase Horizon 2 (per the model from The Alchemy of Growth).
- b. Assess the skills, goals, and team to ensure that the right elements are present for this different phase of the venture.

Step 7. Integrate the business (Corporate Venture Team)

Once matured, the business needs to stand outside of the venturing process and support. This can take the form of integration into an existing business group or the creation of a new one. Timing is important and is based on the dynamics of the other organizations with in the corporation.

- a. Once a Nokia new business "can stand on its own", it is quickly moved to an operational setting similar to those of established lines of business (Day, 2001). The operational definition of "stand on its own" is of course tricky. A few suggestions have been made including: stability of funding, positive cycles of growth and profitability established, and recognition and acceptance of the new business by existing businesses.
- b. The new business should not be transferred too soon. It can get lost in the size of the destination business division. (Garvin and Levesque, 2004)

12.0 Questionnaire for Interviews

12.1.1 Introduction:

Thank you for taking the time to talk with me today. As we have previously discussed I am trying to understand the dynamics of the key factors influencing the success or failure of corporate entrepreneurship.

This research is for my thesis. It is part of the requirements for a Management SM degree in the Sloan Fellows Program in Innovation and Global Leadership at MIT/Sloan. Interviews are a very important part of the research and I greatly appreciate your time and willingness to provide your insights to this work. I will be combining the material gathered in the interviews and publishing the synthesized findings in aggregate in my thesis. Please rest assured that your inputs will be kept anonymous and only the two of us will know the specifics of what you have said. The detailed information you have provided will also be kept confidential where you feel it is important to do so. I will provide you with a draft of my thesis for your review to make sure any material you feel should be removed can be addressed proactively. You will also get a final copy of the thesis electronically.

As we discuss your company's approach to new ventures we will be talking about what occurs at a couple of levels:

At the corporate level - which would span existing and new businesses

At the venture level – the new business.

For the ventures it is useful to think about at least one example of a venture that was considered successful and one that is considered unsuccessful for some reason. The exploration

of the differences between a successful and unsuccessful venture will add tremendous value to

the research being undertaken.

The following pages are an outline of the types of topics I would like to discuss in our

time together. We'll use it as a rough guide to make sure we cover the major areas of interest. I

have tried to do as much background work as possible using available information on your

company and its venturing approach so we may not have to cover everything in detail. We can

of course discuss other aspects or additional dimensions / factors that you think are worth

spending some time on as well.

I would like to record this conversation. This will allow me to interact with you more

fully, while enabling me to quote you precisely.

I hope you will find this discussion engaging and thought provoking as well. Any

questions before we get started?

12.1.2 General Info:

Company:

Respondent:

Title:

Respondent tenure with company:

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12.1.3 Dimensions:

Goals:

What are the goals of your corporate venturing activities?

- Revenue growth?
- Organizational renewal?
- Something else?
- If you think about short-term vs. long-term goals how does this affect your answer?
- How are these goals measured? Are they inspected? What are the metrics used?

Mix of Venturing approaches:

Please describe your organization's approach to pursuing corporate entrepreneurship?

- What are the important factors? What elements are primarily focused on?
- How structured is it? (Ad hoc, structured, repeatable, customized, flexible, ??)

What kinds of different approaches do you consider when starting a new venture?

There are a range of venturing mechanisms that can be pursued. (Internal development, acquisition, educational acquisition, joint venture / partnership, technology licensing)

- Do you pursue a range of mechanisms? Specialize in one?
- How do you decide? Why?
- What factors would change your approach?

If multiple mechanisms are pursued, are they handled by the same or different organizations? How are they integrated? Are there common goals? Where does the big picture come together?

Process:

Describe the basic steps or flow a venture passes through

- Is there a defined process?
- How long has this approach been used?
- How has the approach changed over time?
- What problems / opportunities were addressed in these changes?

