The Relationship between the Quality of the Idea and the Strategic Potential of a New Venture: A Longitudinal Study of Five Irish Campus Companies

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This paper explores the relationship between the quality of the idea and the strategic potential of five high potential UCD campus companies over a seven-year period. Based on previous research, a framework and model was created and employed as a base for company analysis and comparisons. The findings of this longitudinal study support the existence of a dynamic relationship between the *quality of idea* and the *strategic potential,* of new ventures. Over time, constant changing and exploitation of the quality of the idea by the entrepreneur to create systematic differentiation resulted in dramatic changes to the strategic potential of the business.

Key Words: quality of idea, strategic potential, entrepreneurial opportunities
JEL *Classification:* M13

Introduction

Research in entrepreneurship lends itself to investigation by disciplines as wide-ranging as economics, finance, anthropology, sociology, history and psychology; each of these employs its own perceptions and research methodology while operating within its own terms of reference. Based on the research in these areas, it appears that entrepreneurship has a complex set of contiguous and overlapping constructs (Low and MacMillan 1988), with business opportunities playing a pivotal role. The key to understanding the process by which ideas are recognized as business opportunities continues to represent a core focus of research interest in developing theoretical constructs of entrepreneurship (Timmons 1999; Shane and Venkataraman 2000; Gaglio and Katz 2001).

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To create an appropriate framework and model for idea exploitation, the review of the literature undertaken revealed the scarcity of data regarding the specific decisions made and the conditions existing at the idea stage of the new venture as well as longitudinal data following the development of the opportunity over time. This lack of a conceptual basis of how entrepreneurial opportunities are discovered and recognized hinders the understanding and development of entrepreneurship as a discipline (Low and MacMillan 1988; Aldrich and Martinez 2001; Shane and Venkataraman 2000). Both entrepreneurs and venture capitalists usually have difficulty verbalizing the cognitive process experienced when recognizing an idea as an opportunity. They often describe this as 'having a gut feeling' based frequently on their previous experience (Hills 1995; 1997; Hills and Shrader 1998). Building on prior studies (Gartner, Bird and Starr 1992; Busenitz 1996), Lindsay and Craig suggest that in many cases entrepreneurs have no option but to act on an idea with limited information. Entrepreneurs need to make quick decisions without the support of historical trends, previous levels of performance, and market information (Lindsay and Craig 2002). Opportunities often emerge when new tools are used to solve an important problem. These disruptive technologies change the mind-set, paradigm or the way business is done. A significant change in the structure of the requisite knowledge base requires a leap in conceptual change as opposed to an incremental step.

However, disruptive technologies can be complementary when they build on or work with the existing technology (Hamel 2000). Overwhelmingly, the majority of successful innovations focus on political, social, demographic, technical or economic change. Systematically examining and harnessing change in order to develop new ventures requires entrepreneurs to formulate ideas that fill the opportunity.

Timing of the launch is critical, so any delay in commercialization may cause the 'window of opportunity' to close (Abell 1980). For this reason, entrepreneurs tend to make greater use of biases and heuristics in their decision making process (Busenitz and Barney 1997). The research reported here explored this and established the strong relationship between the quality of the idea and the strategic potential of a business.

Background

Entrepreneurship stems from the emergence of an opportunity and the process by which this opportunity is recognized by an individual, who subsequently creates a solution to the problem identified in this opportunity. Entrepreneurship is a process involving the personal, sociological, and environmental factors that give birth to a new enterprise. The role that high quality new ventures with high strategic potential play in increasing employment and economic growth and development is being better understood (Birch 1979; Low and McMillan 1988; Ketchen 2003; Venkataraman 1997; Timmons and Spinelli 2004).

RELATED STUDIES

Over the past two decades, new venture performance models have improved the understanding of the dynamic processes that exist within all new ventures. For example, Gartner's (1985) entrepreneurship performance model indicated that entrepreneurship outcomes are a consequence of the interaction between the individual, the organization and the environment. Sandberg and Hofer (1987) advanced this model showing a strong connective relationship between strategy, industry structure and the entrepreneur. Christman, Bauerschmidt and Hofer (1998) further developed the model with the inclusion of the availability of resources upon which a venture's strategy is based and the organizational structure, processes and systems upon which a venture's strategy is implemented.

