THE ENTREPRENEURIAL PROCESS
IN CONSTRUCTION AND REAL ESTATE VENTURES

by

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and the Center for Real Estate
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Submitted to the Department of Civil and Environmental Engineering
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and Master of Science in Real Estate Development

ABSTRACT

This study determines the fit of the success pattern defined by Timmons' model with the entrepreneurial process of two successful ventures. One is Northland Investment, a real estate venture, and the other is Collaborative Structures, a construction-related Internet venture.

The results show a strong fit between the model and the two successful ventures, which generally exhibited characteristics of higher potential ventures as described by the model. There are, however, some characteristics of the ventures that did not fit certain criteria defined by the model. In these instances, mitigating circumstances tend to suggest that the opportunities were not necessarily lower potential.

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1. INTRODUCTION

Entrepreneurship is a way of thinking, reasoning, and acting that is opportunity obsessed, holistic in approach, and leadership balanced. Entrepreneurship results in the creation, enhancement, realization, and renewal of value, not just for owners, but also for all participants and stakeholders. At the heart of the process are the creation and recognition of opportunities, followed by the will and initiative to seize these opportunities.

Timmons’ model defines a core, fundamental entrepreneurial process that accounts for the substantially higher success pattern among higher potential ventures. The model categorizes potentially successful ventures and probable failures by distinguishing their characteristics based on a specific set of criteria. Successful entrepreneurs, private investors, and venture capitalists use a framework of screening criteria and attractiveness characteristics in evaluating venture opportunities and teams in order to differentiate high potential ventures from low potential ones. Venture capitalists use these criteria to evaluate a select group of opportunities that tend to have a high-technology bias.

1.1 The Objective

This study determines the fit of the success pattern defined by the model with the entrepreneurial process of two successful ventures. First is Northland Investment, a real estate venture founded in 1970 and harvested by its entrepreneur in 1995. This case study determines how the characteristics of this traditional, non-technology-based venture match against the success pattern defined by the model. Second is Collaborative Structures, a construction-related Internet venture founded in 1996 and undergoing rapid growth in 2000. This case study determines how the characteristics of this technology-based venture in a
traditional industry slow to adopt technological innovation match against the success pattern defined by the model.

1.2 Background on the Model

Jeffry Timmons, a teacher and practitioner of entrepreneurship, authored the model of the entrepreneurial process used as a conceptual framework in analyzing the case studies of two successful ventures. He is the first Franklin W. Olin Distinguished Professor of Entrepreneurship in Babson College in Babson Park, Massachusetts. He is also a founding shareholder, director, and advisor to several high potential ventures and venture capital funds.

The model originally evolved from Timmons' doctoral dissertation research at the Harvard Business School about new and growing ventures in the late 1960s, and has since evolved and enhanced by ongoing research, case development, teaching, and his hands-on experience in high potential ventures and venture capital funds. The fundamental components of the model have not changed, but their richness and the relationships of each to the whole has been enhanced steadily, as they have become better understood. 5

1.3 Review of Some Literature

Much of the conceptual material cited in this study were derived from “New Venture Creation: Entrepreneurship for the 21st Century” by Jeffry Timmons, including other studies cited in the book. Providing some initial direction to this study was a master’s thesis entitled “Investigation in Construction Entrepreneurship,” prepared by Frederick Gould of the MIT
Department of Civil Engineering in 1980, under the supervision of Professor Hans Bjornsson.

The purpose of the thesis was to clarify the process in the establishment of a small construction firm. Included was a study of general entrepreneurship, a discussion of the characteristics of the construction industry that differentiates it from a general business venture, case studies of six construction startups in the metropolitan Boston area, and a comparative analysis of the case studies. The thesis concluded that the structure of the venture, ease of transition period, and growth of the business are all directly related to the educational background, construction experience, familiarity with the local environment, and business experience.

Twenty years after study was conducted, a check with the Associated General Contractors' online database of Massachusetts-based contractors showed that only three of the six construction ventures remain in business. While there could be different reasons for their failures, this demonstrates the low survival rate of construction firms. The percentage of new small firms in the construction industry surviving six or more years is about 35%.

A number of ideas presented in Mr. Gould's general research can be found in Timmons' model. His study mentions about gaining work experience in the field and area where you plan to start a business, which is similar to Timmons' concept of apprenticeship. Hiring a lawyer and an accountant, and having a banker are also in Timmons' people resources. His study also mentions about convincing someone to invest in the business concept to test the feasibility of a business. It further adds that when choosing a potential investor, it is important to be selective and to enlist someone who will provide enough funds, provide the necessary management guidance, and stay with the business during the hard times. This second point relates directly to Timmons' concept of value-added investors.
1.4 Methodology

The idea for my topic came about when I was starting to read Jeffry Timmons’ New Venture Creation, and came across “A Visit with an Entrepreneur Exercise.” I would later use the interviewing tips suggested there.) I later came across Frederick Gould’s thesis on construction entrepreneurship, which generally coincided with how I was visualizing the structure of the research. The method I employed essentially combines concept (the model) and practice (case studies).

I figured it was crucial to gain a fundamental understanding of the model in order to proceed with the rest of the research. I accomplished this major task by trying as much as possible to express the model into my own words. I then devised a strategy on how to gather the data efficiently. I collected information provided by each entrepreneur such as company brochures, biographical articles, and newspaper and magazine articles. I supplemented these with information I gathered from my own research of company websites, and online databases where I retrieved more newspaper and magazine articles. The objective of this initial data gathering was to determine and assess the information that were easily available, and to figure out what information I still needed. I got a general sense of how the venture started, its growth, current stage, and the direction where it is headed. Furthermore, I determined the general background of the entrepreneurs involved in the ventures. This initial undertaking allowed me to partially configure the questionnaire to the entrepreneur’s specific experience.

I developed the questions based on the conceptual framework, and from my vision of how I wanted to discuss the analysis. Questions were both closed-end and open-ended, which were intended to keep the questionnaire focused and at the same time, allow for unexpected
comments and insights. I also included comments that described the context of the questions. The questionnaire is presented in Appendix A.3, Questionnaire. I used a personal interview or follow-up emails to clarify some answers, expound on some questions, fill-in missing information, and ask questions that were more appropriate for an interview. I tape-recorded the interview after getting the permission of the interviewee.

I then developed the case studies by using all the information described above and reading other published cases in order to get a sense of writing style. The analyses and discussions of the case studies involved comparing and contrasting the characteristics of the ventures with the success pattern defined by Timmons’ model. I described the venture as being higher, moderate, or lower potential based on a particular criteria. I then concluded the study by describing the fit between the model’s success pattern and the characteristics of the two ventures.

1.5 Organization of Chapters

The organization of this thesis proceeds in the following logical manner. The thesis’ conceptual framework is Timmons’ model of the entrepreneurial process, which I discuss thoroughly in Chapter 2, A Model of the Entrepreneurial Process. I should note here that the framework slightly deviates from the model as originally presented by Timmons in his book. I describe this in Appendix A.3, Refinements to Timmons’ Model.

The next four chapters present the two case studies of Northland Investment and Collaborative Structures, each comprised of the case and the analysis of the case. The cases typically describe the personal and professional background of the entrepreneur who founded the venture, and the circumstances that led to the venture’s founding. The analyses
apply the model into the cases by closely following the format of the thesis' conceptual framework.

In Chapter 3, The Northland Investment Case, I describe the entrepreneurial process of Northland, focusing on the startup stage and the entrepreneur who founded the venture. In Chapter 4, Analysis and Discussion of the Northland Investment Case, I determine and compare the characteristics of Northland’s entrepreneurial process with the success pattern defined by Timmons’ model. In other words, I was trying to answer the question, “Why was this venture successful?”

In Chapter 5, The Collaborative Structures Case, I again focus on the entrepreneur who founded the venture. In Chapter 6, Analysis and Discussion of the Collaborative Structures Case, I determine and compare the characteristics of Collaborative’s entrepreneurial process with the success pattern defined by Timmons’ model. Since this venture is much younger than Northland, I was trying to answer the question, “Why has this venture been successful so far?” This required examining the track record of its founding entrepreneur and reviewing the short history of the new venture.

It is important and timely to note and paraphrase a Harvard Business School case cliché, which, adopted for this thesis, would read, “These cases were prepared as bases for analysis and discussion of the entrepreneurial process in these ventures, and were not intended to illustrate ineffective entrepreneurial practices.” I did, however, intend and went on to illustrate effective entrepreneurial practices because the entrepreneurs I was studying were successful and had proven track records. One of my underlying objectives was to learn from their knowledge and experience, which proved to be very helpful.

I then concluded this thesis by describing the fit between the model and the case studies. This is presented in Chapter 7, Conclusion. I managed this by comparing the
characteristics of higher and lower potential ventures articulated by the model, with the characteristics of the two ventures. I prepared summary tables of these characteristics organized in terms of specific criteria defined by the model. These are presented in Appendix A.1, Summary Tables. The study concludes that there is a high degree of fit between the model and the case studies, but certain characteristics of the ventures did not fit the success pattern defined by the model.
3 NVC, p. 37.
4 NVC, p. 87.
5 NVC, p. 44.
10 NVC, p. 18-20.
2. A MODEL OF THE ENTREPRENEURIAL PROCESS

This chapter presents the conceptual framework used in analyzing case studies of construction and real estate ventures. The framework generally follows Timmons’ model, which defines a core, fundamental entrepreneurial process that accounts for the substantially higher success pattern among higher potential ventures. Despite the great variety of businesses, entrepreneurs, geography, and technology, time and again central themes dominate this highly dynamic entrepreneurial process. The three driving forces of the entrepreneurial process are the opportunity, the team, and the resources. Integrating these driving forces are the elements of fit, balance and timing.

Entrepreneurs and investors can evaluate these driving forces and elements using criteria based on plain, good business sense common in successful ventures. They can then change or reconfigure these to maximize the potential of the venture and make it more attractive to undertake. The entrepreneurial process starts with the opportunity, not financial capital, the business plan, or preparing spreadsheets. Most higher potential opportunities are much bigger than either the talent and capacity of the team or the resources available to the team at the outset. The role of the lead entrepreneur and the team is to understand this imbalance, determine the gaps, and undertake measures to balance the forces and fill in the gaps by building the team and raising resources. In order to raise capital, the team prepares the business plan, which provides the language and code for communicating the quality of the three driving forces and of their fit and balance, including the spreadsheets. The following sections discuss the three driving forces and three integrating elements of the entrepreneurial process.
2.1 The Opportunity

The opportunity is the first driving force of the entrepreneurial process. An opportunity has the qualities of being attractive, durable, timely, and is anchored in a product or service that creates or adds value for its buyer or end user. The following subsections discuss the criteria for evaluating venture opportunities in terms of the industry and market, the economics, harvest potential, competitive advantage, fatal flaw issue, and strategic differentiation.

2.1.1 Industry and Market

Table A.2 in Appendix A.1 includes a summary of the following criteria for evaluating the industry and market where the venture is going to compete, and the market characteristics of highest potential and lowest potential venture opportunities.

- Market

Higher potential opportunities involve a product or service with an identified market niche. It meets an important customer need and provides high value-added or value-created benefits to customers. The customer or user realizes cost savings or other value-added or value-created benefits that pay back their investment in one year or less. The potential payback is identifiable, repeatable, verifiable, and should be less than the product or service life. Customers have no brand or other loyalties. Furthermore, the company is able to expand beyond a one-product company.

Lower potential opportunities are not focused on customer need or value-added/value-created benefits to customers. The market potential is far more difficult and risky to
ascertain if the benefits to customers cannot be quantified in monetary terms. The payback
to the customer or user is more than three years. 7

- **Market structure**

Market structure is evidenced by the number of sellers, size distribution of sellers, whether
products are differentiated, conditions of entry and exit, number of buyers, cost conditions,
and sensitivity of demand to changes in price. 8 Higher potential opportunities are in
fragmented, imperfect markets or emerging industries, wherein unfilled market niches are
identifiable, information or knowledge gaps exist, and the competitive environment is
profitable.

Lower potential opportunities are in industries or markets that are highly concentrated,
perfectly competitive, mature, or declining. 9 There are high entry barriers in industries or
markets where there are high capital requirements and costs in order to achieve distribution
and marketing presence, and where there are price-cutting and other similar competitive
strategies.

- **Market size**

Higher potential opportunities are in markets that are large and growing, wherein capturing a
small market share can represent significant and increasing sales volume. 10 Market size
should be at least $100 million in sales. It should be possible to achieve significant sales by
capturing a small market share without threatening competitors.

Lower potential opportunities are in markets that are too large, such as multi-billion dollar
markets. These markets may be too mature and stable, which can translate into competition
from larger and more established firms. Furthermore, these markets may also be highly
competitive, which translates into lower margins and profitability. An unknown market or
one that is less than $10 million in sales is low potential. 11
• **Market growth rate**

Higher potential opportunities are in markets that have an annual growth rate of 30 to 50 percent. A thriving and expansive market creates new niches for new entrants.\(^\text{12}\)

Lower potential opportunities are in markets growing at less than 10 percent. Competitors are scrambling for the same niches in stable or contracting markets.\(^\text{13}\)

• **Market capacity**

Higher potential opportunities are in markets at full capacity in a growth situation, meaning, existing suppliers cannot meet growing demand. The timing of the opportunity is critical since existing suppliers can increase their capacity before a new entrant can fill the demand.

• **Market share attainable by year five**

Higher potential opportunities are in markets where the venture has the potential to be a leader and capture at least a 20 percent market share.

Lower potential opportunities are in markets where the venture is able to capture less than five percent market share.

• **Cost structure**

Higher potential opportunities are in markets where the venture can become the low-cost provider. Economies of scale are insignificant or work to the advantage of the new venture. There are low costs of learning by doing.\(^\text{14}\)

Lower potential opportunities are in markets where the venture continually faces declining cost conditions.
2.1.2 Economics

Table A.3 in Appendix A.1 includes a summary of the following criteria for evaluating the economics of the opportunity, and the economic characteristics of highest potential and lowest potential opportunities.

- **Gross margins**
  Gross margin is the unit selling price less direct and variable costs.\(^\text{15}\) Higher potential opportunities have high and durable gross margins exceeding 40 to 50 percent. Gross margins should allow for error and flexibility to learn from mistakes.\(^\text{16}\) In addition, higher gross margins translate into higher after-tax profits and shorter time to breakeven.
  Lower potential opportunities have fragile gross margins of less than 20 percent.

- **Profits after tax**
  Higher potential opportunities generate strong and durable after-tax profits of 10 to 15 percent, and often 15 to 20 percent or more.\(^\text{17}\)
  Lower potential opportunities generate fragile after-tax profits of less than 5 percent.

- **Time to breakeven**
  Higher potential opportunities attain breakeven and positive cash flow within two years.
  Lower potential opportunities attain breakeven and positive cash flow after four years.

- **Return on investment (ROI) potential**
  Higher potential opportunities yield a return on investment of 25 percent or more per year.
  A high ROI justifies a satisfactory harvest price when the company is taken public or acquired by another company. The harvest potential of a venture is discussed in more detail in Subsection 3.1.3.
  Lower potential opportunities yield fragile returns of less than 15 to 20 percent per year.
- **Capital requirements**

Higher potential opportunities can be funded with low to moderate capital requirements. There are, however, higher potential opportunities such as high technology ventures, which have high capital requirements to fund continual research and development.

Lower potential opportunities cannot be funded or have high capital requirements.

- **Internal rate of return (IRR) potential**

Higher potential opportunities return five to ten times the original investment in five to ten years. A 25 percent or more annual compounded rate of return is considered very healthy. Lower potential opportunities have less than 15 percent IRR.

- **Free cash flow characteristics**

Free cash flow is a way of understanding a number of crucial financial dimensions of any business:  

- The robustness of its economics;
- Its capital requirements, both working and fixed assets;
- Its capacity to service external debt and equity claims;
- And its capacity to sustain growth.

Unlevered free cash flow (FCF) is defined as earnings before interest but after taxes (EBIAT) plus amortization (A) and depreciation (D) less spontaneous working capital requirements (WC) less capital expenditures (CAPex), or mathematically,

\[
FCF = EBIAT + (A + D) - (\pm WC) - \text{CAPex.} \]

EBIAT is driven by sales, profitability, and asset intensity. Low-asset-intensive, high-margin businesses generate the highest profits and sustainable growth. Higher potential opportunities generate sustainable free cash flows equal to 20 to 30 percent or more of sales. Sales growth is moderate to high at 15 to 20 percent or more per year. Asset intensity is low

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per dollar of sales. The spontaneous working capital requirement is low and incremental.