- Selecting Ventures: Where do the venture ideas come from?
- Three common approaches:
 - o Technology capability
 - o New business idea
 - o Customer / external problem identified
- Are the enabling innovations or resources sourced in an open or closed model?
- Is there any particular timing (yearly, monthly, whenever the opportunity arises) where new ventures are considered?
- Tell me more about what typically happens? Who is involved in this process? What criteria and information is required by the decision makers?
- How do you choose the markets and potential applications?
- There are often more ideas than can be pursued at any given time. What do you do with the extra ideas? What happens to ideas that are explored but shelved?
- Describe the measurement or review processes used by the venture team
- Describe a typical venture review
- What are the criteria? Where do they come from?
- How often are reviews conducted?
- Venturing is often described as a learning intensive effort.
- Does this resonate with you?
- How do you manage the leaning that takes place?
- Do you pursue in-market experimentation? Describe what you do to test and learn about the market and customer desire for new business ventures

Structure:

Venturing program

- How is the venturing program organized? Where does it fit in the corporate structure
- How are decisions made? Who is involved?
- Individual ventures
- How are the individual ventures organized? Where do they fit in the corporate structure?
- How are decisions made? Scope of decision responsibility for the venture vs. corporation
- Are ventures stand-alone? How structurally connected are they?

"Connectedness":

• How connected are the ventures intended to be to the original sponsoring organization?

- Describe the types of interaction between the venture and the rest of the corporation.
 - o Who are the players in these interactions?
 - Where are they located in the organization structure?
- What actions does the corporation take to support the venture?
 - o Are resources available to ventures? How are they acquired?
- How are the ventures viewed by peers? In the corporation? Other ventures?

People:

Champions:

- Who are the sponsors for your corporate entrepreneurship efforts?
 - o What do these people focus on? What are their objectives?
- What role does the CEO have? (Ex: Process champion, mentor, business champion, interested observer, observer)
- What roles have you played?
 - o What are the most challenging aspects of this role?
 - o What are the most rewarding? What keeps you excited about these efforts?
- Who typically champions new business ideas?
 - o Where do they come from?
 - o Why do they champion them?
 - o What incentive do they have?

Venture Leaders and Staff:

- How are people picked for individual ventures and to mentor and grow the corporate venturing processes?
- What attributes do you feel are most important in a venture leader?
- Contrast this with the attributes most important in a core business leader?
- What attributes / skills can be "learned on the job" vs. those that they need to start the venture with?

Growth of people:

- How does your corporation find, groom, and grow people capable of leading successful ventures? Is there an established training program? Internally or externally provided?
 - o If so what skills does it focus on? How does it run?
 - o Do you believe it makes a difference? Is it worth the effort and expense?
- Is this an established process (for example with HR support) or much more opportunistic?
- Is it useful to try and groom people for these roles? Why / why not?
- Is it better to just "keep an eye out" for them in the organization?

Incentives:

Are the incentive structures for venture personnel the same or different than the rest of the corporation's employees? Why?

Are incentives important to the team?

Risk Attitude and Time-Frame:

How do you decide between acceptable and unacceptable risk in venture opportunities?

How do you manage that risk?

Ventures can take a long time to mature. Many studies state that you should be prepared to invest for 5-7 years before seeing a good return.

What time-frame are you concerned with? What factors influence that timing?

Example ventures: Successes / Failures

Background on the example ventures:

- Goals of the venture
- Risks associated with this venture
- What is the basis for this venture? How did it come about?
- What criteria were used to select the venture?

What unique characteristics of this venture stand out in your memory?

What made this venture successful / unsuccessful? (Define what you mean by successful / unsuccessful for each venture)

Did the approach to subsequent ventures change as a result?

General Insights:

What keeps you up at night? What do you worry about?

What one company characteristic with respect to venturing (a barrier) would you change immediately if you had the power to do so?

What other companies do you think do corporate venturing well? Who do you benchmark or learn from?

Feedback:

Thanks for taking the time to meet with me today. I hope you found the discussion stimulating and perhaps got something out of it as well. I'd love to hear any final comments, thoughts, or feedback on what we did today.

Is there anyone else in your organization that you think it would be worthwhile for me to talk to?

Thank you.