McDougall, Shane and Oviatt (1994) broadened the scope of these models to include multinational enterprises, arguing for the inclusion of organizational formation through: internationalization of some transactions; strong reliance on alternative governance structures to access resources; the establishment of foreign location advantages; and control over unique resources. As comprehensive as these models of new venture performance are, they omit the significance of the quality of the idea as a major determinant of new venture performance and its relationship to the strategic potential of a new venture. This study of the evolution of the idea for a range of firm sizes and ages allows us to decompose the effect of exploiting the idea over time and on future growth and propose an understanding of the relationship between the quality of the idea and the strategic potential of a new venture. The literature is reviewed in the areas of: the entrepreneur and management team, opportunity recognition and evaluation, and the strategic potential of the new venture.

ENTREPRENEUR AND MANAGEMENT TEAM

Based on the research, entrepreneurs are a well-researched group of people (Caird 1992). Yet, a consensus on the definition of who an entrepreneur is has yet to emerge. In the past three decades, this entrepreneur broadly covered anything from the individual who starts his or her own business, to someone who displays entrepreneurial flair in an existing organization or even the government. Indeed, a significant amount of research has been carried out in an effort to determine what makes a successful entrepreneur.

Considering that such a large and diverse group of people engages in the entrepreneurial process, it is highly unlikely that the entrepreneur can ever be totally described by specific characteristics (Shane and Venkataraman 2000). Although there are many myths and stereotypes of entrepreneurs, ventures competing in highly technical/dynamic environments need revolutionary entrepreneurial leaders who will successfully solve the problem through risk taking innovative behavior.

For entrepreneurs competing in today's hyper-competitive markets, Gary Hamel pointed out that successful venture creation comes down to a leadership gut check and understanding that the boom-time of the 1990s was an aberration (Hamel 2002).

During the past decade, earnings and share prices were propelled upward by five forces: a significant amount of capital spending and IT investment; a large amount of baby-boomer money that was fed into the stock market and in turn drove price-earnings ratios to high levels; round after round of cost cutting; a worldwide merger boom that pushed share prices even higher; and a record number of share buybacks.

Hamel concludes that the way for success is systemic, radical innovation. The imperative for every entrepreneur is to focus on innovative problem solving (Hamel 2002).

This makes the caliber of the entrepreneur and the core management team critical to the successful strategic development of a new venture. Subsequent studies expanded this idea by confirming the notion that visionary entrepreneurs who defy conventional wisdom, ignore the confines of technological know-how, and challenge the status quo with innovative solutions to their customer's problems, are synonymous with sustainable high potential high growth new ventures.

Past research has developed the following entrepreneurial characteristics affecting success. The education, skills and know-how of the entrepreneur are identified as vital characteristics by Stevens and Burley (1997), Kets de Vries (1996) and Garavan and O'Cinneide (1994). Schumpeter (1934); Kirzner (1979), Kirchhoff and Green (1995), Timmons and Spinelli (2004), Christensen (1997), Drucker (1993), and Hills (1995) indicated that innovation, creativity, the exploitation of change and opportunity recognition are essential characteristics of an entrepreneur. Stevens and Burley (1997), Gunter McGrath (2000), Hamel (2002) and Matson (1997) cite the ability to develop a strong company culture that will set the direction of the new venture, as important.

While Bygrave, Johnstone, Lewis and Ullman (1998), Nesheim (2000) and Timmons & Spinelli (2004) suggest that management, experience and frugal use of scarce resources are of paramount importance. Ardichvili, Cardoza and Ray (2003). Low and McMillan (1988), Matson (1997), Timmons and Spinelli (2004) and Kuratko and Hodgetts (2004) feel that entrepreneurs with high social capital in the form of social networks and partnerships have a distinct advantage over novice entrepreneurs. Hsu (2003), Matson (1997), Nesheim (2000) and Muzyka and Birley (1997) consider financial expertise as being a vital characteristic, and Drucker (1993), Hills (1995), Timmons and Spinelli (2004), Hamel and Prahalad (1994), Gunter McGrath (2000), Bygrave and Phil (1994) and Bachher and Guild (1996) felt that commercial experience, creative problem solving and visionary leadership skills were very important entrepreneurial characteristics.