Asset intensity is a function of capital expenditures while spontaneous working capital requirement is a function of cash, inventory, and accounts receivable less accounts payable. Lower potential opportunities generate free cash flows equal to less than 10 percent of sales. Sales growth is low at less than 10 percent per year.

2.1.3 Harvest Potential

Harvest means realizing capital gains from exit mechanisms such as undertaking an initial public offering or selling the company. Table A.4 in Appendix A.1 includes a summary of the following criteria for evaluating the harvest potential of the venture, and the harvest characteristics of highest potential and lowest potential opportunities.

- **Strategic value**

Higher potential opportunities have a high strategic value in the industry, such as valuable technology, or have a high value-added strategic importance to their acquirer, such as distribution, customer base, geographic coverage, proprietary technology, contractual rights, and the like.  

Lower potential opportunities have low or no strategic value in the industry. The value of those with extremely large capital commitments can be severely eroded by unanticipated circumstances.

- **Valuation multiples and comparables**

Part of the entrepreneur's analysis is to identify some of the historical boundaries for the valuations placed on comparable companies in the same industry, market, or technology area as the new venture. Higher potential opportunities may have the following valuation multiples, x:
Lower potential opportunities may have the following valuation multiples, x: 25

- Price/earnings ≤ 5x
- EBIT ≤ 3 to 4x
- Revenue ≤ 0.4x

These rules of thumb are variable and should be thought of as a boundary and a point of departure. 26

- Exit mechanism and strategy

Higher potential opportunities are started and grown with a harvest objective in mind. 27 The harvest is intended for the entrepreneur, partners, investors, key managers and employees to realize capital gains from the sale of the company. Exit mechanisms include taking the company public or being acquired by another company.

- Capital market context

The context in which the sale or acquisition of the company takes place is largely driven by the capital market context at that particular point in time. 28 Initial public offerings are especially vulnerable to the sudden or unexpected changes or shifts in the capital markets. Hence, timing is a vital concern. Higher potential opportunities are planned for harvest at a time when capital market conditions are favorable.
2.1.4 Competitive Advantage

Table A.5 in Appendix A.1 includes a summary of the following criteria for evaluating the competitive advantage of the venture, and the competitive characteristics of highest potential and lowest potential opportunities.

- **Fixed and variable costs**
  
  Fixed costs are those the venture incurs regardless of its production levels. Variable costs are those that rise or fall as the firm produces more or less product. \(^{29}\) Higher potential opportunities exist in firms with high operating leverage, which means higher fixed costs relative to variable costs. Higher potential opportunities are capable of achieving and sustaining a position as a low-cost provider and have the lowest costs of marketing and distribution. \(^{30}\)

- **Degree of Control**
  
  Higher potential opportunities have moderate-to-strong degree of control over costs, prices, and channels of distribution. \(^{31}\) This is possible for ventures competing in fragmented markets where there is no dominant competitor, and the market leader has a 20 percent or less market share.

  Lower potential opportunities lack control over these factors. This is possible for new ventures competing in highly concentrated markets where there is a dominant competitor owning 40 to 60 percent or more market share. A dominant competitor can exercise market power and influence over suppliers, customers, and pricing. \(^{32}\)

- **Barriers to entry**
  
  Higher potential opportunities can erect barriers to entry, which can be in the following forms: \(^{33}\)
o Proprietary protection, regulatory advantage, or other legal or contractual advantage, such as exclusive rights to a market or with a distributor.

o Fast response/lead times in technology, product innovation, market innovation, people, location, resources, or capacity.

o Network of beneficial contacts accumulated over a considerable length of time than cannot be acquired quickly.

o A top-quality management team can become the most important strategic competitive advantage for a new venture. This is discussed in more detail in Subsection 2.2.1, Team Qualities.

Lower potential opportunities cannot erect entry barriers or are facing existing entry barriers erected by established companies.

2.1.5 Fatal Flaw

An opportunity has a fatal flaw if it has a characteristic of a lower potential venture opportunity in terms of the industry and market, the economics, harvest potential, and competitive advantage. A fatal flaw also comprises lower potential characteristics of venture teams, which are discussed in Subsection 2.2.1, Team Qualities. Higher potential opportunities have no fatal flaws.

Lower potential opportunities have one or more fatal flaws.

2.1.6 Strategic Differentiation

Table A.7 in Appendix A.1 includes a summary of the following criteria for evaluating the strategic differentiation of the venture, and the differentiating characteristics of highest potential and lowest potential opportunities.
- **Degree of fit**

Higher potential opportunities have a high degree of fit among the three driving forces of the entrepreneurial process—the opportunity, the team, and the resources. This is discussed in more detail in Subsection 2.4.1, *The Fit*.

- **Team**

Higher potential opportunities have high-quality venture teams. This is discussed in more detail in Section 2.2, *The Team*.

- **Service management**

Evidence suggests that most customers stopped buying a company's product or service because of bad customer service, not bad quality. Higher potential opportunities have a superior service concept that can be delivered consistently.

Lower potential opportunities perceive service management as unimportant.

- **Timing**

Higher potential opportunities are seized, grown, and harvested during favorable market conditions. This is discussed in more detail in Subsection 2.4.3, *The Timing*.

- **Technology**

Higher potential opportunities have a product based on proprietary and breakthrough technology.

Lower potential opportunities have a product with many substitutes or competitors.

- **Flexibility**

Higher potential opportunities allow the flexibility to commit and decommit quickly, to adapt, and to abandon if necessary. This is a major competitive weapon, particularly against larger firms, which typically take six years or more to change their basic strategy and 10 to 20 years or more to change their corporate culture. 36
Lower potential opportunities exist in teams that are slow and stubborn to change.

- **Opportunity orientation**

Higher potential opportunities exist in teams that are constantly alert to the marketplace or continually searching for opportunities. Lower potential opportunities exist in teams that are unaware of what is happening in the marketplace.

- **Pricing**

Higher potential opportunities are priced at or near the market leader's price. This is especially true for high value-added or value-created products or services in a growing market. Pricing policy relates to the discussion on gross margins in *Subsection 2.1.2, Economics*.

Lower potential opportunities under-price the competition.

- **Marketing and distribution channels**

Higher potential opportunities have new and accessible marketing and distribution channels and with networks in place.

Lower potential opportunities have unknown or inaccessible marketing and distribution channels.

- **Room for error**

Higher potential opportunities allow room for error and flexibility to learn and survive from mistakes and bad things that happen unexpectedly. The business and financial strategies have to be forgiving, e.g., estimates of revenues, costs, cash flows, timing, and capital requirements.

Lower potential opportunities have unforgiving financial policies such as high leverage, low gross margins, and low operating margins.
2.2 The Team

The entrepreneurial team is the second driving force of the entrepreneurial process. The team is composed of the lead entrepreneur, the founding partners, and the key managers. A very capable entrepreneurial leader forms the higher potential venture team by picking or attracting partners and key managers who have complementary competencies. A high quality team enhances the opportunity potential and its ability to raise outside capital. Investors are captivated by the creative brilliance of a company's lead entrepreneur and bet on the superb track records of the management team working as a group. The following subsections discuss the criteria for evaluating venture teams in terms of team and personal qualities.

2.2.1 Team Qualities

Table A.8 in Appendix A.1 includes a summary of the following criteria for evaluating the qualities of a new venture team, and the characteristics of highest potential and lowest potential teams.

- Team composition

A higher potential team is composed of members whose skills are complementary and compatible with one another. They are also free agents who are able to pursue the opportunity. Free agents are clear of employment, non-compete, proprietary rights, and trade secret agreements. A lower potential team has no such qualities or no team at all, i.e., a solo entrepreneur.

- Industry and technical experience

A higher potential team has members who are accomplished and possess profit and loss experience and track records in the same industry, with the technology, and in the market
area where the venture will compete. The ability to execute, adapt, and devise constantly new strategies is vital to the survival and success of a new venture. 40

- **Intellectual honesty**

This relates to the members’ knowing what they do and do not know, and their ability to seek other people with strengths that complement their own weaknesses in order to meet the needs of the new venture. The lead entrepreneur picks partners who can compensate for his shortcomings, and together, they hire or attract key managers to fill in the gaps.

- **Integrity and reputation**

A major long-term advantage for new venture teams is the integrity and unquestioned reputation of the team members. 41 This quality should also be present in the venture’s personnel, investors, directors, and other people resources.

- **Team philosophies and attitudes**

The most successful entrepreneurs seem to anchor their vision of the future in certain entrepreneurial philosophies and attitudes, i.e., about what a team is, what its mission is, and how it will be rewarded. The soul of this vision concerns what the founder or founders are trying to accomplish and the unwritten ground rules that become the fabric, character, and purpose guiding how a team will work together, succeed and make mistakes together, and realize a harvest together. 42

The team philosophies and attitudes are: cohesion, teamwork, integrity, commitment to the long haul, harvest mind-set, commitment to value creation, equal inequality, fairness, and sharing of the harvest. The rewards, compensation, and incentive structures rest on these team philosophies and attitudes. 43
2.2.2 Personal Qualities

Table A.9 in Appendix A.1 includes a summary of the criteria for evaluating the personal qualities of the lead entrepreneur and the founding partners, and the characteristics of highest potential and lowest potential founders.

- Apprenticeship

A lot of what an entrepreneur needs to know about entrepreneurship comes from learning by doing. Evidence suggests that the most durable entrepreneurial careers, those found to last 25 years or more, were begun across a broad age spectrum, but after the person selected prior work or a career to prepare specifically for an entrepreneurial career. This is the concept of apprenticeship, which requires knowing:

- What to prepare for;
- Where the windows for acquiring the relevant exposure lie;
- How to anticipate these;
- Where to position oneself; and
- When to move on.

Successful entrepreneurs follow a pattern of apprenticeship rich in experience:

- They are older and have acquired at least 8 to 10 years of substantial experience, built contacts, possess the know-how, and established a track record in the industry, market, and technology niche within which they eventually launch, acquire, or build a business.
- Frequently, they have acquired intimate knowledge of the customer, distribution channels, and market through direct sales and marketing experience.
The more successful ones have made money for their employer before doing it for themselves.

They are likely to have accumulated enough net worth to contribute to funding the venture or to have a track record impressive enough to give investors and creditors the necessary confidence.

They usually have found and nurtured relevant business and other contacts and networks that ultimately contribute to the success of their ventures.

They frequently evolve from an entrepreneurial heritage or are shaped and nurtured by their closeness to entrepreneurs and others.

• Goals and fit

There is a meeting of founders’ expected and potential rewards from the venture. What founders expect to get from the venture is close to what the venture can, at least, realistically give them.

• Desirability

An entrepreneur pursues an opportunity not only for its attractiveness or high potential, but also because it is desirable in terms of, for example, his lifestyle. He wants to create something new and be in control of his life.

• Opportunity cost

The economic definition of an opportunity cost is the value of the best alternative use of a resource. This definition has implications to the entrepreneur. A very capable entrepreneur may have other alternative occupations such as working for a large and established company. He is, in effect, foregoing a stable stream of earnings in order to pursue an opportunity and potentially realize higher returns. This opportunity cost is even greater since the entrepreneur undergoes an apprenticeship in order to prepare for an entrepreneurial career. Furthermore,
the entrepreneurial process of a new venture requires a significant number of years to
determine its success or failure. Thus, the entrepreneur has to seriously consider the
opportunity cost of pursuing an opportunity.

- **Upside/downside issues**

  The entrepreneur needs to consider not only the potential rewards from the venture, but
also the potential risks. Higher potential ventures do not have excessive downside risks,
which can lead to the entrepreneur becoming heavily indebted. The entrepreneur has to be
able to bounce back from the venture’s possible failure. His financial exposure in launching
the venture must not be greater than his net worth, which is the amount of resources he can
reasonably draw upon, or his alternative disposable earnings stream if the venture does not
work out. 48 Otherwise, the scale of the venture may be too big for the entrepreneur’s
capacity.

- **Risk/reward tolerance**

  Upon considering the upside/downside issues, successful entrepreneurs take calculated risks
or avoid risks they do not need to take. Gamblers or extreme risk-takers or overly risk-averse
entrepreneurs are unlikely to sustain any long-term successes. 49

- **Stress tolerance**

  The entrepreneur is fit to handle the stressful requirements of a fast-growth, high-stakes
venture. 50

- **Attitudes and behaviors**

  Timmons synthesized over 50 research studies to determine the attitudes and behaviors in
entrepreneurs that are desirable and acquirable. 51 These include: commitment and
determination; leadership; opportunity obsession; tolerance of risk, ambiguity, and
uncertainty; self-reliance and ability to adapt; and motivation to excel. Other desirable but
not so acquirable attitudes and behaviors include: energy, health, and emotional stability; creativity and innovativeness; intelligence; capacity to inspire; and values.

2.3 The Resources

The resources represent the third driving force in the entrepreneurial process. The resource requirements of a new venture include people, financial capital, and the business plan. It is essential for an entrepreneur to determine what resources are needed, when they are needed, and how to acquire them. The key to managing resources in a new venture is to use the minimum possible amount of resources at each stage in the venture's growth. Instead of owning these resources, entrepreneurs should seek to control them. One way to control resources is to use other people's resources, which include for example, money invested or loaned by friends, family, business associates and other investors. Special arrangements can be made with customers or suppliers who can provide inexpensive or free resources, such as materials, equipment, space, or people, in exchange for future services or business transactions.

Successful entrepreneurs devise ingeniously creative and stingy strategies in marshalling and gaining control of resources. Such strategies promote a discipline of leanness throughout the firm, conserving its equity, and thus, maximize shareholder value. The following subsections discuss the resource requirements of a new venture.

2.3.1 People

People resources include the boards of directors and advisors, the attorney, the accountant, and consultants. While investors, bankers, and other lenders are also people resources, I
classified them under financial capital. The management team is also a people resource, but I classified it under the team. Table A.10 in Appendix A.1 includes a summary of the following types of people resources, their characteristics, and value-added benefits.

- **Board of directors and advisors**

  The board of directors and advisors add value to the venture with their relevant experience, knowledge, and networks. They provide expert advice, valuable guidance, and objective oversight.

- **Attorney**

  An effective attorney has the experience and expertise in dealing with specific issues facing a new venture. An attorney provides legal advice regarding incorporation; contracts and agreements; liability protection; real estate and insurance matters; tax planning and review; copyrights, trademarks, patents, and intellectual property protection; mergers and acquisitions, etc.

- **Accountant**

  An effective accountant is an experienced general business advisor, especially to emerging companies. In addition to audits and taxation, an effective accountant can add value by assisting the entrepreneur with strategy, raising capital, mergers and acquisitions, etc.

- **Consultants**

  Consultants are hired to solve particular problems and to fill gaps not filled by the management team. With their specialized knowledge and experience, they add value to the venture by providing expert services in strategy formulation, market research, project feasibility studies, assessing business opportunities, etc.
2.3.2 Financial Capital

The extent and timing of financial capital requirements are only determined after the opportunity has been assessed, the team has been formed, and all other resource needs have been identified. At this stage, it is now important to know how much cash the venture will need, and when and where to raise it.

One of the most common misconceptions among untried entrepreneurs is that you first have to have all the resources in place, especially the money, in order to succeed with a venture. Thinking money first is a big mistake. Money follows high potential opportunities conceived of and led by a strong management team. Too much money at the outset is accompanied by a lack of discipline and impulsive spending, usually leading to serious problems and failure.

Sources of equity capital include formal and informal investors. Informal investors such as angels or wealthy individuals are sought when the investment amount needed and the required rate of return expected are less than what formal investors such as venture capitalists require. The single most important criterion for selecting investors is what they can contribute to the value of the venture—beyond just capital. Sources of debt capital include bankers and other lenders. Table A.11 in Appendix A.1 includes a summary of the following types of financial capital resources, their characteristics, and value-added benefits.

- **Equity capital**

Venture capitalists supply capital and other resources to entrepreneurs in business with high growth potential in hopes of achieving a high rate of return on invested funds. In return, they will also provide assistance, advice, and information to help the entrepreneur prosper. Throughout the investing process, venture capital firms seek to add value in several ways:
- Identifying and evaluating business opportunities, including management, entry, or growth strategies;
- Negotiating and closing the investment;
- Tracking and coaching the company;
- Providing technical and management assistance; and
- Attracting additional capital, directors, management, suppliers, and other key stakeholders and resources.  

Angels are self-made entrepreneur millionaires who have made it on their own, and have substantial business and financial experience. Their relevant knowledge and experience add a lot more value to the venture than just money. They can also provide business contacts and savvy business advice to the entrepreneur.

• Debt capital

The banker or other lenders provide debt capital when the venture is more or less stable. The banker or other lenders should be like partners, not difficult minority shareholders. First and foremost, therefore, an entrepreneur will be well advised to pick the right banker or lender, rather than to pick just a bank or a financial institution, although picking the bank or institution is also important.