Roure and Madique (1986), Tyebjee and Bruno (1981), Bygrave and Timmons (1992) and Neshiem (2000) feel that industry and market knowledge and the ability to carry out research for the development of new products and services are crucial characteristics for entrepreneurs. Hamel(2000), Gunter McGrath (2000), Timmons and Spinelli (2004), Drucker (1993) and McClelland (1961) contend that the psychological, social and behavioral characteristics of the entrepreneur play a vital role in determining his/her success as will commitment, motivation, perseverance and determination.

Based on these findings, for the purposes of this longitudinal study, the entrepreneur was defined as an individual who possesses the foresight and creative ability, not only to recognize viable opportunities when they arise, but also be able to convert them into a successful new venture.

OPPORTUNITY RECOGNITION AND EVALUATION

The results of the research indicate that entrepreneurship faces a complex set of contiguous and overlapping constructs, (Low and McMillan, 1988) with the recognition of business opportunities playing a pivotal role in the process. The ability to identify opportunities has been identified as one of the most important abilities of successful entrepreneurs (Casson and Wadeson 2007; Casson 1982; Hills and Shrader 1998; Schumpeter 1971; Kirzner 1979; Reynolds et al. 2001; Ardichvili, Cardozo, and Ray 2003). Entrepreneurs have a special ability at identifying a problem, which they often describe as having a 'gut feel' and a 'belief' in the resulting idea to solve this problem. Opportunity evaluation, high value-add for the customer, and good leadership are important in this opportunity recognition (Hills 1995; 1997). Whereas, Baron & Ensley's (2003) study found that the cognitive frameworks used by novice entrepreneurs rely on: 'gut feel' – how novel the idea is; whether the idea is based on a new technology; the superiority of the product or service; and on the idea's potential to change the business model of the industry.

An opportunity exists when a bundle of resources can be sold at a higher price than the cost to package and deliver this bundle (Shane and Venkataraman 2000). For Kirzner, discovering these opportunities means being acutely alert when they exist (Kirzner 1979). He and others see that entrepreneurs thrive on the disequilibrium of economic and market forces (Kirzner 1973; Kaish and Gilad 1991; Busenitz 1996; Kirchhoff and Green 1995; Gaglio and Katz 2001). In this disequilibrium, the alertness to opportunities is, at a certain level, due to the cognitive abilities of the entrepreneurs (Alvarez and Busenitz 2001; Baron and Ensley 2003).

Identifying and exploiting an opportunity does, however, require a high degree of prior knowledge and entrepreneurial competence (Fiet and Samuelsson 2000; Shepherd and DeTienne 2005). The discovery process refers to the identification and conceptual development of a business idea for a venture; and the exploitation process refers to the tangible actions that are taken, in order to realize a business idea's commercial value, usually through the creation of a new venture (Casson 1982; Teece, Pisano and Shuen 1997; Davidsson 2006). Ultimately, an opportunity is about adding value for all parties involved (Muzyka 1997).

The idea provides the basis for the new venture: 'it expresses concrete conditions existing in a company; it describes the company's actual way of functioning, its organization, its actors, processes and strategies' (Norman 1977). This is why it is so important to concentrate on the quality of the idea before establishing a new venture. The new product or service must provide clear value in the eyes of the customer and members of the distribution channel if they are involved in solving the problem. Bygrave and Phil (1994) stress that higher potential businesses identify a market niche for a product or service that meets important customer needs and provides high value added benefits to the customer.

According to Drucker, 'an innovation, to be effective, has to be simple and it has to be focused. It should only do one thing, otherwise it confuses. If it is not simple, it won't work. Everything new runs into trouble; if complicated, it cannot be repaired or fixed. All effective innovations are breathtakingly simple' (Drucker 1993). Timmons (1999), Bygrave and Phil (1994), Drucker (1993), Christensen (1997), Neshiem (2000), Hamel (2002), Shane (2004) and Stevens and Burley (1997) cite innovative, superior or unique technology with differential advantage or patent protection as a key characteristic in determining the quality of a business opportunity (idea), while Timmons (1999), Muzyka (1997), Hills (1995), Christensen (1990), Shane (2004) and Bygrave and Zacharikis (2004) feel that value added features are of utmost importance. Bygrave and Zacharikis (2004), Drucker (1993) and Timmons (1999) found that the opportunity (idea) must be attractive, durable and timely with a well thought out method of distribution.

Hamel (2002), Timmons (1999), Hills (1995), P. Christensen (1990), Drucker (1993), Shane (2004) and Molian (1997), feel that the highest quality ideas and the most profitable opportunities arise out of solving a significant problem and/or meeting an unsatisfied consumer need. Bygrave and Zacharikis (2004); Timmons (1999); Abell (1980); Shane (2004) and Christensen (1997) agree that timing is also very important. Abell (1980), Timmons (1999) and Jolly (1997) consider a good degree of 'fit' to be vital between the entrepreneur and the available resources required to commercialize the idea. The ultimate test of opportunity recognition and evaluation is being able to develop the idea to the point where one could logically overcome most major obstacles to its commercialization. The opportunity must have high growth potential, strong and early cash flow, high profit potential and offer attractive rates of return for investors.

STRATEGIC POTENTIAL

Competitive positioning or *fit* occurs when a firm finds a good fit in its market place between the needs of its customers and the resource capabilities of the firm. It is the quality of this position or fit that a company can obtain between the industry environment and its own internal capabilities and resources that determines its strategic potential. High strategic potential represents the degree of fit or competitive position a company can achieve for itself by being able to develop a high quality, unique innovative idea that solves an important problem.

The components of strategic potential include: (1) Employment (Forfás 1996; 2000); (2) Size of potential markets (Thompson and Strickland 1996; Kelly 1997; Tyebjee and Bruno 1984; Bygrave, Johnstone, Lewis and Ullman 1998; Timmons 1999); (3) Growth rate of the market (Forfás 1996; 2000; Thompson and Strickland 1996; Porter 1980; Rea 1989; Nesheim 2000); (4) Potential for profitability (Tyebjee and Bruno 1984; Bygrave and Timmons 1992, Timmons 1999; Nesheim 2000; Muzyka 1997; Harmon 1999); (5) Entry and exit strategy (Nesheim,2000, Bygrave and Phil 1994; Timmons 1999; Porter 1980); and (6) Good competitive positioning in high growth attractive markets are major elements for evaluating the strategic potential of an idea (Porter 1980; Thompson and Strickland 1996; Kelly 1997; Tyebjee and Bruno 1984; Rea 1989; Nesheim 2000; Bygrave and Timmons 1992).

While previous research has addressed the topics and relationships between entrepreneur, opportunity recognition and strategy, there appear to be few published criteria on what defines 'quality' in a business idea. Nor has there been any research on the dynamic atmosphere surrounding entrepreneurs when they commit to themselves starting a new venture and manage the relationship between the quality of the idea and its strategic potential.

While previous research presents a wide range of frameworks and models regarding opportunity recognition, new venture formation and determinants of success (Vyakarnam and Myint 2006), there is a lack of information on three major areas inherent in and affecting the overall process: *the source or nexus of opportunities, the quality of business ideas and their relationship to the strategic potential of a new venture, and the dynamics that permeate every level of the entrepreneurial processes.*

Some feel that research efforts should be concentrated in this area and should incorporate individuals and teams and the mode of organizing within the context of wider environments (Busenitz, West, Shepherd, Nelson, Chandler and Zacharis, 2003; Shane and Venkataraman 2000; Shane 2004). Timmons supports these views, arguing that many potential entrepreneurs fail to recognize opportunities. He estimated that only one in thirty ventures had founders who were able to identify an opportunity that they would grow into a venture of at least one million dollars in revenue (Timmons 1999).

With this in mind, the process of assessing the quality of an idea before start-up is important, not only for the entrepreneur, but also for anyone investing in the new venture. Businesses with poor quality ideas are unlikely to have high strategic potential. Unless, during the life of the business, the quality of the idea can be significantly improved enabling a strategic re-positioning of the business.

Firms based on high quality ideas have good potential for high profitability, which provides funds for further development of the business. The growth of this type of venture is far more rapid (Hisrich, Peters, and Shepherd 2010). Businesses with these characteristics are considered to have high strategic potential and have been labeled 'Gazelles.'