2.3.3 The Business Plan

Inspired by a new business idea, the entrepreneur prepares a business plan carefully thinking through all of the issues and problems associated with starting and developing the new business. The business plan carefully articulates the merits, requirements, risks, and potential rewards of the opportunity and how it will be seized. Developing the business plan is mainly for the purpose of raising capital from prospective investors. It is absolutely critical to
persuading investors and lenders to participate in the business. It also guides the policies and actions of the firm over a number of years. Preparing the business plan is also an opportunity for the entrepreneur to commit his thoughts and plans into writing, which requires much deeper and careful thought than simply declaring, “I want to start a company.” It articulates the business opportunity, the product or service, the size of the market, the customers and competitors, the marketing and sales strategy, the sustainable competitive advantage, financial projections, the action plan, and lastly, it answers the all-important question, “Is the venture feasible?” Table A.12 in Appendix A.1 includes a summary of the characteristics and value-added benefits of a business plan.

2.4 The Fit, Balance, and Timing

The integrating elements of the entrepreneurial process are the fit, balance, and timing of the driving forces. The three driving forces—the opportunity, the team, and the resources—are rarely matched, and these elements put everything together. The entrepreneurial process should follow a holistic approach, which emphasizes the importance of its wholeness and the interdependence of the three driving forces. These integrating elements also relate to the synergies of the three driving forces, i.e., the interaction of these driving forces produce a combined effect that is greater than the sum of their individual effects. The following subsections discuss the criteria for evaluating the fit, balance, and timing of the three driving forces.
2.4.1 The Fit

Table A.13 in Appendix A.1 includes a summary of the following criteria for evaluating the fit, and their characteristics and benefits.

- **The Fit of the Opportunity with the Team and the Resources**
  This relates to the ability of the team to pursue the opportunity desired while using the resources that are available. The team has the industry and technical experience, and the intellectual honesty to pursue the opportunity. The personal qualities of the founders are consistent with the opportunity to be pursued. The team knows what, when, and how to acquire and control people and financial resource requirements in order to pursue the opportunity.

- **The Fit of the Investors with the Opportunity and the Team**
  The investors are capable of adding value to the venture, not just providing the money. Value-added investors are knowledgeable and experienced in the industry and market where the opportunity is based. They can provide valuable advice and guidance to the team and have access to networks of customers and suppliers. These are related to the discussion on investors in Subsection 2.3.2, Financial Capital. Furthermore, there is chemistry between the team and its investors.

- **The Fit within the Team**
  This relates to the fit among the lead entrepreneur, the partners, and the management team. They have team chemistry, i.e., complementary competencies and compatible skills. This relates to the discussion on team composition in Subsection 2.2.1, Team Qualities.
2.4.2 The Balance

Table A.14 in Appendix A.1 includes a summary of the following criteria for evaluating the balance, and their characteristics and benefits.

- **The Three Driving Forces**

  This relates to the ability of the lead entrepreneur to balance and re-balance the opportunity and the resources that are available. For example, an opportunity with a huge potential can far outweigh a one-man team with very limited resources. Seizing the opportunity requires balancing its huge potential by building the team and filling-in the resource gaps. Building the team involves the addition of partners and the management team. The resource gaps are filled with the addition of investors, directors, advisors, a business plan, etc.

  After startup, in order to sustain growth, the entrepreneur assesses whether the size of the team is large enough or too small, whether the resources are sufficient or not, and whether the strategies and tactics are effective or not. The entrepreneur undertakes the re-balancing if and when necessary.

- **Risk and Reward**

  Another constant balancing act involves the positive relationship between risk and reward. The greater the risks taken, the greater the potential reward. This does not imply that the lead entrepreneur should assume the greatest risks in order to realize the greatest potential reward. The lead entrepreneur has to balance the risk and reward by taking calculated and manageable risks, and expecting returns that are commensurate to the level of risks assumed.
2.4.3 The Timing

The window of opportunity is a time interval wherein opportunities exist or are created in real time. The timing of all these entrepreneurial events should happen when the window is opening, not closing, and that it remains open long enough for the venture to be sown, grown, and harvested. The entrepreneurial process is a long one, and it takes a considerable length of time to determine whether a new venture is a success or a failure. Table A.15 in Appendix A.1 includes a summary of the timing involved in the following venture stages, their characteristics, and benefits.

- **Startup**

  The entrepreneur has to have the ability to recognize the opportunity and the decisiveness in seizing the opportunity. The entrepreneur assembles a team that collectively has the competence to undertake the opportunity while using the resources that are available.

- **Growth**

  Timing is critical in the entrepreneur's ability to change business strategies in response to changing market conditions during the growth stage of the venture.

- **Harvest**

  The reaping of the harvest is equivalent to taking the growing venture public or selling the venture while it is growing or when it is already mature. The harvest strategy is executed when capital market conditions are favorable.
2 NVC, p. 38
3 Ibid.
4 NVC, p. 80
5 NVC, p. 88
6 Ibid.
7 Ibid.
8 Ibid.
9 NVC, p. 89
10 Ibid.
11 Ibid.
12 Ibid.
13 Ibid.
14 NVC, p. 90
15 NVC, p. 91
16 Ibid.
17 NVC, p. 90
18 NVC, p. 91
19 Ibid.
21 NVC, p. 91-92
22 Ibid.
23 NVC, p. 92
24 NVC, p. 86
25 Ibid.
26 NVC, p. 92
27 Ibid.
28 Ibid.
30 NVC, p. 92
31 Ibid.
32 Ibid.
33 Ibid.
34 NVC, p. 93
35 NVC, p. 94
36 Ibid.
37 NVC, p. 95
39 NVC, p. 94
40 Ibid.
41 NVC, p. 93
42 NVC, p. 278
43 Ibid.
44 NVC, p. 227
45 Ibid.
46 NVC, p. 226-227
48 NVC, p. 93
49 NVC, p. 94
50 Ibid.

41
1 J. A. Timmons, L. E. Smollen, and A. L. M. Dingee, Jr., New Venture Creation, 2nd ed. (Homewood, IL: Richard D. Irwin, 1985, pp. 139-69).
3 NVC, p. 39
4 NVC, p. 328
5 Ibid.
6 NVC, p. 330
7 NVC, p. 39
8 NVC, p. 438
10 NVC, p. 440
12 NVC, p. 328
13 NVC, p. 367
16 Ibid.
17 NVC, p. 83
18 NVC, p. 84
3. THE NORTHLAND INVESTMENT CASE

Bob Danziger, founder, former chairman and CEO of Northland Investment Corporation had just finished teaching the fall semester's first session of "Real Deals" in September 1999. "Real Deals" is a series of seminars offered monthly to graduate students of the MIT Center for Real Estate's real estate development program. The seminar invites the real estate industry's "movers and shakers," entrepreneurs, and their colleagues to present actual transactions they are currently working on or have recently completed, and discuss the deal structure, the strategies, and tactics of negotiating complex transactions. David Epstein, founder and CEO of The Abbey Group, a well-established owner and developer of commercial property in New England, had just delivered a fascinating presentation about the Landmark Center, a mixed-use redevelopment of the former Sears complex, a one-million square foot national historic building in Boston's Fenway district.

As graduate students form a beeline towards David for more Q&A's, a graduate student quietly approaches Bob, politely introduces himself, and briefly explains his thesis research about the entrepreneurial process in construction and real estate ventures. He asks Bob to refer him to real estate entrepreneurs he could study, having no clue about Bob's entrepreneurial background. Bob graciously replies, "Absolutely, I can refer you to real estate entrepreneurs like David. Moreover, I'm an entrepreneur myself, having started my own real estate company, and had just sold it a few years ago. I would be very happy in helping you in your thesis." Bob's remark delights the graduate student who, in turn, expresses his interest in studying Bob's entrepreneurship.

Later at home in Newton, Massachusetts, just after retrieving an old company brochure, and while typing-up a brief biographical outline that the graduate student had requested, Bob
reminisces about his 30 years of entrepreneurial experience in real estate, and thinks about what interesting stories to narrate to his intrigued graduate student.

3.1 The Entrepreneur’s Personal Background

Robert A. Danziger was born and raised by a middle-class family in Newton, Massachusetts, a suburb west of Boston. Bob’s father ran a small, three-person sales agency, which included a secretary and a brother as partner. The company functioned as a sales representative for manufacturers of household linens, which they sold to department stores. The manager of the household was Bob’s mother, to whom Bob attributed part of his entrepreneurial attitude:

My mother was a risk-taker who instilled an entrepreneurial spirit in me even as a child. She would always encourage me to take chances and tell me to go for it. Although my mother stayed at home, she would have been an entrepreneur in another generation. My father, on the other hand, was not a risk-taker, running a little sales agency his whole life.  

Following graduation from a public high school, Bob entered the elite, ivy-league school, Dartmouth College, where he received his AB in 1956. Right after that, he attended Dartmouth’s Amos Tuck School of Business Administration, where he majored in marketing. Bob recalled working his way through high school and college, which demonstrated another dimension of his entrepreneurial attitude:

I always had a work ethic. During high school, I used to work on Saturdays at a department store in Boston, earning $5 per day in order to have the money to go out on dates. During college, I worked as a waiter at the nicest inn in Hanover, New Hampshire called Hanover Inn. I waited on tables

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everyday, and got my meals and tips. This allowed me to split the tuition with my father, who also had to send my sister to school after me, so he couldn't have easily afforded to send us both without me working. It helped a lot and I would have probably done it even if it weren't a necessity. I wanted to participate in the cost and I disciplined my time better than kids who didn’t work. It was a great experience working there and I met a lot of interesting people.

One of those people was Stephen Osman of Stamford, Connecticut who later became Bob’s roommate in business school, and much later, became a private investor in Bob’s real estate partnerships. In an interview with Boston Business Journal in 1994, Stephen said of Bob, “I knew he was going to be successful because of the qualities he had—hardworking, intelligent, sincere, friendly and honest. He is a self-made person.” He and Stephen are very dear friends today. Bob recalls, “Stephen came from a very wealthy family—he used to have breakfast at the Hanover Inn instead of the college cafeteria, with some of his friends who could afford to do that.”

3.2 The Entrepreneur’s Work Experience

After receiving his MBA from Tuck in 1957, Bob married his wife, whom he met when they were in the eighth grade. Shortly thereafter, he began his career in the marketing department of a large manufacturer of work shoes, working to become the sales manager of the company. In 1958, the company sent him to Los Angeles, California. He and his wife lived in Orange County, and didn’t have any children then. Everyday, Bob would drive by an orange grove on the way to work, and when he drove home at night, he observed houses
being constructed everywhere. He recalls, “It was exploding and it just seemed to me that
something was going on here that I should be a part of.”

This curiosity drove Bob to enroll in a one-year real estate course at the University of
Southern California. He attended weekly night classes, which was taught by a semi-retired
real estate professional named Henry Mitchell. He became fascinated with the whole field of
real estate, and by the end of the course, he had gotten to know Henry very well and told his
teacher, “I’d love to participate in this in some way, and if you ever hear of something for
sale, maybe I can put some money together.” So one day, Henry called Bob and they drove
to an area in Orange County, not too far from where Disneyland was eventually built. Bob
recalls his first encounter with a real estate opportunity:

He showed me a farm that he had heard was for sale. There were no
freeways out there then, and you didn’t have to be a brain surgeon to figure
out that the freeways were coming in at some point. I had no money then, so
I wrote home to my father, my father-in-law, my brother-in-law, and a few
other people about the opportunity. I was able to put together a small family
partnership, which included Henry, and we then bought the farm. The
farmer was just grazing cows on it and I had no idea what I was going to do
with it. I just wanted to participate in the growth of the area. Two years later,
things were happening out there—freeways were starting to be built in the
area—but we didn’t sell it yet.

After three years of working at the shoe company in Los Angeles, Bob and his wife returned
to Boston after accepting a marketing job offer from Lawrence Miller, his former teacher
and thesis advisor at Tuck. He became the sales manager at Lawrence’s family-owned,
children’s furniture company, where he worked for the next five years. In the meantime,
Henry called Bob and informed him that a town was being built around their land, which might be taken by eminent domain unless they sell it. The farmer had long since died, and they made a decision to sell the land to a developer. Bob recalls, “That was my first real estate venture and percentage-wise, it was a very successful deal—the partners made a lot of money.”

Bob rose to become vice president of the children’s furniture company, and got along very well with Lawrence. Bob recalls:

> It was a terrific job—I became the number two guy in the company, and I was being paid fine. However, I felt that I just couldn’t work for a salary the rest of my life. If I wasn’t going to become an entrepreneur, I should, at least, own a piece of the company. So I went to Lawrence and told him that I need to get equity in the company. Unfortunately, his mother controlled the stock and he didn’t have the authority to give me any stock. He said to me, “I’ll do anything—I’ll pay you better—but I can’t promise you that you’ll ever have any ownership in this company.” When he said that, it affected me very markedly and I decided I couldn’t stay in a company where I didn’t have ownership. I never forgot that because when I started my own company, I immediately gave my key people the ownership opportunity.

The third company Bob joined was Mister Donut, which was in the food franchising business. His role was finding the locations, negotiating the sites, and selling the franchises. He gained a lot of real estate experience because he learned how to find properties, evaluate and negotiate them, and finance and build them. He built donut shops in shopping centers, which he learned a lot about. The company had plans to go public, but in 1968, the owner surprised everyone by selling the company to a large public company called International
Milling, which supplied all the flour for the doughnuts. Bob was offered an opportunity to run the donut division for this public company, which was based in Minneapolis. He recalls the turning point of his career:

The whole deal there was that I was going to get equity, which the owner and myself discussed when I started. But when he unexpectedly sold the company rather than going public, he still owned all the stock and those of us who worked there didn't get any benefit. By then I said to my wife that on two occasions, I thought I was going to get equity and it didn't work out. I was starting to feel the entrepreneurial juices flowing and it was time for me to start my own business. I was 36 years old.

3.3 The Startup

In 1970, there was an emerging land market for vacation and retirement homes in northern New England, i.e., Vermont, New Hampshire, and Maine. The interstate highways were being completed, there was growing interest in skiing, and people were becoming more affluent. Concurrent with these trends, children's camps on choice waterfront sites were closing, thus affording an unusual opportunity to buy select property for development of vacation and retirement homes. Bob recalls how he started the company:

When we formed the company, before we started buying the lands, I figured I needed about $60,000 to survive for one year. I and five other investors put in $10,000 each. I gave each of them five percent of the company. I didn't have any money so I borrowed the money from my father-in-law. After that I had to use the money we made from projects to keep the company going. At the early stages, I did not look to make money for myself. I just made sure
that I got a good enough return for my equity partners so that they would continue to invest in projects that followed. My investors were all friends and several of them were college connections. They were all older and more established in their careers. They saw me as a young guy who had an idea, they were intrigued, and they were just going to roll the dice. When I started, I had a secretary and these five investors who became my board of directors.

During the first year of the company, Bob served as a sales agent of Landvest, a young but more established real estate company that was essentially doing the same business he planned on doing. This company had a lot of land-use planners and acquisitions people going around buying-up these properties, but they did not have too many people selling the land parcels. Bob introduced himself and his business proposition that Northland was to become its sales agent in the suburbs west of Boston. He would get a listing of their projects, visit them, take pictures, and evaluate them. If Bob liked them, he ran and paid advertisements on them in order to sell the properties it developed. Landvest liked the idea and for the first year, Bob basically got his inventory from Landvest plus sales commissions. Bob did not work for them, but rather, he established his own identity, i.e., the Northland name.

It quickly became apparent to Bob that the way to make more money in this business was not just to get the commission, but to be the principal. He closely observed what they were doing and knew he could do the same thing if he had the capital. He then decided to discontinue his business relationship with them, and pitched his business plan to prospective investors. He showed his track record of selling properties developed by the other company, and was successful in raising capital from a number of investors.
This is how Bob and his partners launched Northland as a principal, instead of an agent. He then went up to northern New England and identified certain areas where the ski industry was starting, and lakefront areas where boating, fishing, and other recreational activities were accessible. He walked into the offices of brokers in the local communities and introduced himself and the kind of properties he was looking to buy. He recalls, “I started networking, doing it myself, knocking on door by door.” The principal intent was to purchase choice properties in choice locations. Bob soon bought farm lands and children’s camps, received approval from towns for future development, subdivided them into parcels, built the improvements such as roads and utilities, and then sold the parcels to people wishing to build their own homes.

Typically, Bob could get debt financing for half of it, either from banks or through the farmer, i.e., seller-financing. The debt capital was usually from the seller at the very beginning. There were tax advantages to seller-financing at that time. If the seller received more than twenty-nine percent of the payment at the sale, they had to pay capital gains tax on the entire sale price. With seller-financing, the capital gains tax on the remaining 71 percent was spread out over the number of years Bob paid off the debt. Bob had to explain this to the farmers, most of whom accepted this arrangement. The other equity half was financed by affluent friends and other private individuals. Neither source of capital was institutionalized then. He did not have to put in his own money in these projects. As the lands were sold, the farmer was first to receive his payments, then the equity partners got back their investment, and then whatever remained was split between the investors and the company.
3.4 Creative Marketing and Sales Strategies

In those days, if people wanted to buy a ski house, they went up north and went into some broker’s office in the town they wanted to be, and started to look at all the listings. One of the things Bob did in those early days, which was somewhat original because no one had done it, was that he opened an office in Boston that marketed properties in northern New England. He went up north to those brokers, got all their listings, and set up a beautiful showroom in Boston where it was much more convenient for people to see the listings. Bob recalls his creative marketing strategy:

I put an ad in the paper and if you answered the ad, you don't have to go up north to New Hampshire. You come over in the evening on your way home from work, tell me where you want to be, and I'll show you the whole thing, including videos, slide projections, etc. If you saw something you liked, I then made an appointment on a Saturday or Sunday for you and your wife to drive up and meet the broker by-appointment, who's already been briefed by me as to what you want and so forth. It was a very efficient process because in one day, you got to see what you wanted to see. Both the broker and myself benefited from this process and we split the commission.

When Bob was working for Mister Donut, he participated in food-franchising conferences for people interested in owning a food franchise. These were held in big coliseums in New York and Boston, and representatives of franchisers like Bob would sit in front of a table with a picture of their donut shop. The conference allowed franchisers to present various options to many prospective franchisees in one place. Bob effectively adopted this notion
into marketing real estate by periodically organizing land seminars at five-star hotels in Boston. He recalls another one of his unique and clever marketing strategies:

We would invite people with big ads in the paper to come to a land seminar and learn how to buy land for vacation or retirement homes at no cost. We would have 500 people on a Wednesday evening or Sunday afternoon at the Marriott Hotel. I would invite the key brokers from up-country to join me and we would put on a seminar. We'd have a lawyer talking about environmental issues, a tax accountant talking about tax implications, an estate planning person, marketing people, and so forth. People would come and register, leaving their names, addresses, and phone numbers. They would learn all about the various properties in different parts of New England and how to do it. It was very professionally done with no pressure to buy. If you're interested, you would then make an appointment with us. If we didn't hear from you, we'll send you a follow-up letter saying we're glad that you came to our seminar and if you're still interested, give us a call, night or day. We got a lot of business that way. We used to call them seminars but basically, it's a sales meeting. The brokers loved it because they got exposure to all these people. We consolidated the process and made it very easy for someone who was looking to buy a property in northern New England.

3.5 The Key Managers

Bob's background was in marketing and finance, and hence, did not have expertise in areas such as land-use planning, construction, etc. Thus, one of the very first people he hired was Frank Stewart, who had a master's degree in land-use planning. Frank stayed with Bob
throughout his career and would later buy the residential division from Bob. As the company grew, Bob hired an accountant to be CFO, construction people, etc. Bob recalls how he hired his key managers:

I put a team together with expertise, and in any one of those disciplines, they knew more than I did. I wasn’t really looking for people who had experience. I was just trying to evaluate bright, effective, and ambitious people with high integrity. I was lucky to hire five of these people over a period of five years (1971 – 1976), and each one stayed with me for the full term. I think I’m a pretty good judge of people but the odds of that happening are very small. They learned on-the-job from me, except the land-use planner and the accountant. One was actually a customer interested in buying a vacation home. He and I hit it off, and he came to work for me after leaving his teaching job in the school system.

Later, Bob offered his key managers an opportunity to own stock in the company. Moreover, he gave them pieces of the partnerships in the company’s projects. The profit sharing scheme did not dilute the investors and as Bob recalls:

In fact, the investors liked the idea because the guy who’s out there trying to buy, sell, and fix-up is incentivized beyond his salary. The better that project does, the more money he makes. Therefore, it’s good for the investors, and by the way, it’s good for the company. There were times when my wife would say to me, “You own this company, why do you keep on giving away pieces of everything to these employees?” And I’d say to her, I want to keep these very good people and I was very fortunate in picking them. I think I created a climate that was fun, and they made good salaries, but they stayed
because if the company made a profit, then they made a profit. It was a way for a private company to give real value to an employee. You can give an employee stock, but they don't know when that is going to be harvested and they have no control over it. But once the project partnerships were done, and all the properties were sold, we harvested that money. They got real cash. That was the best incentive all the way through. I continued that even when we became a much larger company.

3.6 Growing in Difficult Times

In order for Northland to grow to a larger scale, it became apparent that the company had to expand beyond just land subdivision in northern New England. This decision was accelerated by the oil crisis that started in February 1974. Bob recalls the effects of the oil embargo:

- It became so acute that people did not have gasoline in their cars, so you weren't about to buy a piece of property three hours up in Maine. The business collapsed overnight, just like that. I had people who had given me good-sized deposits on land, suddenly relinquishing the deposits rather than close on the sale because they thought they wouldn't be able to get there.
- People panicked and thought that it was always going to be like this—people lining up at gas stations to get a rationed amount of gasoline.

In response to this crisis, Bob and his small team took a look at the company and asked, "Are we a land company or are we a company that knows how to put real estate together and look at a commercial piece of real estate and do the same thing?" Buy an undervalued piece of land or recyclable piece of property, and do for it what they did for the land, which
is basically recycling a farm into a vacation home community or a children’s camp into a subdivision. So Bob went back to his partners and told them about his plans—put the land business on-hold and see what happens with this oil embargo. In the meantime, Bob would identify some office buildings and shopping complexes that are distressed and need help. They will put some money together and borrow some from banks. Bob recalls how they weathered the crisis:

While the oil crisis was putting the rest of our business on the backburner, we bought a little medical office building in Kenmore Square near Fenway Park in Boston. I felt than even in the depths of that recession, the one people who would probably still stay in business were doctors who needed a place to practice. So I felt a medical office building was a pretty safe thing to buy. We put a partnership together and fixed-up the building. I had some prior experience in leasing commercial properties. We did lease it and it was successful. Then we bought another little building, then a larger building, and so on. A few years later, the crisis abated, gasoline was then flowing again, and we reactivated the land business. I had one person keep the land business alive, at least, making sure that the grass was cut and the snow was plowed. By then, we had built a commercial business, which was the higher-growth area and we were buying and rehabilitating older buildings. We shifted the focus of the company because of an external circumstance, and if we didn’t, we would have been out of business. That was a very critical time in our history. The company was only four years old when that happened.

By this time, equity capital was secured through private limited partnerships with individuals, while commercial banks and mortgage lenders such as insurance companies financed debt
capital. Northland would serve as the general partner of a real estate fund, which is a pool of equity capital available to acquire existing, income-producing, commercial properties.

3.7 More Difficult Times

In the early 1980's, interest rates went up to 18 to 19 percent. Northland did not buy much, just laid-low and managed what they had. In 1986, the tax reform act took away the tax shelter of investing in real estate. Prior to 1986, investors could deduct their losses from ordinary income, and people were rushing to give money to real estate companies such as Northland to buy real estate. As a result, the limited partnerships with private investors became much less, and Bob raised equity capital from institutions such as endowment funds and pension funds. In the recession of the early 1990's, Bob recalls the difficulties at that time:

In those days, everybody just had to survive. I had a terrific office building located in downtown Hartford, Connecticut. The major tenant in the building was a big insurance company who occupied six floors, paying $20 per foot, and would have been there for many, many years. It went bankrupt because its business got so bad and therefore, they defaulted on their lease. The proforma and debt service on the building were based on those terms. I couldn't even get $10 per foot because everybody in Hartford was having trouble, laying-off people, and nobody was looking for new space. I didn't run that building any different than I had in the previous five years that I had owned it. In such a situation, you either have to restructure the loan or hand over the keys to the lender if they don't agree.
According to Bob, the biggest risks of the business are tax legislation, economic cycles, and other external circumstances that you can’t control. He adds, “You should have enough reserve power to ride that out, and the creativity and imagination to shift.” Another thing Bob worries about is the sudden flood of investment capital into the real estate market.

The real estate industry appeals to one’s sense of greed and opportunities, and when a lot of capital is made available, particularly other people’s capital—whether it is from lending institutions or equity markets, it is very difficult for real estate developers to resist temptation to take that capital and deploy it. It often has been said that when capital is most available is just the time you should not take it. 

### 3.8 The Mature Organization

Bob developed his one-person operation into an institutional grade real estate firm with a high quality portfolio, extensive experience, and an industry-wide reputation for excellence. It specializes in the acquisition, development, financing, and management of office buildings, shopping centers, research & development facilities, and industrial complexes; and the planning and marketing of waterfront homesites, suburban communities and condominium residences. On a selective basis, it also offers advisory services to institutions and other property owners in real estate development, asset management, and financing.

### 3.8.1 Real Estate Investment

Northland has established stringent guidelines for potential acquisitions and/or development projects. They actively seek:
Existing downtown and suburban office buildings of 50,000 to 350,000 square feet

- Shopping centers and malls of 100,000 to 1,000,000 square feet
- Modern industrial and R&D facilities of 50,000 to 200,000 square feet
- Undeveloped land suitable for new commercial and residential projects

Northland Investment is the parent company of three subsidiary companies, which are into residential development, commercial development, and asset management.

### 3.8.2 Residential Development

A separate development team directs the acquisition, land-use planning, financing, construction, marketing and management of residential property. It actively seeks to acquire waterfront estates, former children’s camps, and major tracts of land for single-family and town house residential development.  

- **Products**
  - Multi-acre oceanfront and lakefront home sites
  - Retirement and vacation condominium residences
  - Choice suburban parcels of land for primary home communities
  - Multi-family and mixed-use opportunities including existing buildings suitable for rehabilitation

- **Services**
  - Project planning and feasibility consulting services to other property owners and financial institutions

Since its inception to the late eighties, Northland has purchased more than 60 separate tracts of undeveloped land totaling over 9,000 acres, with prime ocean and lake frontage of nearly 58.
20 miles. It has also created and marketed over $30 million worth of recreational, investment and primary home property from Bar Harbour, Maine to Newport, Rhode Island. 13

3.8.3 Commercial Development

Northland’s commercial development division initiates, evaluates, acquires and directs its new construction and rehabilitation projects. These often comprise multi-building phased projects to be developed over an extended period. 14

- **Products**
  - Urban and suburban office buildings
  - Research & development facilities
  - Shopping centers
  - Industrial complexes

- **Services**
  - Select development advisory services to individual, corporate or institutional clients.

Since its venture into commercial real estate in the mid-seventies to the late eighties, Northland has purchased, developed or rehabilitated more than 40 commercial properties comprising about three million square feet, with an estimated current market value in excess of $350 million. 15

3.8.4 Asset Management

Northland manages all of its own properties. In this way, they not only maintain their high standards of asset management but are assured intimate knowledge of the problems and
opportunities the buildings offer. Since Northland Management Corporation is a division of the parent company and retained by all the partnerships, its people are trained to manage from the “owner’s perspective.” This relationship also facilitates close interaction with the company’s acquisition and development groups, accounting and data processing departments, and the company’s investors and financial partners. An important function of asset management is to appraise each property semi-annually and recommend the optimum time to refinance, expand, improve or sell. Northland’s management group has implemented numerous renovations and re-leasing programs for existing properties, secured rezoning classifications to permit property expansions, and negotiated a number of favorable asset sales and refinancings.

- **Services**
  - Leasing, lease administration
  - Tenant relations
  - Building maintenance
  - Construction management, leasehold improvements
  - Accounting, financial controls and reporting
  - Appraisal
  - Legal affairs
  - Real estate consulting and asset management services to other property owners on a selective basis.

In the late eighties, Northland managed approximately three million square feet of commercial space, occupied by more than 500 retail, office, and industrial tenants.
3.8.5 Finance and Administration

Northland’s treasurer’s office is responsible for:

- Developing and maintaining banking and lending relationships
- Overseeing the fiscal operations of Northland’s properties

This division is also available to offer other real estate owners expertise in:

- Financial structuring
- Capital sourcing
- Management information systems

Northland’s controller’s department direct the preparation of all corporate and partnership financial statements. With the MIS staff, this group works closely with the management and development divisions to assure prompt, accurate and timely financial reporting.

Northland’s human resources and administrative services department is responsible for:

- Employee benefits program
- Personnel recruitment
- Payroll services
- Develop corporate programs such as customized in-house training sessions.
- Oversee property insurance program

3.9 The Competitive Advantage

The company concentrates all of its activity in the six-state New England area, a region whose demographics, economic conditions and development trends are most familiar to the company. Their intimate knowledge of this vibrant market provides them with an
"indigenous advantage," which enables them to acquire and/or develop properties that have the highest potential for success. 18

In 1994, Northland managed more than five million square feet of commercial real estate in New England, half of which it owned. Although diversified, Bob said the keys to success are concentrating on a specific area and managing your own portfolio:

We never bought a property outside of New England in 25 years. I always felt that I wanted to be able to drive in two hours to every property. We weren't too far from home in terms of knowing the market, what was going on in the market, the culture, the people, the contacts—lawyers, brokers, appraisers, bankers. Real estate is a local business. You're a lot better staying in the area in which you are familiar. We have always stayed in New England.

We try to develop properties to which we can add values through our expertise: leasing, development, management and financing. We are not passive investors. We manage our own properties, therefore, we feel that we have more control. 19

3.10 The Harvest

In the late eighties to early 1990's, Bob, his original partners, and key managers, who were now partners as well, discussed various harvest options, which included a public offering and a management buy out (MBO). In consultation with a number of investment banks, they arrived at a decision not to undertake an initial public offering (IPO) because the company did not have enough critical mass to become a public real estate investment trust (REIT). Moreover, Bob would have been required to sign-on a long-term contract as the CEO, being the "historical glue that held the company together." He and his wife had planned to retire at
age 60, and he was 55 then. The MBO option involved the key managers buying the company from Bob and his original partners. However, later in 1990, the real estate industry collapsed from the economic recession. Thus, the MBO had to wait. Bob wanted to sell the company at a good time so that his key managers would succeed on their own. He also wanted to maximize the price that he would get for selling his stake in the company. In 1995, the real estate industry had recovered from the recession of the early '90s. Bob had run Northland for 25 years already. Everything just came together—the real estate cycle was up, he was ready, and his key managers were ready—the time has come.

Because the key managers could not agree on who was to become CEO, the negotiations were done for each part of the company, with the people who headed those divisions. The whole process took about a year, and in 1995, Bob sold the three operating divisions of the company to members of its senior management. Its president, Jeremy Hubball, and Joseph Ryan, its treasurer and CFO, plus four other senior executives purchased Northland Investment, which included the commercial and asset management divisions. Peter Barber, executive vice president, acquired Northland Development. Frank Stewart, senior vice president in charge of residential real estate, and three members of his management team took over Northland Residential. Bob and his original partners got their pro-rata share of the harvest. He recalls with pride the key managers who bought the company:

Those key managers stayed with me for almost 25 years. They were young people who grew with the company. They were in their early 20’s when they started, and when they bought the company, they were in their mid-40’s. Those were good people.
3.11 The Entrepreneur Today

Today, Bob sits on the boards of directors of Northland Residential Corporation and Benchmark Assisted Living, a developer of assisted-living residences for senior citizens. He is also an angel investor in two startup companies. He is committed to serving his alma mater and community, serving as trustee, overseer, and in other various capacities to Dartmouth College, Tuck, Brandeis University Heller Graduate School, Beth Israel Hospital, and the Newton Wellesley Hospital Charitable Foundation. He is also committed to sharing his knowledge and experience, being an adjunct faculty member at MIT's Center for Real Estate, and a visiting lecturer in real estate at Harvard's Kennedy School of Government and Dartmouth's Amos Tuck School of Business Administration. This busy “retirement” schedule still leaves some time for Bob and his wife to travel at least twice a year to interesting destinations around the world. Within the last few years, they have visited Africa, China, Thailand, Japan, Korea, and numerous cities in Europe.
1 Robert A. Danziger, “Real Deals” Course Syllabus, MIT Center for Real Estate, Fall 1999.
2 Interview with Bob Danziger, April 11, 2000, MIT Center for Real Estate.
4 Ibid.
5 Interview with Bob Danziger, April 11, 2000, MIT Center for Real Estate.
10 Northland Investment Corp. Marketing Brochure
11 Ibid.
12 Ibid.
13 Ibid.
14 Ibid.
15 Ibid.
16 Ibid.
17 Ibid.
18 Ibid.
4. ANALYSIS AND DISCUSSION OF THE NORTHLAND INVESTMENT CASE

In this chapter, I determine and compare the characteristics of the entrepreneurial process of this successful real estate venture with the success pattern defined by Timmons' model. The framework of the analysis and discussion in this chapter closely follows the framework of the model.