Research Hypothesis and Framework

The overall hypothesis of this research is that the *strategic potential of a new venture is dependent on the quality of the idea.* This interaction provides the foundation of a dynamic process from which a new venture emerges. It is an ever-changing process with new creative elements of value added and differentiation continuously evolving from actions taken by the entrepreneur and management team (Shane 2004; Timmons and Spinnelli 2006). The 'strategic potential' is established at the venture's inception by the characteristics inherent in the quality of the idea.

Based on previous research, a framework was developed to address the topic. This framework (indicated in table 1) was structured to accommodate a detailed account of each company's history over a seven-year period from its inception. The framework involves three major components: *Quality of Idea, Strategic Potential and the Entrepreneur and Management Team.* Although each of these elements has previously been separately investigated, they have not been studied together over time.

The left cell details the 'Quality' characteristics contained in the idea, tracking its evolution from the establishment of the company. Changes in uniqueness, technical specifications, functionality, and added value characteristics are documented. The middle cell details the characteristics of the entrepreneur and management team tracking the evolution of their management skills and expertise over the seven-year period of the venture, particularly looking at any additions to core competencies as well as other resources. The right cell details the developmental progression of the strategic potential of the firm, tracking its evolution over the seven-year period. Details of repositioning in the market, geographic expansion and increases in sales, profitability and employment are documented. Major milestones and critical change points in the life of the firm are identified clearly in the framework.

TABLE 1 Exemplars of entrepreneurship: A framework

Quality of idea	Entrepreneur and management team	Strategic potential
Desired characteristics from the literature	Desired characteristics from the literature	Desired characteristics from the literature
Start-up		
• Solve a significant problem or meet a need/desire for which someone is willing to pay a premium (customer base) • Technological content that is superior, innovative or unique with differential advantage or patent protection • High value added features and method of distribution • Attractive durable and timely • Access to vital resources • Viable business model	• Management experience • Networks and partnerships • Financial expertise • Commercial experience • Leadership style • Industry and market knowledge • Attitude • Skills and know-how • Behaviours • Ability	• Size of potential market – local, national, international or global • Growth potential • Sales potential • Profitability potential • Secure competitive position • Employment potential • Entry and exit strategy
Dynamic changes		
• Desired characteristics must be assessed at start-up and graded at each of the major change points in the company history.	• Desired characteristics must be assessed at start-up and graded at each of the major change points in the company history.	• Desired characteristics must be assessed at start-up and graded at each of the major change points in the company history.
Present		
• Assessment of characteristics at the present.	• Assessment of characteristics at the present.	• Assessment of characteristics at the present.

In the context of each new venture, the framework represents a dynamic developmental process. The development is iterative; an entrepreneur evaluates the 'quality of idea' not only in the start-up phase, but also several times at different stages of growth. These evaluations can generate a total repositioning of the company.

The research indicates that most of the entrepreneurs after seven years have a business that is very different from the original one. Successful growth was achieved through a succession of recreating the business, the idea, and its strategic potential (Hills, Lumpkin, and Singh 1997).

Research Methodology

The research technique used for this longitudinal study is a multi-embedded case design, which is exploratory and qualitative in nature. Initially a pilot study was conducted on four different MBA Case company projects. This pilot study of the four illustrative cases was analyzed and summarized to provide input to the framework. Then five Irish, high potential companies (profiled below) were selected and each entrepreneur took part in a series of in-depth, relationship-based interviews over a period of seven years. These interviews were guided by customized questionnaires, which provided a rich source of information on the management of the dynamics in the new ventures.

COMPANY PROFILES

Company A was, established in 1985 by three electronic engineering graduates from University College Dublin. Since then it has grown into a multi-million dollar corporation and has become one of the largest privately owned manufacturers of building control systems in Europe. Company A is a leading supplier of building management control systems within European and World markets – Asia, Australia, France, Germany, the UK and the United States. Categories of buildings serviced include high security prisons, historic castles, commercial offices, industrial buildings, hotels and colleges.

Company B was established in 1996 by three members of the University College Dublin Digital Signal Processing group and was sold in 2003. Company B was an innovator of smart maths in silicon solutions for broadband digital communication; it became a leading provider of semiconductor products that delivered lightning-fast bandwidth via its proprietary silicon solutions. It delivered these solutions through patented DSP module compiler technology coupled with proprietary DSP algorithms.

Company C produced and developed media-based solutions for communications and education purposes, meeting the needs of a variety of clients in the broadcast, corporate and institutional sectors.