4.1 The Opportunity

In 1970, there was an opportunity for Northland to purchase lands occupied by farms and children's camps in northern New England, subdivide them into parcels, build the infrastructure, and sell the parcels to affluent people interested in building vacation and retirement homes.

4.1.1 Industry and Market

Table A.2 in Appendix A.1 includes a summary of the following characteristics of Northland's industry and market.

- Market

Bob identified a market niche in affluent people needing lands to build on their vacation and retirement homes. Northland subdivided large tracts of land into marketable parcels, and constructed improvements such as roads and utilities. In addition to these value-added benefits Northland provided to their customers, it also sold choice properties in choice locations—areas where the ski industry was starting, and lakefront areas where boating, fishing, and other recreational activities were accessible. These value-added or value-created
benefits provided by Northland can be quantified in terms of the difference in market values of improved land from raw land.

In this market, customers have no brand or other loyalties since land is a big-ticket item and probably a one-time investment. Since land is a very durable product, the potential payback to the customer is definitely less than the product life. Later, Northland was able to expand beyond land subdivision into commercial real estate and residential development. These market characteristics suggest Northland’s opportunity had higher potential.

- **Market structure**

The market for land subdivision in northern New England was just emerging when Northland started. The market structure was imperfect. There was an unfilled market niche. The local broker in every town was the only one selling the land. Only Landvest, which was still new then, was doing land subdivision as a company. Thus, the competitive environment was profitable. Furthermore, information and knowledge gaps existed. The brokers’ listings of properties were not readily available to prospective buyers. Bob devised unique and creative marketing strategies to make the listings readily available to prospective land buyers, and to educate them as well. These required high capital requirements and costs in order to achieve marketing presence. Since Bob was the first to employ these strategies, the barriers to entry were low for Northland. Moreover, since land is unique and differentiated, there were no price-cutting or other similar competitive strategies. Land prices were dependent on their market values. These characteristics of Northland’s market structure suggest a higher potential opportunity.

- **Market size**

The market size in terms of sales was unknown at that time, but it was an existing, growing market. Competition was few and the market was not too competitive. Northland was able
to achieve significant sales by capturing a small market share without threatening competitors. Given these characteristics of the market size, the opportunity was higher potential, but having an unknown market size decreases its potential.

- **Market growth rate**

The market growth rate was unknown at that time, but the market was growing rapidly and starting to thrive. These suggest a higher potential opportunity in terms of market growth. Adopting a similar strategy later, Northland considered only superior locations in growth markets throughout New England.

- **Market capacity**

The market was not at full capacity, but was in a growth situation. There was enough existing supply to meet growing demand. According to the model, Northland had a lower potential opportunity because of undercapacity in its market. However, the process of matching buyers with sellers was inefficient. Bob’s creative marketing strategies consolidated the process and made it much more efficient. Thus, figuring a way around the inefficiencies of an unattractive market capacity provided a high potential opportunity for Northland. As the company grew, it prepared forecasts to study current and anticipated market absorption when considering a potential development project or site.

- **Market share attainable by year five**

The market share attained by year five was unknown. It was a new market when Northland started. Landvest was probably the market leader at that time, but Northland had the potential to capture a significant market share and become the market leader. Northland’s potential to capture a significant market share suggests it had a higher potential opportunity. The number of competitors has increased over the years. Today, Northland is the market leader in land subdivision. Landvest is still around though.
Cost structure

Northland was not a low-cost provider in its market because being one was not really important. As mentioned earlier, land is unique and differentiated, and its price is dependent on its market value. Furthermore, economies of scale are insignificant, and the costs of learning by doing are low. According to Bob, it did not take him very long to learn the business since real estate is not a complicated business. These characteristics suggest a moderate-to-high potential opportunity in terms of the cost structure.

4.1.2 Economics

Table A.3 in Appendix A.1 includes a summary of the following characteristics Northland’s economics.

- Gross Margins

Gross margins are generally market-driven, and determined by working back the costs from the subdivided land’s market-value sales price, which was suggested by brokers based on comparable properties. The direct and variable costs include the land cost, the costs of building the roads and utilities, and broker sales commissions. The difference of the market-driven selling price and these costs would constitute Bob’s gross margin.

Bob included allowances in the projections in order to allow for error and uncertainties. For example, he would use the lower value of the range of market values given to him by brokers. The gross margins earned by Northland are probably between 20 and 40 percent, which is the range between highest and lowest potential opportunities. Thus, Northland’s opportunity had moderate potential in terms of gross margins. In later stages of the company, Northland prepared forecasts of future rental income and operating costs when considering a potential acquisition or development project.
- **Profits after tax**

The profits after tax Northland earned on their land sales were 15 to 20 percent. These suggest a higher potential opportunity in terms of profits after tax.

- **Time to breakeven**

Northland required only one year to breakeven and attain positive cash flow. This clearly suggests a higher potential opportunity in terms of breakeven time. The company made profits every year thereafter.

- **Return on investment (ROI) Potential**

The limited partnerships that were formed by Northland to own its properties averaged between 15 and 20 percent ROI annually. This suggests a low-to-moderate potential opportunity in terms of ROI. Later, Northland would earn extraordinary returns on investment from acquiring and rehabilitating under-utilized and distressed properties.

- **Capital requirements**

Northland’s land subdivision business had high capital requirements, which included the costs of the land and building the roads and utilities. Bob was, however, able to fund Northland’s capital requirements by using seller-financing and investors’ financial capital. Northland’s ability to fund its high capital requirements suggests a higher potential opportunity.

- **Internal rate of return (IRR) potential**

Northland averaged 22% IRR over a 20-year time period. This was determined in 1990 when they were thinking of taking the company public, with the help of their investment banker. Their minimum acceptable IRR was typically 15 to 18 percent, which is market-driven and depends on returns expected by investors. These suggest a moderate-to-high potential opportunity in terms of IRR.
• **Free cash flow characteristics**

Northland’s annual sales growth was about 20 percent. The level of its asset intensity per dollar of sales was high because of high capital expenditures for land and improvements. Its spontaneous working capital is high, mainly because of high land inventory. The land subdivision business is not really cash flow-driven, unlike Northland’s subsequent commercial real estate business, which is driven by stable streams of cash flows from rents paid by tenants. While Northland’s sales growth is high, its high levels of asset intensity and spontaneous working capital may offset this. Based on Northland’s free cash flow characteristics, the model would suggest a “lower potential opportunity.”

4.1.3 **Harvest (Potential)**

In 1995, Bob and his original partners harvested Northland by selling the company to its key managers. Table A.4 in Appendix A.1 includes a summary of the following characteristics of Northland’s harvest.

• **Strategic value**

Northland did not possess characteristics like market dominance for it to have a high strategic value in the industry. Furthermore, the value of its large capital assets can be severely eroded by external circumstances such as economic cycles and tax legislation. However, Northland did acquire over the years, a high value-added strategic importance to the acquirer in terms of its tenant base, and regional concentration. Therefore, Northland’s opportunity had moderate potential in terms of strategic value.

• **Valuation multiples and comparables**

Bob did not provide any specific valuation multiples, but he did describe how they valued the company. The company had an internal appraisal system wherein the value of each
property was determined and updated every six months. The value was equivalent to the price of the property as if it were sold in the open market at that time. The key managers hired a private appraiser to look into every commercial property and determine the cash flows from each. The commercial development and residential divisions were valued based on historical earnings because these turnover businesses did not have assets and had to be valued differently. The asset management division also had to be valued separately as well. They used a capitalization rate, which depended on the market conditions at that time, and it varied depending on the type of asset, i.e., land, office building, shopping center, and industrial properties.

- **Exit mechanism and strategy**

Bob did not have an exit mechanism and strategy in mind when he started in 1970. In the late eighties to early 1990's, Bob, his original partners, and key managers, who were now partners as well, discussed various harvest options, which included a public offering and a management buy out (MBO). If, according to the model, higher potential opportunities are started and grown with a harvest objective in mind, then Northland had a “lower potential opportunity.”

- **Capital market context**

The MBO had to wait because in 1990, the real estate industry collapsed from the economic recession. Bob wanted to sell the company at a good time so that he could maximize the price that he would get for selling his stake in the company. When Bob harvested the company in 1995, the real estate industry had recovered from the economic recession of the early 1990's. The availability of capital was getting better. The acquirers were able to raise capital on their own, and Bob also extended a five-year purchase-money mortgage loan to
them. Thus, the company was harvested when capital market conditions were favorable, which suggests a higher potential opportunity in terms of the capital market context.

4.1.4 Competitive Advantage

When Northland started in land subdivision, its competitive advantage was based on its being the second mover and its differentiated marketing strategies. Bob learned the trade by first becoming the sales agent of the first mover, Landvest, and closely observing what his future competitor was doing. Customers valued Northland's differentiated strategy because Bob made it convenient and easier for them to look at the properties and make an intelligent buying decision. Later on, Northland developed a more sustainable competitive advantage with its regional focus on the New England market and thoroughly knowing everything about the market. Table A.5 in Appendix A.1 includes a summary of the following characteristics of Northland's competitive advantage.

- **Fixed and variable costs**

In land subdivision, the fixed costs would include the cost of non-sellable land, e.g., open areas, the costs of building improvements such as roads and utilities, consultant fees, and overhead. The variable costs would include the sellable land, financing, and sales commissions. Northland's operating leverage was at moderate levels. As mentioned earlier, Northland was not a low-cost provider in its market because being one was not really important. Furthermore, it did not have the lowest cost of marketing. In fact, it probably had the highest cost of marketing because this was one of the ways it differentiated itself from its competitors. Based on these characteristics, the model would suggest that Northland had a “lower potential opportunity.”
As the company grew, each division was set in a separate cost structure, and costs were allocated to each division. Every year, Bob could look at each part of the business and assess whether it was making money. He was basically bottom line-oriented. If a particular part of the business did not make money, he and his key managers would work on it or drop it.

- **Degree of control**

Northland had moderate degree of control over costs, weak degree of control over prices, and strong degree of control over marketing channels. While Northland had little control over financing costs, sales commissions, and costs of improvements since these are market-driven and outsourced, it did have control over the cost of the land. This is essentially, also market-driven but Bob figured a way to control it by working back the costs from the subdivided land’s market-value sales price, which was suggested by brokers based on comparable properties. Bob would work his way back by considering the costs of building the improvements, the carrying costs on the mortgage, taxes, broker sales commissions, required returns of other equity partners, and then finally, determined the price he would pay for the land. He did not listen to the price the farmer was asking, but rather, he named the price.

When Northland started, Landvest was the market leader in a new and emerging market, and was, in fact, the only major player then. However, it was not a dominant competitor who could exercise market power and influence over suppliers, customers, and pricing. Northland’s ability to exercise moderate-to-strong degrees of control, suggests that it had a higher potential opportunity. Northland’s competitors have increased over the years but today, Northland is the market leader in land subdivision. In later years, Northland managed its own properties, and therefore, had the ability to exercise stronger degree of control over costs.
• **Barriers to entry**

When Northland started, it faced entry barriers because it had to compete against Landvest, which was larger and more established. It could not capitalize on some land acquisition opportunities because of its lack of reputation. But since it was an emerging and growing market, there was so much land to buy. Furthermore, it did not have to compete on prices when it came to selling the lands. Northland more than made up for its competitive disadvantage with its unique and creative marketing strategies.

Later, Northland was able to erect barriers to entry, which created competitive advantage in its market. It had exclusive control over desirable land, fast response to market cycles, a bright and innovative management team, regional focus, capital resources, and a network of beneficial contacts accumulated over a considerable length of time. This ability to erect entry barriers indicates Northland had a higher potential opportunity. Competing against new entrants and smaller but growing competition was not a critical concern for Northland because they did not compete directly to buy land since there was so much land to buy.

4.1.5 **Fatal Flaw**

Based on the above criteria, Northland had characteristics of a lower potential opportunity in terms of market capacity, return on investment, free cash flow characteristics, exit mechanism and strategy, and fixed and variable costs. It also had characteristics of a lower potential team in terms of team composition and industry and technical experience. These are discussed in **Subsection 4.2.1, Team Qualities**. According to the model, having one or more of these fatal flaws constitute a “lower potential opportunity.” Table A.6 in **Appendix A.1** includes a summary of these fatal flaw characteristics.
4.1.6 Strategic Differentiation

Table A.7 in Appendix A.1 includes a summary of the following characteristics of Northland’s strategic differentiation.

- Degree of fit

There was a high degree of fit among the three driving forces of Northland’s entrepreneurial process—the opportunity, the team, and the resources—suggesting it had a higher potential opportunity. This is discussed in more detail in Subsection 4.4.1, The Fit.

- Team

Northland had a high-quality venture team, suggesting it had a higher potential opportunity. This is discussed in more detail in Section 4.2, The Team.

- Service management

Northland did not have a superior service concept because the land subdivision business did not really require one. As mentioned earlier, land is a big-ticket item, and the sale is a one-time transaction. Thus, there is really no after-sales customer service. Therefore, the criterion is not applicable to Northland’s land subdivision business. In later years, it became applicable to Northland’s asset management business, in terms of tenant relations and building maintenance.

- Timing

The timing of Northland’s entry into the market, as well as Bob’s exit from Northland, were opportune, suggesting Northland had a higher potential opportunity. This is discussed in more detail in Section 4.4.3, The Timing.
• Technology
Northland did not have a product based on proprietary and breakthrough technology. Neither did its competitors. At that time, technology was not a source of strategic differentiation in real estate.

• Flexibility
Northland demonstrated many times its tremendous flexibility in adapting quickly to changing market cycles and trends. It quickly expanded into commercial real estate in 1974 when the market for land subdivision in northern New England collapsed due to the oil crisis. It was able to raise equity capital from institutional investors when the tax reform act in 1986 shooed away individual investors. This ability to adapt quickly suggests Northland’s higher potential opportunity.

• Opportunity orientation
Northland’s concentration in New England gave it the ability to be constantly alert to the marketplace and continually searching for opportunities. It also managed all of its own properties, which assured intimate knowledge of the problems and opportunities the buildings offer. Bob keeps himself opportunity-oriented by reading periodicals, participating in industry seminars, and networking constantly. Northland’s opportunity-orientation suggests its higher potential opportunity.

• Pricing
The pricing of subdivided land is market-driven, and Northland exercised weak degree of control over it. The market price would reflect the value added or created by Northland’s choice lots in choice locations, and construction of improvements.
- **Marketing and distribution channels**

Bob devised unique and creative marketing strategies, such as the showroom in Boston and the periodic land seminars. These transformed a traditional, inefficient process into one that was much more convenient and easier for customers to look at the properties and make an intelligent buying decision. This ingenuity in marketing suggests Northland’s higher potential opportunity.

- **Room for error**

Bob included allowances in the projections of revenues and costs in order to allow enough margins for error. He would also use the lower value of the range of market-value sales prices suggested by brokers based on comparable properties. Thus, Northland’s gross margins included a margin of error. Later, as Northland borrowed more from banks to finance its projects, leverage levels were moderate at 50 percent. The rest would be financed by equity capital from individual or institutional investors. Also, once Northland puts a deal together, it bounces off the deal to its lender, who then do their analysis and verify if there is enough margin for error in the deal. This process allows an independent check on Northland’s analysis. This system of allowing room for error suggests Northland had a higher potential opportunity.

Furthermore, Bob adds that there are certain parameters in the business, such as, for example, return on costs (ROC). A 12 percent ROC would probably fly, but an 8 percent ROC would not because once the debt is considered, the project would not get enough returns for the equity investors in order to attract their participation.
4.2 The Team

The Northland entrepreneurial team consisted of Bob as the lead entrepreneur, and five partners who were well along in their own careers. They were more like investors than partners, also serving as Bob's directors and advisors. Bob hired his key managers as the company grew.

4.2.1 Team Qualities

Table A.8 in Appendix A.1 includes a summary of the following qualities of Northland's entrepreneurial team.

- **Team composition**

The model would suggest that the Northland entrepreneurial team had "lower potential," since Bob started Northland essentially by himself in 1970. However, the following discussion suggests otherwise because Bob slowly built a high-quality team as Northland grew.

- **Industry and technical experience**

During the first year, Northland functioned as a sales agent of Landvest, another real estate company. Bob closely observed its business operations, and then discontinued his business relationship with them when he decided to compete against Landvest. Bob was a free agent because there was no non-compete agreement. With this experience, he learned more about the trade, in addition to his real estate experience with Mister Donut.

He then started to hire his five key managers over the next five years. They were all free agents. Three of them had little or no experience, but had good educational background and excellent interpersonal skills. Bob recalls that he was not really looking for people who had
experience, but was just trying to evaluate bright, effective, ambitious, and high-integrity people. His key managers each developed different skills as Bob assigned them to different areas of the business, i.e., sales, acquisitions, planning, finance, etc.

Neither Bob nor his key managers possessed technical knowledge. One exception was Frank Stewart who had just finished a master's degree in land-use planning when Bob hired him in 1973. These circumstances would tend to suggest that the Northland team was “low-to-moderate potential,” since only Bob had the industry experience, and Frank had the technical knowledge, but not the experience. Again, the following section on intellectual honesty would suggest otherwise.

In later years, while Northland’s real estate portfolio became the evidence of its dynamic growth, it regarded its employees as the base of its future growth and the reason for its success. Its senior executives developed a high degree of expertise in their respective areas, and its staff included professionals in all disciplines of real estate investment, finance, development, management and marketing. Many were associated with Northland for most or all of their business careers.²

- **Intellectual honesty**

Bob knew that he understood very well marketing and sales, in general, and the retail sector of the real estate industry. Moreover, he knew that he did not understand well the residential land subdivision sub-sector of the real estate industry, and technical areas such as land-use planning and construction. Therefore, he underwent an apprenticeship with Landvest in order to understand land subdivision, and he outsourced or hired technical expertise. He hired good people with expertise that he did not have. He gave them a lot of autonomy to perform the functions he did not have the expertise to perform.
One of his key managers was Joseph Ryan, an experienced accountant whom he hired in 1976 to be the controller, and later became the treasurer and chief financial officer. His inexperienced key managers were good, bright people who learned quickly from Bob and each other. Bob’s intellectual honesty, as well as his key managers’, clearly indicates that the Northland team was higher potential. Later, Bob attributed his success to his family and the expertise of his colleagues, who helped him diversify his real estate activities into commercial, retail and other properties.  

- **Integrity and reputation**

According to Bob, integrity was the primary focus of the Northland organization, including its entire people. Northland also gained an industry-wide reputation for excellence. These characteristics provided a long-term advantage to the Northland team. Stanley Miller, a general partner in Boston-based Congress Realty who met Bob in 1969 on a vacation trip to the Caribbean, said of Bob, “He is a man of the greatest integrity. His handshake is a commitment.”

- **Team philosophies and attitudes**

Bob nurtured Northland with the following team philosophies and attitudes: Treat everyone fairly, have a customer focus at all times, insist on integrity on all dealings, provide growth opportunities for its employees, and commitment to establish long-lasting family, personal, and business relationships. He does not do anything for the short term. In an interview with Boston Business Journal in 1994, CFO Joseph Ryan said of Bob:

> He has instilled a family atmosphere in the company. He certainly holds his family in a higher place than his business, as is appropriate. This is one of the reasons we have all stayed. We all have very strong feelings for our families.
Learning from two work experiences where he was unsuccessful in getting equity from his employer, he gave his key managers the opportunity to own a piece of Northland. Moreover, he shared with them part of the company’s profits from the project partnerships. He would split 10 percent of the company proceeds between himself and his key managers. These key managers stayed with Bob throughout their careers, and bought the company from him in 1995. These team philosophies and attitudes, particularly its reward and incentive structure, made Northland a higher potential team.

4.2.2 Personal Qualities

Table A.9 in Appendix A.1 includes a summary of the following personal qualities of Northland’s lead entrepreneur.

- Apprenticeship

When Bob graduated from business school, he did not have aspirations to become an entrepreneur yet. He clearly intended to work for somebody, which he did for 12 years in three different companies. He did not select his prior work to prepare specifically for an entrepreneurial career. He did gain a lot of sales and marketing experience, which became useful later, although the first two companies he worked for were not at all related to real estate. Moreover, he first learned about real estate while he was working in Los Angeles for the first company, which lasted for about three years. He was intrigued by the rapid growth of Orange County, which encouraged him to take a real estate course at USC. He then formed a small family partnership, which included the course lecturer, to buy a piece of land, and sold it later for a substantial profit. He was definitely an entrepreneur in-the-making. He left his first job because he and his wife wanted to go back to Boston.
In his second job at the children’s furniture company, which lasted for five years, he realized the importance of giving ownership opportunities and sharing profits to key employees. This became a key and distinctive philosophy of Bob when he started his own company later. He left his second job because he could not get equity in the family-owned company.

The start of his apprenticeship was with the third company he worked for. While the company was in the food-franchising business, his responsibilities were very relevant to real estate. In addition to gaining the relevant work experience, he observed closely the entrepreneur who started the company. He also learned about marketing strategies in food-franchising, which he later adopted in marketing land in a unique, creative, and effective manner. This valuable apprenticeship went on for about four years until the owner of the company sold it to a larger public company, and Bob did not get the equity he was promised when he started.

Finally, Bob decided to start his own company when he was 36 years old, but his apprenticeship continued because Northland became a sales agent for Landvest, which was exactly in the same business he wanted to be. This was obviously part of Bob’s big plan. In one year, he learned the trade by selling land developed by Landvest, observing closely their operations, and at the same time, building up Northland’s name and track record. He acquired intimate knowledge of the customer, the market, and the marketing channels through this direct sales and marketing experience.

All in all, Bob’s work experience lasted 12 years, which included four years of apprenticeship. Adding the one-year of apprenticeship with Landvest, Bob had five years of apprenticeship, possessed the know-how, and nurtured contacts before venturing into the land subdivision business as a principal. He had made money for Landvest, the last two companies he worked for, and especially, his early investors, before doing it for himself.
Although he did not accumulate enough net worth to contribute to funding the new venture, he was able to borrow his initial investment from his father-in-law. He established a reputation in his market niche by starting small and making sure that each project was successful. This was critical in giving future investors and creditors the necessary confidence. He evolved from an entrepreneurial heritage. His father ran a little sales agency, while his mother was a risk-taker and great motivator who greatly influenced him. His close association with the entrepreneur who ran the food-franchising company also influenced him. All these facts and circumstances overwhelmingly indicate a higher potential entrepreneur.

- **Goals and fit**

Bob understood the potential rewards from the venture, which eventually exceeded what he expected from it. Thus, there was a meeting between Bob's goals and what the venture could realistically provide. This suggests a higher potential entrepreneur.

- **Desirability**

Bob pursued the opportunity not only for economic gain, but also for independence, the ability to make his own decisions, and to determine his destiny. The desirability of the opportunity for Bob suggests a higher potential entrepreneur.

- **Opportunity cost**

Bob considered his opportunity costs, which included a stable stream of earnings from the large and established public company that acquired the food-franchising company he last worked for. He declined its offer for him to run the donut division. At that time he had to support a wife, two children, and a vacation cottage up in New Hampshire. Bob had strong self-confidence that if the business failed, he would be able to get a job. He would write his resume, put his academic credentials right on top, his good track record and references from
the three companies he worked at, and go get another job. In an interview with Boston Business Journal in 1994, Bob said:

The biggest decision I made was to leave the comfort of a paying job and start the business from scratch. Being an entrepreneur was the most exciting and fantastic experience that I had in business. There were many sleepless nights, but the rewards were gratifying.  

- **Upside/downside issues**

Bob considered the potential risks of the venture. As mentioned earlier, Bob did not accumulate enough net worth to contribute to funding the new venture, and had to borrow his initial investment from his father-in-law. Thus, his financial exposure was greater than his net worth at that time. Each of his five investors contributed an amount equal to his own investment. There was a substantial risk of losing his investors’ capital and his own capital, which would lead to his indebtedness. There was a high probability that the business would fail because he was starting from absolute scratch in a business he had never done, and he did not know the first thing about land subdivision. Furthermore, he did not have deep resources to draw upon if more money was needed. The model would suggest, at this point, that the entrepreneur was “lower potential” because the scale of the venture was too big for Bob’s capacity. In spite of this, however, I would still consider him to be a higher potential entrepreneur because he did the important thing, which is to consider the risks of probable failure, their causes, and how to mitigate those risks by confronting the causes.

- **Risk/Reward Tolerance**

Bob confronted the probable causes of failure by spending a year of apprenticeship as a sales agent for Landvest. After this, he understood what the land subdivision business was all about. He marshaled other people’s resources and used them accordingly. He borrowed his
initial investment, raised equity capital from investors, and convinced the seller to finance the purchase of the lands. In short, Bob took calculated risks. In this regard, he was a higher potential entrepreneur. He adds:

I measure the circumstances, probable results, and consequences very carefully. There are a lot of risks. I don’t think entrepreneurs have to be high-risk takers, but they should be willing to take risks. You can’t cover everything and you can’t be too scientific about it. A lot of the entrepreneurial process is playing it by ear and feeling your gut. I went by that a lot. I did all the analysis, looked at the project and the numbers, and said yes or no. I didn’t always make the right decision.

- Stress Tolerance

Bob encountered numerous stresses throughout his entrepreneurial career. It could be as simple as meeting the payroll every week in the early years, when sometimes, the money did not come in. Or it could be as complicated as foreclosing on a distressed property. Fortunately, Bob had a bright, compassionate, and understanding wife, whom he has been married to for the past 44 years and counting. Furthermore, she was very supportive, and had good ideas and instincts. She worked as a high school guidance counselor for 17 years, starting in 1973. Bob shared with his wife a lot of his experiences and decision-making over the years. According to Bob, he got relief from some of the stresses and problems by talking with her. Bob’s ability to tolerate and cope with stresses suggests that he was a higher potential entrepreneur. In an interview with Boston Business Journal in 1994, he said:

If you have a really strong loving relationship, it frees you up to concentrate a lot of your energy on your business because you have that support at home.

It makes it easier to be successful.
• Attitudes and Behaviors

According to Bob, the two most important characteristics that helped him succeed are integrity and persuasiveness. At this point, a lot of Bob’s attitudes and behaviors have been pointed out and illustrated—opportunity orientation, vision, ability to adapt, intellectual honesty, integrity, commitment, sharing, creativity and innovativeness, intelligence, observance, independence, self-confidence, calculated risk-taking, and tolerance of risk and stress. Bob also had a natural ability to persuade others. He said:

You have to be able to raise capital, and therefore, you have to be persuasive.
You’re always selling—to the person you’re buying the property from to lower the price, to the bank lending you the money, to the investor putting up the equity, to a prospective employee coming to work for you instead of somebody else, and to the tenant leasing the space.

Bob had very good interpersonal skills or a keen ability to get along with diverse people—the lawyer whom he met after high school and became his mentor, the wealthy customer whom he waited on and later became a roommate and investor, the real estate lecturer at USC who became a partner, the former teacher and thesis advisor at Tuck who offered him a job in the children’s furniture company, the customer who left his school-teaching job to work for him, etc.

Bob was also hard working and self-reliant. He worked in high school to earn extra money, and worked during college to help his father in paying his tuition. He always had leadership skills. He was the president of his high school class, and held other leadership positions. He had the capacity to inspire, which is a very important leadership trait. His key managers stayed with him throughout their careers.
Bob’s attitudes and behaviors further reinforce his being a higher potential entrepreneur. In an interview with Boston Business Journal in 1994, Bill McCall, chairman of McCall & Almy, a Boston-based real estate advisory firm, said Bob was a visionary with the ability to see what could be done:

He has been an imaginative guy, a thoughtful person who really tried to study real estate and approach it in a profound manner. And that is what you should do because you are dealing with other people’s money in real estate. 

4.3 The Resources

Bob was very effective marshaling and gaining control of resources. He was very effective in using other people’s resources, such as other people’s knowledge, experience, expertise, contacts, money, etc.

4.3.1 People

Table A.10 in Appendix A.1 includes a summary of the following types, characteristics, and value-added benefits of Northland’s people resources.

- **Board of directors and advisors**

Bob’s directors came from five different backgrounds—the lawyer who was a partner in a law firm, an investment banker who was a friend of the lawyer, a head of a construction company, a head of a retail company, and a personal friend. They were also his original equity investors. They were in their late 40’s to early 50’s, well along in the careers, and became Bob’s advisors and mentors. They added value with their relevant experience,
knowledge, and networks. They recruited subsequent investors in Northland's project partnerships.

They never got a dividend from the company but they got their shares from the project partnerships. Moreover, each of them got the opportunity to participate in all the deals, i.e., a lot of the construction contracts were awarded to the person who headed the construction company, the lawyer handled the legal services, etc.

When Bob harvested the company in 1995, he turned to two of his directors to help him value the company. One was Larry Bacow, an MIT professor who had experience in valuing real estate companies, such as the sale of Spaulding & Slye. The other was the investment banker. The five original directors stayed with Bob for 25 years and they each got their share of the market value of the company when it was sold in 1995.

- **Attorney**

Bob's attorney was William Glovsky, a partner in a law firm who also functioned as Bob's advisor, mentor, and confidante. He was 15 years older than Bob. Bob first met him when Bob was a high school senior applying into Dartmouth, which has this system in which applicants interview with a local committee composed of alumni as part of the application process. He was one of the interviewers in that committee. When Bob got out of Dartmouth, he became Bob's friend and family lawyer. He helped Bob organize the company, became the first investor, and recruited another original investor.

- **Accountant**

In the beginning, Bob did the accounting himself since he was after all, a business school graduate. In 1976, Bob hired Joseph Ryan, an experienced accountant who served as the controller and became one of Bob's key managers. He was elected treasurer in 1983 and chief financial officer in 1985. He was primarily responsible for developing and maintaining
all banking and lending relationships, directing the preparation of all corporate and partnership financial reports, and monitoring the fiscal operation of all Northland properties.

- **Consultants**

Bob hired consultants such as planners, engineers, architects, and contractors to provide the technical expertise that the Northland team did not have. They added value with their specialized knowledge and experience.

### 4.3.2 Financial Capital

By carefully analyzing each project, including its projected revenues and costs, Bob determined how much financial capital to raise, and then figured out when and where to raise it. According to him, the concept of the project attracts the capital. **Table A.11** in **Appendix A.1** includes a summary of the following types, characteristics, and value-added benefits of Northland's financial capital resources.

- **Equity capital**

Bob's original equity capital investors also became his board of directors, advisors, and mentors. As mentioned earlier, they added a lot of value with their relevant knowledge, wealth of experience, and network of business contacts. These five investors recruited other friends to become investors in Northland's limited partnerships. Later on, Northland raised equity capital from institutional investors, such as endowment funds and pension funds, whom Bob met in various industry functions. Northland also had joint venture partners, which comprised of various real estate investment companies.

- **Debt capital**

Bob's original source of debt capital was the farmers selling him the land. He was very persuasive in explaining to them why it was beneficial for them to provide seller financing.
Bob’s first banker was a neighbor who was also a friend. Later, debt capital was financed by commercial banks for short-term construction loans, and by insurance companies for long-term mortgage loans. The value added by bankers and lenders in Bob’s deals was an independent check on Nortland’s investment and financial analyses. They do their own analysis, determine its financial viability, and verify if there are enough margins for error in the deal. Northland’s banking and lending relationships were somewhat mixed. In times of distress, some lenders who had enough confidence in Bob agreed to loan restructuring, while others foreclosed on the property.

4.3.3 The Business Plan

Bob prepared a viable business plan and presented it persuasively to investors in order to raise capital. Not only was it an effective tool in raising capital, it guided the policies and strategies of Northland over a number of years. Hence, it was constantly changing in order to meet changing market conditions. It was a critical resource for the company. Table A.12 in Appendix A.1 includes a summary of the characteristics of Northland’s business plan.

4.4 The Fit, Balance and Timing

Northland possessed many characteristics of higher potential opportunity and team. Bob was very effective in marshaling and gaining control of people and financial resources with value-added benefits in order to pursue the opportunity. Integrating the driving forces—the opportunity, the team, and the resources—of Northland’s entrepreneurial process were their fit, balance, and timing.
4.4.1 The Fit

Table A.13 in Appendix A.1 includes a summary of the following characteristics and benefits of Northland’s fit.

- **The Fit of the Opportunity with the Team and the Resources**
Bob had the ability to pursue the opportunity while using the resources that were available. Bob had the industry experience and the personal qualities as an entrepreneur to pursue the opportunity. He understood what people and financial resources to acquire, when to acquire them, and how to acquire them.

- **The Fit of the Investors with the Opportunity and the Team**
Bob’s original equity investors added a lot value to the venture, in addition to their investments. They had knowledge, experience, and contacts in the market where the opportunity was being pursued. Their chemistry with Bob, as well as among themselves, was excellent.