The team consisted of highly experienced educational television producers with mutual experience of over 200 produced hours of domestic and international broadcasting. Their unique skill- base combined expertise in television, video and multimedia production with that of learning and instructional design. The team, formally members of staff of the media lab of UCD, established their new venture as a campus

TABLE 2 Company C: Ratings for quality of idea

Item	Start	Changes					
		1st	2nd	3rd	4th	5th	6th
Low quality idea	25	25	20	10	10	5	5
Value added	55	60	65	70	75	80	85
Business model	60	65	70	75	80	80	85
Resources	60	65	70	75	80	70	65
Attractive	55	60	70	75	75	80	85
Durable	55	60	70	75	75	80	85
Timely	55	60	65	70	75	75	80
Access to market	55	60	70	75	80	70	70
Solve a problem	55	60	70	75	80	80	90

company, situated in the NOVA Centre in UCD. The company was sold in 2003.

Company D, founded in 1992, is a leading global banking and treasury consultancy firm with sister offices in London and Johannesburg. The company offers a unique consultancy service for its over 300 major corporations across three tax jurisdictions. Company D delivers not only best practice, but also the cost and service benchmarks which corporations need for the negotiation of pricing and for the management of banking and treasury activities. Areas of expertise include cash management, currency hedging (transaction and translation) cash pooling and netting systems, borrowing strategies and the benchmarking of interest and other margins. Additional business intelligence offered includes industry sector interest margins and service benchmarks, assistance with requests for proposals for bank tendering and a range of software products – OIC, Currency Manager and ECM.

Company E, originally a college project, was subsequently developed into a campus company at UCD in the early nineties. The management team comprised one UCD lecturer and two research students. Today Company E is one of the leading providers of intelligent learning solutions with over one million licensed users across the globe. Company E's implementation experience spans a variety of industries, including financial services, healthcare, government, and pharmaceuticals in blue-chip companies such as: ABB, AHIMA, Alexander Forbes, Basler Insurance, Belgacom, Clinphone, Credit Suisse, Diageo, Dow Chemical,

TABLE 3 Company C: Ratings strategic potential

Item	Start	Changes					
		1st	2nd	3rd	4th	5th	6th
Competitive position	60	65	70	75	80	80	80
Potential for profit	60	65	70	75	80	75	75
Potential for sales	60	65	70	75	80	75	75
Growth rate of market	60	65	70	75	80	85	90
Entry strategy	50	50	60	70	80	85	90
Size of market	50	55	60	70	75	70	70
Exit strategy	35	40	50	55	60	75	80
Potential for employment	25	35	50	60	65	50	50

TABLE 4 Company C: Ratings for the entrepreneur and management team

Item	Start	Changes					
		1st	2nd	3rd	4th	5th	6th
Macro environment	55	60	65	70	75	65	65
Skills/know-how	60	65	70	75	85	65	68
Creative/innovative	60	65	70	75	85	75	75
Company culture	55	60	65	70	75	70	70
Behaviour/attitude	55	60	65	70	75	70	70
Leadership style	55	60	65	70	75	70	70
Commercial experience	60	65	70	75	80	65	70
Networks/partnerships	55	60	70	75	80	70	70
Financial expertise	55	60	65	70	75	60	60
Managemnt expertise	50	55	60	65	70	60	60

Eurocontrol, Husqvarna, Innovatia, Liberty Group, Ryanair, Smith & Nephew, Valero, Volvo CE and World Bank.

Framework and Model

The framework (indicated in table 1) and a supporting diagnostic model was created to present the analysis of each of these case companies. The developed model brings clarity and precision to the interrelationships existing among the individual characteristics of a new venture. The model (shown in tables 2, 3 and 4) synthesizes the historical data obtained from each of the companies over the seven-year period. A questionnaire was designed to evaluate each of the concepts; the results of the questionnaires were logged onto a datasheet.The datasheet contains details of the characteristics at start-up, at the major inflection points, and finally at the end of the seven-year period. Each interviewee, having gone through the process of analyzing their new ventures, rated the performance of each variable at each stage of development.

Findings

This study of the evolution of three interacting variables over a seven-year period will focus on the quality of the idea and strategic potential together, rather than focusing on each component individually. This will clarify the findings regarding the correlation between these two phenomena, and their interaction within each company.