- **The Fit within the Team**
Bob’s key managers were inexperienced, but they were good and bright people who learned quickly from Bob and each other. They did not have complementary competencies and skills at the beginning, but they each developed different, complementary competencies and skills as Bob assigned them to different areas of the business. Hence, as the company grew, they developed an excellent chemistry with Bob and among themselves.

4.4.2 The Balance

Table A.14 in Appendix A.1 includes a summary of the following characteristics and benefits of Northland’s balance.
• **The Three Driving Forces**

When Bob started, there was a tremendous imbalance among the three driving forces. The huge opportunity in the land market for vacation and retirement homes in northern New England far outweighed Bob and his very limited resources. Thus, he first learned the trade by acting as a sales agent for another real estate company doing the same business, and building up the Northland name. He used this track record to raise equity capital from a small group of investors. As Bob needed more people, he hired people with expertise that he did not have.

When the market for land subdivision disappeared overnight as a result of the oil crisis in 1974, Bob re-balanced the three driving forces in order to sustain growth. Northland entered a new market, acquired and rehabilitated distressed office buildings, and leased the space to tenants. This required changing the responsibilities of his key people. For example, a land sales person became a leasing agent for office buildings. The people changed just like that because they were good and bright, so they learned. This also necessitated Northland to borrow debt capital from banks, in addition to the equity capital supplied by private investors. In 1986, when equity capital from private individuals became scarce as a result of the tax reform act, Bob managed to raise equity capital from institutions such as endowment funds and pension funds.

• **Risk and Reward**

Bob faced a lot of risk factors that contributed to a high probability of failure at the start. However, he considered the risks of probable failure, their causes, and how to mitigate those risks by confronting the causes. In essence, he took calculated risks. According to Bob, he generally aimed for singles and doubles, instead of triples and homeruns.
4.4.3 The Timing

Timing is particularly important in real estate because of its sensitivity to economic and business cycles. During Northland’s 25-year entrepreneurial process, the company encountered different windows of opportunity that were opening and closing. Table A.15 in Appendix A.1 includes a summary of the timing involved in the following stages of Northland’s entrepreneurial process.

- **Startup**

When Bob started in 1970, the availability of capital at that time was limited, so he started small. The window of opportunity was just opening, since the market for land subdivision in northern New England was just emerging.

- **Growth**

Over the years, Bob demonstrated creativity and imagination to shift Northland’s business strategies in order to sustain growth whenever market conditions changed. For example, when the window of opportunity for land subdivision abruptly shut in 1974, Bob looked for another window of opportunity in acquiring and rehabilitating under-utilized commercial properties.

- **Harvest**

The timing of the harvest was dictated by a personal timetable and the real estate cycle in 1995. The real estate industry had recovered from the recession of the early '90s and Bob had run Northland for 25 years already. By selling the company to his key managers at a good time, there was a greater chance that his key managers would succeed on their own, and he and his original equity partners maximize the price that they would get for selling their stake in the company.
1 Bob Danziger, Answers to Questionnaire, 4/6/00.
2 Northland Investment Corp. Marketing Brochure
4 Ibid.
5 Ibid.
6 Ibid.
7 Ibid.
8 Ibid.
5. THE COLLABORATIVE STRUCTURES CASE

John Macomber, founder and CEO of Collaborative Structures, had just finished teaching the spring semester’s first class on “Strategic Management in the Design and Construction Value System” in February 2000. The weekly, graduate-level course introduces the basic techniques of strategic analysis, highlights particular strategic issues common to AEC and real estate firms, and explores alternative project delivery systems driven by advances in information technology. John has been teaching this course and its precursors to graduate students in civil engineering, real estate, and architecture since 1988, through the construction management program of MIT’s Department of Civil & Environmental Engineering.

As the typical, first-day crowd of graduate students exit the lecture hall, a graduate student who had taken the same course the year before, quietly approaches John, politely introduces himself, and briefly explains his thesis research about the entrepreneurial process in construction and real estate ventures. He asks if John would be willing to participate in a case study of the construction-related Internet venture that John had started in 1996. John readily agrees and adds that he was looking forward to participating in the research project.

Later in the office at 50 Congress Street in downtown Boston, while John’s assistant, Karen, collects a brochure and newspaper clippings about the company, John composes his biographical outline for the graduate student’s research. While looking through his office window that overlooks Faneuil Hall Marketplace, he takes this unusual break from his normally busy and hectic schedule to ponder on his entrepreneurial journey.
5.1 The Entrepreneur's Background

John D. Macomber was born and raised in Boston as the fourth generation of the Macomber family of construction innovators. John's great-grandfather, George Borden Harrington Macomber, founded the George B.H. Macomber Construction Company in 1904. The very first project completed by the company was the Post Office Square Building in Boston, the first structural steel building in New England. In 1927, John's grandfather, C. Clark, bought it from George Sr., and later completed the original Shopper's World in Framingham, Massachusetts, the region's first shopping center that featured the largest structural steel spring arch dome in the world in 1951. 2

In 1960, John's father, George Jr., also bought it from C. Clark and ran it for the next 30 years. During this period, the company completed the 45-Story Devonshire Building in Boston, still the tallest reinforced concrete building in New England, and Faneuil Hall Marketplace, the first open air festival marketplace in the United States. 3 John credits his father as being the one responsible for most of the company's growth. 4 In June 1990, John and his sister Gay also bought the company from their father, with John becoming the chairman, president, and CEO. John had come a long way from his early days with the family-owned company that had annual revenues of $75 million at the time he took over.

John spent summers of working as an assistant field engineer in 1973, and as a laborer in 1976. 5 After receiving his AB in Mathematics in the Social Sciences from Dartmouth College in 1978, he worked as an estimator and field engineer for the next three years.

In 1982, during the summer in-between his first and second years at Harvard Business School, he interned as a data processing analyst at the company. Asked if he felt any pressure to enter the family business, John said that while no force was exerted, he sensed his family
would be delighted if he did. After receiving his MBA in 1983, he realized that “there weren’t any companies I liked better and any businesses I liked better.” Shortly thereafter, he joined the company as a project manager, handling noteworthy projects such as the Four Seasons Hotel, a mixed-use hotel and luxury condominium building located on the east side of the Boston Common, with spectacular views of the park and city. In 1987, he became the vice president of strategic planning, and started to think about ideas on how to integrate the construction process.

5.2 The Big Idea

John became fascinated by the potential of information technology in the construction business during this time, continuing to when he became president in 1990. He pondered about its needs as well as the difficulties of harnessing its potential:

Construction really is an information business. You need to know what point you are at now, and what goes where. I was aware of how the processes of winning new clients, estimating, project management, and accounting were critically dependent on the flow of information. Information about design, construction, costs, and change orders were kept in a wide variety of forms: paper, blueprints, hand-written estimate forms, on computer, and in the heads of experienced management.

As a preliminary step, I initiated the overhaul of the firm’s computer systems. But later as president, I needed to make a judgment on how much information technology can help our business competitively. There are many nice ideas that might work in theory, but the construction industry is slow to change. There are many individuals in the value-adding chain who have strong incentives to hoard information and keep things exactly as they are.
Anyone who can crack the information nut will certainly make a lot of money. The question is how to do it, who to do it, and when to do it.  

5.2.1 Construction Industry Structure

When John was attending Harvard Business School for his MBA, he became a student of business professor and management guru, Michael Porter, author of the best-selling management bibles, Competitive Strategy (1980) and later, Competitive Advantage (1985). Mr. Porter wrote numerous papers about competition, including “How information gives you competitive advantage,” which he co-wrote with Victor Millar, a managing partner of Arthur Andersen & Company. Mr. Porter’s teachings and writings would become a tremendous and powerful influence on John’s business and teaching careers. Recalling what he learned from Mr. Porter, John analyzed the structure of the construction industry and understood why it is structurally unattractive and slow to adopt innovation:

The construction industry is characterized by several distinct elements:  
- No economies of scale—few benefits to size  
- Low barriers to entry—easy to get in  
- High barriers to exit—hard to get out  
- Non-economic competitors—other firms in it for the love of it, not for the money  
- Unique product, project based—few scale or learning economies  
- Local control and personal relationships—benefits to local scale  

All of the "five forces" indicate low return on investment, and no source of sustainable competitive advantage. The economic performance of firms bears this out. Historically, these factors have led to intense fragmentation. The top
two largest constructors in the U.S. each account for less than one percent market share. Moreover, the top 400 largest constructors combined account for less than 25 percent market share. This means that firms are deadly competitive, and show relatively low returns of capital. The profit margins of the largest companies—measured in tens of millions on revenue of billions—are microscopic, especially in relation to the risks accepted.  

Further, with such extensive fragmentation, no one firm has the standing to take the lead in any significant innovation. Industries like this are very slow to change; the dynamics are tough. Designers, constructors, investors, and project owners alike all suffer as inefficiencies and diseconomies are hard to overcome.  

5.2.2 Information Inefficiencies in the Construction Process

Because of this industry structure, John cited examples of how firms involved in the construction process were encouraged to hoard information:  

- Equipment distributors jealously guarded their exclusive distributorship rights, discouraging contractors from calling factories directly for pricing or delivery information.

- Contractors kept costing information to themselves, since a good cost database was a clear competitive advantage.

- Designers tended to rigidly control the dissemination of design information, so that they could remain in control of the process.
Engineers made their living providing expertise in structural or mechanical design, and thereby resisted any information tools, such as expert systems, replacing their hard-earned knowledge.

In addition to these firms, the construction supply chain also includes a multitude of participants—owners, material and equipment suppliers, tenants, lawyers, lenders, insurers, etc. They all need to share a myriad of information through traditional communication channels such as meeting in-person, mail, phone, or fax. As would be expected, this inefficient system of sharing information results in a lot of waste and confusion.

Furthermore, John adds:

On a project basis, projects are organized around static and imperfect information, with teams trying to do the best they can but largely positioning themselves to press risk onto other parties. There is miscommunication, misalignment, misunderstanding; it’s testimony to the goodness of human nature that projects are completed at all.  

A misunderstanding in a one-year project could cost a design company up to $50,000, according to the American Institute of Architects, an industry group based in Washington, D.C. 

5.2.3 The Promise of Information Sharing

In 1990, the idea of using technology to share information was starting to be discussed openly in construction industry events. John had chaired a seminar sponsored by the Associated General Contractors of Massachusetts on integrating the construction process through a shared database of building attributes and development. What came out of the conference was a vision of a database of building attributes and information, shared among
the project owner, architect, engineer, general contractor, and subcontractor. For example, an architect can easily disseminate information such as change-orders to the general contractor and subcontractors. This sharing of information would be a radical departure from the traditional adversarial relationships among the parties. John figured this efficient system of sharing information would result in building cost savings, which could be passed on to the client. Thus, the design and construction team that could make this happen will be awarded more contracts by happy clients. However, he understood that integrating the construction value chain would require substantial time and energy, significant investment in technology, and organizational change because of a fragmented construction industry. He also knew that clients only cared about lowest price or good reputation from their contractors, not information efficiency. Although John had a natural lean towards innovation, he did not want to be on the “bleeding edge” of technological development, and simply wanted to be ready for the information wave when it arrives. Delivering the promise of information sharing had to wait.

5.3 Back to Reality

John’s big idea also had to wait because there were much more pressing challenges facing the company. Several months after assuming the leadership of the company, the economic recession of the 1990s hit New England, triggering a real estate market crash and a severe downturn in the construction industry. John recalled, “I inherited an organization that had been built in the ’80s for the real estate boom, and it fell to me to streamline it for the ’90s, and now the task is to grow it.” Recalling again what he learned from Mr. Porter, John initiated a strategic and dramatic turnaround of the company. He completely reorganized the
company's human resources and its product market focus into servicing clients such as educational institutions, healthcare providers, high technology companies, and financial service companies.

In an interview with Banker and Tradesman in 1995, John credited his firm's longevity largely to its focus on repeat work for clients with whom the company has established relationships:

Our relationship-building has allowed our company to become a trusted resource and professional resources provider, which separates what we do from the work of a onetime, rough general contractor. We seek out customers who want not just a building, but also a relationship. We don't compete very much on the commodity side, such as warehouses or single-family homes. We've always been good at complicated projects, whether they're complicated technically, by the process by which they must be carried out, or based on some situation in the owner's makeup, such as time constraints.

In the same interview, he also talked about the idea of process integration and practicing participatory management:

Our company has also undertaken further integration of the process, becoming involved in the overall management and planning of a job beyond the actual construction. I promote the idea that making decisions early and in a well-informed manner allows for the construction of a better building. We are also committed to continuous employee training by letting employees lead work groups and giving them the skills to lead those groups. We do not adhere to an autocratic, hierarchal, lead-from-top-to-bottom approach.
Under John’s leadership from 1990 to 1996, the company completed award-winning, complex projects such as the MIT Biology Building in Cambridge, Massachusetts; the Beth Israel Hospital Shapiro Clinical Center in Boston; the Hewlett-Packard manufacturing facilities for medical products in Andover, Massachusetts; and the Fidelity Investments Data Center in Merrimack, New Hampshire. In addition to the clients of these projects, the company’s impressive array of clients also included Harvard University, Joslin Diabetes Center, EMC Corporation, and State Street Bank.

5.4 The Turning Point

Throughout John’s career, from his early days to his becoming a construction executive and a real estate investor, he was increasingly frustrated by the waste and foolishness he experienced in communication. He recalls his repeated frustrations:

When I was an assistant project manager in 1980, almost all I did was receive, handle, and send drawings, logs, transmittals, and sketches. There was little time to think about them. Ever since, I grew increasingly frustrated at the inefficiency, friction, and foolishness around knowledge management in the real estate and construction industry. People think construction is such a backward industry. But less than 50 percent of the cost is labor. A lot of time is spent waiting for information. I got frustrated with the foolishness in project management. Documents are created digitally, but then a lot of time is spent moving them around in paper form. Ten to fifteen percent of time is wasted on inefficient and inaccurate communications.

In 1995, the information wave had arrived in the form of the Internet and groupware. Team technologies, commonly called groupware, are designed to enable people within business
organizations to communicate and exchange information as integral parts of their everyday work. Moreover, team technologies allow people to share relevant knowledge and coordinate business tasks in entirely new ways. Effective implementation and use of these technologies can lead to significant organizational improvements. As John recalls:

I saw new tools becoming available including groupware, 3D design tools, and the Internet. These could only be used well on a system-wide basis, and nobody was thinking of using them on a project-by-project basis because this would be difficult. They are expensive to implement from scratch, and their business success depends on the whole team working in concert. The contractual relationships on individual projects typically are not set up in this way.

John began figuring out how to use these tools and to devise a viable business model that would deliver the promise of information sharing enabled by information technology. This undertaking would require all his time and energy, and in 1996, John handed over the reins of the construction company to his executive vice-president, Don Colavecchio, a veteran manager who then became the president and CEO, while John remained as chairman and majority shareholder. By then, the company’s annual revenues had doubled to $150 million since taking over the reins in 1990. John was 40 years old and ready to take on a new challenge in his young career.

5.5 The New Venture

Continuing the Macomber family tradition of construction innovation, John founded Collaborative Structures in June 1996. His new venture is a pioneering provider of web-based communication solutions for the Architecture/Engineering/Construction (AEC)
industry. It provides a secure project management website where participants in the AEC supply chain can share project documents and information.

5.5.1 The Mission

The venture aims to increasing productivity and profitability for its customers and users by focusing on their business and people needs, and then on leveraging the technology. John’s vision for Collaborative Structures involves being able to effect change throughout the construction process and the overall industry:

I have assembled a team that includes top experts in real estate and construction, sophistication in team building and sociology, and of course, leading talent in software design and hardware systems. As a team, our vision is to build a company that is a trusted resource to every member of the project, from end user to financier, to consulting engineer, to bricklayer. Our hope is to help everyone involved, every day. 32 By managing the communications for the whole project, we’re vastly reducing the confusion, redundancy, and litigation. We’re trying to restructure not only the way jobs are done, but also the whole industry. 33

5.5.2 The Business Model

John adopted his application service provider (ASP) business model from one of his other businesses, Hamilton Construction Equipment, which provides productivity equipment to projects on a rental basis to teams who do not want to own and maintain tools. This application rental approach is especially appealing to smaller and mid-sized businesses unable
or unwilling to commit the staff resources and IT infrastructure required for cutting-edge business tools. John recalls the logic of his business model:

Project teams rent our solution. This is analogous to going out and renting a crane, but instead, we manage their information. Since many construction projects last only 12 to 24 months, it makes sense for an independent party to handle project management, as opposed to the companies building their own computer networks. We make the benefits of these technologies available to project teams on a project basis, ready to use, and spare them any technology risks and capital commitments.