THE RELATIONSHIP BETWEEN QUALITY OF IDEA AND STRATEGIC POTENTIAL

The most important finding of this longitudinal study is the support provided for the existence of a dynamic relationship between the quality of idea and strategic potential of the new venture. The impact on strategic potential can be clearly observed when the quality of idea is developed through the introduction of new products or business models. The findings illustrate that the original idea for each new venture contained some significant strategic potential. Through the establishment of a new venture, the entrepreneur brings the quality of idea into existence. This is the basis of a process where the embryonic quality of the idea needs to be incorporated into an effective system or culture installed by the entrepreneur to execute their vision and ultimately realize the idea's strategic potential (see e. g. Christensen 1990; Baron and Shane 2004; and Shane 2004).

It is the entrepreneur's insight into the idea's competitive advantage that produced its potential commercial value. Also notable is the manner in which the entrepreneurs embraced the dynamics of new venture development. Each entrepreneur continually solved a multitude of customer's problems by investing in research and development, which was translated into innovative products. These findings support the arguments of Hills (1995), Shane (2004), Timmons and Spinelli (2004) and Baron and Shane (2004), who contend that solving customer's problems needs to be a prime focus of entrepreneurs. This is the key for not only recognizing and evaluating viable opportunities, but also for sustaining profitable growth.

Each entrepreneur studied achieved positive results by responding to problems, instead of reacting in a negative way. Each used the situation they found themselves in to take advantage of the quality of their ideas. The quality of the idea evolved from the launch of new products, the introduction of new business models or delivery methods.

Evidence from each company indicated that the entrepreneurs displayed a high level of strategic competence, which enabled them to recognize the potential of their ideas. This included the idea's life expectancy, the type of resources required to commercialize it, the right timing for the idea to be introduced in the market place, and whether the idea was attractive enough to disrupt the market or create a new one.

The ability of the entrepreneurs to network and make use of external resources was also apparent. They utilized this ability to gain access to markets, and organize methods for distributing their products, which was important for the survival and growth of their ventures. The findings in several of the cases suggest that, in some instances, who you know is as important as what you know.

What seems to unite each of the entrepreneurs is their belief that their customer's experience is of the utmost importance and that the quality of idea is transitory and not seen as an end in itself. This suggests that all entrepreneurs should be close and personal with their customers in order to better satisfy their customer's needs, which in turn impacts the realization of the new opportunities. Similar findings occurred in the studies of Teece (1986), Pennings and Harianto (1992) and Van deVen (1993).

It also indicates another important principle found in the entrepreneurs studied, I. E. the relationship between the quality of the idea and strategic potential is fundamental to the way their companies are run.

The findings also indicate that when dealing with a multivariate catalyst like the relationship between the quality of the idea and strategic potential, there are a number of ways to manage the process. The entrepreneurs showed that managing this process in their own entrepreneurial ways assisted them in affecting a repositioning of the company as well as revolutionizing its propensity for increased profitability and growth. Another key feature of creating and sustaining their new ventures was access to highly skilled talent.

A high potential new venture based on a high quality idea occurred in two of the company examples, and a low quality idea transformed by the actions of an entrepreneur occurred in the third. For example, two of the entrepreneurs established their new ventures with medium to low quality ideas and over time transformed these into much higher quality ideas. The outcome of these entrepreneurial actions was actualized in each of them being able to attract resources that were not previously available. These resources included funding, a strong capable management team, stronger market positions, geographic expansion, increased customer bases, and a much stronger strategic potential.

The findings of this longitudinal study also indicate that being proactive and visionary is an important factor in setting up and running a successful new venture. The strategic potential of the business will not improve unless the entrepreneur and the management team continually improve and enhance the quality of their ideas. This supports the research findings of Timmons and Spinelli (2004), Christensen (1990), Baron and Shane (2004), and Shane (2004).

These findings are also supported by Shepherd (1997), Roure and Madique (1986), Tyebjee and Bruno (1981), Bygrave and Timmons (1992), Shane (2004), Neshiem (2000), and Roberts (2006), who stress the importance of industry experience and knowledge of market and technological elements as critical factors for success. An entrepreneur must maintain these skills in order to be able to recognize what is important, where the difficulties lie, and what is the real value to the market. What is also evident from the findings is that high quality new ventures with strong strategic potential are dynamic works-in-progress.

They operate at the leading edge of high technology markets and as such are remarkably difficult to manage. Each of the entrepreneurs studied coped with these dynamics differently.

THE DYNAMICS OF ENTREPRENEURIAL LEADERSHIP

The findings also offer a unique view of the day-to-day tension and problems in running a new venture based on each entrepreneur's perspectives. Collectively these entrepreneurs demonstrate an outstanding ability to persistently recognize and pursue opportunities through the collection and integration of information and activities, which in turn strengthened the venture's strategic potential.

The findings offer an understanding of how the distinctive combination of high quality ideas, people and resources can come together to create new ventures. It also shows how the entrepreneurs choreographed the intricate dynamics of these high potential new ventures. It is also quite notable that during the period of the study, an exceptionally turbulent external environment prevailed and the unprecedented events that occurred during the time-line of the study played a pivotal role in the eventual outcome of some ventures. The technology downturn and the global market disturbance forced several of the entrepreneurs to think outside the box in order to survive. This unstable environment did eventually bring to light any management design flaws inherent in the structures of their new ventures.

Even though it was their first venture, the majority of the entrepreneurs dealt remarkably well with the major changes that occurred over the longitudinal study of their companies. In many instances, the entrepreneurs experienced up to ten major changes in as many years, while coordinating the development of new products, enhancing the management team, mobilizing resources and raising funds. The ways the entrepreneurs managed the changes support the findings of Casson (1982), Hills and Shrader (1998), Schumpeter (1971), Kirzner (1979), Global Entrepreneurship Monitor (2001), Ardichvili, Cardozo, and Ray (2003), and Roberts (2006). The impacts of these entrepreneurial behaviors are manifested in the entrepreneur's ability to secure and maintain a strong position in the marketplace, enjoy increasing sales, gain geographic expansion and increased profits.

Conclusions

This longitudinal research study has validated the use of a new framework and model for the collection, analysis and presentation of empirical data. The application of the framework and its supporting diagnostic model resulted in demonstrating the strength of the characteristics of quality of idea, strategic potential, and entrepreneur and management team at all the developmental stages of the company. The insights and information generated from the interviews together with the findings from this longitudinal study offer a comprehensive account of each entrepreneur's experiences of managing the dynamics encountered throughout the creation and development of their new ventures as they overcame numerous obstacles.

The model also demonstrated how the relationship between the quality of the idea and strategic potential affected the trajectory of each new venture. In this way, the model provides a strong analytical tool for predicting the factors that influence the growth of the new ventures based on the characteristics of the three exemplars: quality of idea, strategic potential and the entrepreneur and management team. The model has proven to be an effective tool for measuring and analyzing the overall correlation and analysis of these active forces during this longitudinal study. The results of this versatile diagnostic and educational tool can be useful in a wide variety of research studies.

The overall results of this longitudinal study illustrate the need to focus on the quality of idea, not only at start-up, but also through the life of the company. The selection of a business idea is a critical element, which requires continuous improvement. The results confirm that if a company starts with a low quality idea, this problem can be altered over time to create a much higher quality idea. This then becomes the force behind developing a high strategic potential.

The research indicates that each of the entrepreneurs successfully attracted the level of finance they required, in part by morphing from medium/low quality ideas into high quality ideas with high strategic potential.

As the entrepreneurs began to seriously embrace the relationship between the quality of idea and strategic potential, they benefited even further by gaining geographic expansion. This resulted in them repositioning their companies into markets that were previously unavailable.

The application of this diagnostic model offers insight into the ongoing dynamics of any new venture, by evaluating the characteristics of the quality of idea, strategic potential, the entrepreneur and the management team. The model provides a good diagnostic and analytical tool, which is an effective mechanism for detecting the strength of each individual characteristic on each of the three dimensions. This information can then be leveraged to create strategies to change the quality of an idea either to launch a much higher potential new venture or to reposition an existing one.

The model can evaluate each opportunity to maximize the investment opportunity as well as to predict the survival possibility of more uncertain technology start-ups or ventures started with lower quality ideas. This makes the model appropriate for use by any company regardless of its quality of idea or stage of development.

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