The business model started out being all things to all people, with all offerings, and later evolved to be increasingly focused on doing one thing really well, which is project communication for multiple companies on multiple jobs. By listening to feedback from their customers and users, and also doing it by trial and error, Collaborative Structures further developed the business model and the solutions.

5.5.3 The Collaborative Solutions

Collaborative Structures' whole package of project communications solutions is comprised of its FirstLine database product, secure hosting, customer service, and technical support.

- **Product and Hosting**

  The FirstLine product is a central, shared database for use by the project team to share and manage information over the Internet by using a standard web browser. The project database is hosted and maintained on independent and secure network servers, which are backed by off-site storage of project data. FirstLine provides easy access, advanced organization, and increased accountability within the project delivery process.
FirstLine provides easy access to and instant communication of various types of project documents and information such as CAD drawings, meeting minutes, photographs, schedules, and submittals. For example, the most up-to-date drawings can be posted on the site, and project participants who need to know are notified by email. They can then view them online and print relevant portions directly from their computers. They do not waste time waiting for the drawings to be commercially printed, packaged, and delivered to the huge number of project participants every time changes are made to drawings.

This feature allows rapid dissemination of information, saves on paper and mail costs, and minimizes errors. The payback is on efficiency and time, which translates into cost savings. John said the new technology allows projects to be completed five to ten percent more quickly, while cutting costs.\(^4\) The cost benefit can be appreciated by the fact that in 1997, Federal Express delivered more than 15 million sets of blueprints costing more than $500 million to ship, according to International Data Corp., a market research firm based in Framingham, Massachusetts.\(^5\) Moreover, project participants located in various parts of the country or the world can collaborate much more easily.

Passwords allow for differing levels of access to information and services. A midlevel manager on a building site, for instance, might be able to post a request for information on one area of the site, but might not be able to view the minutes of the senior project-management team's meetings.\(^6\)

FirstLine provides advanced organization of information by displaying all types of documents in a common format, and links related documents by a thread map that allows similar emails to be pulled by topic, in chronological order.\(^7\) These features allow users to easily prepare, retrieve, and read these documents in a consistent way.
Firstline provides increased accountability by giving users information on their current, complete, and pending tasks. They can hold others accountable by actively prompting others to take action on critical information. It also creates a permanent project record of the decision-making process, i.e., who has viewed and acted on what information and when. This virtual paper trail cannot be changed, and given to users of the site on a CD-ROM once the project is complete. This automatic documentation of the decision history reduces risk and minimizes time spent processing claims. If legal disputes arise, there is a compendium of evidence about which parties were informed of and accountable for what parts of the job. Much of the same information is vital to the building’s maintenance team after the job is completed. Rather than having stacks of equipment manuals and building specifications stored in a warehouse, the data can be compiled on disks or cartridges and kept in a single desk drawer.

- **Service and Support**

The FirstLine solution includes customer service to project teams throughout the life of the project. It includes an extensive orientation process that provides the project team with initial training and ongoing assistance. Furthermore, its technical support complement the online help database. Customers can access its technical support specialists by phone and email during office hours on weekdays.

### 5.6 The Customers and Users

Collaborative Structures’ customers and users consist of the various participants in the construction supply chain. These are principally the project owners and developers; architects, engineers and consultants; and general and trade contractors. Other participants include financial institutions and facilities managers.
5.6.1 Owners and Developers

This vital link of the construction supply chain needs up-to-date information in order to manage the design and development of new and existing facilities. These project originators outsource financial, design, and construction services to various project participants whom they need to effectively manage and coordinate. Collaborative Structures’ owner-type clients include educational institutions such as Stanford University, Dartmouth College, Vanderbilt University, and the Massachusetts Institute of Technology. Also included are real estate companies such as Beacon Capital Partners and Leggat McCall Properties. The venture was recently awarded the contract for project communication hosting for the MIT Media Lab expansion, which was to be executed in a cutting-edge, collaborative fashion and is scheduled for completion in 2003. Susan Personette, project manager for MIT, cited Collaborative Structures’ capability to meet the project’s unique needs:

We did a careful review of all of our options, and Collaborative Structures was the clear winner. We have a fast moving project with team members from all over the world. Our architect, Fumihiko Maki from Japan, is particularly concerned about craftsmanship and team communication. The Media Lab is highly sophisticated and demanding, and they are concerned about the most effective use of information technology. For us, that was clearly Collaborative Structures. No other company offered this winning combination of intuitive use, powerful linking of documents, and extensive people support for our global team. 44
5.6.2 Architects, Engineers and Consultants

These professional service providers in the construction supply chain need to communicate and coordinate information with other project participants and among themselves. For example, recurring revisions in the design process are sources of constant pain among design professionals. FirstLine significantly lessens this pain by keeping them current with the latest information and thus allowing them to work from the same revisions. Sasaki Associates, an architecture firm based in Watertown, Massachusetts, used FirstLine on the State Street Financial Services renovation in downtown Boston. Nancy Freedman, its principal architect, cited its other benefits:

One of the most useful benefits is that it cuts down on paper. My hard-copy file for State Street is only about 25 percent of the total of a typical project like this. Thread map is a great feature. You can see even very small details that were talked about over months in subject and chronological order from the most recent back. 45

5.6.3 General and Trade Contractors

These project participants need to manage a variety of information such as plans, specifications, submittals, requests for information, transmittals, change orders, etc. among themselves, with their clients, and with design professionals. Managing these information is critical in their efficiency and effectiveness in allocating resources and finishing the project within schedule and budget.
5.7 The Competition

Following John’s pioneering venture, a number of new ventures have pursued similar trails blazed by Collaborative Structures. Its main competitors include Bidcom, Cephren, and Buzzsaw. Other competitors include BuildNet, Framework Technologies, Bentley Systems/Workplace Systems, Cubus, Meridian Project Systems, etc. 46

5.7.1 BidCom

Bidcom (www.bidcom.com) was founded in 1997 and headquartered in San Francisco. It has among its backers, Oracle’s venture capital arm, Internet Capital Group, and Hines, a leading real estate owner and developer. In addition to its collaborative solution, InSite, it is developing an online marketplace, which would allow business-to-business transactions for the researching, buying, and selling of materials, equipment, and services.

5.7.2 Cephren

Cephren (www.cephren.com) was formed in January 2000 by the merger of Blueline Online and Ebricks.com. Blueline was founded in 1996 and is based in Palo Alto, California, which is also where the merged company is now based. One of its backers is Bechtel, a leading engineering and construction company. In addition to its collaborative solution ProjectNet, it is also developing MarketNet, an online marketplace similar to Bidcom.

5.7.3 Buzzsaw

Buzzsaw (www.buzzsaw.com) was launched only in November 1999 and is based in San Francisco. The venture was spun off from Autodesk, the maker of computer-aided-design
software. In addition to its collaborative solution, ProjectPoint, which it is providing free for
up to 100 megabytes of storage space, it is also developing an online marketplace similar to
Bidcom and Cephren.

5.8 What's Next?

The future for Collaborative Structures would depend on the trends happening in the
construction industry and also on how John sees the future for his new venture.

5.8.1 E-Commerce Trends in the Construction Industry

The construction industry puts in place about $650 billion of construction in the United
States each year, making it the second largest industry in the country. It accounts for about
eight percent of the US gross domestic product. Moreover, the construction market
worldwide is $3.2 trillion. The industry's intense fragmentation has made it slow in adopting
new technology. So far, e-commerce has barely penetrated the industry's second and third
tiers, among companies with less than $100 million in annual revenue, where most
communication still occurs the old-fashioned way, with faxes, voice mail and overnight
packages.

Some construction executives cite a stubborn resistance in their industry to any new
approaches to business. Others suggest that the Web's continued reliance on the personal
computer makes the medium impractical on many job sites (although some of the solutions
allow hand-held Palm computers to supplement desktop and laptop machines). And some of
the holdouts say that the benefits of e-commerce sites have not yet been made sufficiently
clear to them.
However, as projects become more complex and its participants become more spread out, the industry is slowly adopting new technology. The American Institute of Architects estimates about 20 percent of the largest US architectural firms already use project Web sites. Dan Slavin, CEO of Framework Technologies of Burlington, Massachusetts foresees a tremendous change in construction projects:

Within five years every project will use these tools. Building owners demand it, designers and builders who use it gain a cost advantage, and aggressive adopters want to leverage project data further on in the facility lifecycle.

Dennis Byron, a supply chain analyst at International Data Corp., echoes a similar point:

While software has long been used to manage construction and architectural projects, the web holds the potential of sorting out the spider web of collaboration among companies involved in the building process. Construction portals can help track a project, locate reports, research zoning laws, access information on materials, and collaborate on projects. We really think this [construction] is going to be a real [large] part of the business over the next couple of years.

According to Forrester Research, which studies e-commerce and is based in Cambridge, Massachusetts, U.S. business trade on the Internet, which was virtually zero only three years ago, will rise from $43 billion in 1998 to $1.3 trillion in 2003, accounting for more than nine percent of total U.S. business sales and about 15 percent of total gross domestic product. So far only a fraction or some $6.3 billion of the construction industry's overall business is conducted online. Even by 2004, Forrester expects the online total to reach only $141 billion, or less than 11 percent of total construction spending. One of its analysts, Mathew Sanders, shares his view of the future:
Down the line a bit, these sites will evolve to the point where they'll include players that are far upstream, like providers of sawmill equipment. Procurement will be in place, and everyone will be plugged in along a virtual supply chain. It'll be incredible to see how that drives efficiency. 54

As the market emerges from its infancy, new entrants are attracted to new and existing business opportunities and niches. As Buzzsaw chief executive, Carl Bass, comments:

There are hundreds of start-ups now with $5 million worth of backing. If you can quote the size of the industry and spell AEC, the industry acronym for architecture, engineering and construction, you can raise $5 million.

5.8.2 John’s View

John Macomber is helping to lead the way in the midst of a technological revolution in the construction industry. He affirms the now oft-quoted remark that the Internet changes everything, and ventures on how it will restructure the industry:

The real impact of information technology is in transforming industry. The industry value system needs to be understood. New information technologies will lead to both barriers to entry and to economies of scale that did not exist before. New competitive pressures will arise. Information technology is only a source of information if it can truly lower your costs or truly increase differentiation. Customers will not pay for differentiation they do not value. Out with technology for the sake of technology; focus on the technologies that either reduce the client’s own costs or enhance the client’s experience. 55

Furthermore, John justifies why he primarily focuses on people issues, and then on leveraging the technology next:
Real estate, design, and construction remain face-to-face service businesses. Everyone in the value chain buys based on four factors: price, schedule, quality, and people. If technology drives price and quality towards a common level, what is left is the people who can deliver the schedule and can lead a team. Teams who can truly leverage new technologies like 3D solid models tied to databases, or online purchasing of services, will have outstanding leaders at their core. So in the end, after the techno-dust settles, the enduring source of competitive advantage will still be people, after all. In the new millennium, firms are well advised to select, train, and grow their people first, and their technology second. 56

2 Company History, www.gbhmacomber.com/frameset_history.htm

1 Ibid.


10 Ibid.


12 Ibid.

13 Ibid.


18 Ibid.


22 Ibid.

23 Ibid.

24 Ibid.


26 John Macomber, Email Reply to Queries by Leo Sen, 4/24/00.


32 Ibid.


37 John Macomber, Email Reply to Queries by Leo Sen, 4/24/00.


39 Ibid.
6. ANALYSIS AND DISCUSSION OF THE COLLABORATIVE STRUCTURES CASE

In this chapter, I determine and compare the characteristics of the entrepreneurial process of this construction-related Internet venture, which has been successful so far, with the success pattern defined by Timmons’ model. Since Collaborative Structures has been around for only four years, it is timely to note that according to Timmons, new ventures are rarely established solidly in less than three or four years because they experience dynamic ups and downs over an extended period of time due to economic cycles. Seven years is a realistic time frame to expect to grow a higher potential business to a point where a capital gain can be realized.¹

Assuming the venture will be successful if nothing goes terribly wrong, the framework of the analysis and discussion in this chapter closely follows the framework of the model.

6.1 The Opportunity

Collaborative Structures is a pioneering application service provider of web-based communication solutions for the construction industry. It rents-out on a project basis a secure project management website where every participant—owner, architect, engineer, consultant, contractor, subcontractor, etc.—can access and share project information such as plans & specifications, correspondences, change orders, etc.

6.1.1 Industry and Market

Table A.2 in Appendix A.1 includes a summary of the following characteristics of Collaborative’s industry and market.

¹
Market

John identified a market niche in the construction industry for Collaborative's product and service, FirstLine. The company manages project information for its customers, which can be any of the following: owner/developer, architect, engineer, consultant, contractor, subcontractor, etc. They also become the users. FirstLine reduces waste and confusion around moving and tracking information in projects. It leverages new technology to reduce the time to project completion by approximately five to ten percent, enhances work quality, cuts costs, and ultimately increases profits. Web project management also makes it easier for partners across the country, or the world, to collaborate. The potential payback to the customer or user is three months.

In this market, customers have no brand or other loyalties because the appropriate service provider is selected based on the particular needs of the project, but loyalties can be developed by Collaborative if the customer becomes familiar and comfortable using the product. It has the potential of becoming a standard. The product life is co-terminus with the project. In other words, when a project ends, the hosting service ends as well since it is not anymore needed. Collaborative Structures is capable of expanding beyond FirstLine, which is just its initial offering. In the future, it can provide content, procurement, and other applications. These market characteristics suggest a higher potential opportunity.

Market Structure

It is important to distinguish between the construction industry structure and Collaborative's market structure. The construction industry is highly fragmented, mature, and intensely competitive. In contrast, the market for Collaborative's web-based communications solutions in the construction industry is relatively new and imperfect. By managing the
communications in projects, Collaborative is not only restructuring how projects are undertaken, but is also slowly restructuring the industry.

Being the pioneer in this new market, the entry barrier for Collaborative was low. Collaborative continues to identify unfilled market niches to enter. There are huge information and knowledge gaps, which Collaborative is looking to fill. The competitive environment is profitable although there are price-cutting and other similar competitive strategies. For example, the business model of late entrant Buzzsaw.com gives the service away for free, earn revenues from web advertising, and figure out later how to make the business viable.

The market is starting to require high capital requirements and costs in order to achieve distribution and marketing presence. Collaborative’s competitors have recently been creating a lot of buzz and hype in various business publications. In contrast, Collaborative is employing a different strategy by building its client base slowly through referrals from existing clients instead of a costly advertising campaign. John reasons, “In construction, with hundreds of people and hundreds of millions of dollars at risk, it’s a relatively slow, direct-sale, hand-holding proposition rather than marketing and hype.” 3 These characteristics of Collaborative’s market structure suggest a higher potential opportunity.

- **Market size**

There was no existing market yet when Collaborative, being the pioneer, started. John estimates the market size today to be probably under $10 million, but can someday be $10 billion. 4 In an interview with the Boston Globe in June 1999, John estimated the market demand for software and websites to manage projects electronically as $1 billion worldwide. 5 Based on these characteristics, the model would suggest that the opportunity is “lower potential,” because it is too small today, uncertain, and possibly too large in the future. The
size implies that achieving significant sales in today's small market may threaten competitors, which are still few but increasing. Furthermore, a large, multi-billion dollar market in the future can potentially translate into competition from large, established firms and smaller ones entering the market. Thus, there is a window of opportunity between today's small but growing market and a mature, stable market in the future. This relates to the discussion on timing the window of opportunity in Subsection 6.4.3, The Timing.

- **Market growth rate**

The growth rate of the market is unknown, but can be characterized as growing rapidly and creating new niches for new entrants. These suggest a higher potential opportunity in terms of market growth.

- **Market capacity**

The existing supply from companies such as Collaborative is capable of meeting current market demand. Since the market is relatively new and emerging, a rapidly growing market demand can potentially exceed existing supply. Collaborative can increase its capacity before new entrants step in to fill the demand. These characteristics suggest a moderate-to-high potential opportunity for Collaborative.

- **Market share attainable by year five**

Collaborative's market share today is unknown, but John estimates Collaborative to attain market share of between 30 and 50 percent in 2001. This suggests a higher potential opportunity in terms of market share.

- **Cost structure**

Collaborative is not a low-cost provider because it differentiates its product and service from its competitors. There are significant economies of scale because the marginal cost of adding customers is small. There are significant costs to learning by doing. There are significant
benefits as well, because Collaborative is able to constantly improve its product and service. Based on these characteristics, the model would suggest that the opportunity is "lower-to-moderate potential."

6.1.2 Economics

Table A.3 in Appendix A.1 includes a summary of the following characteristics of Collaborative's economics.

- **Gross Margins**

Collaborative's gross margins cannot be quantified or may not be applicable because its product and service are priced together as a function of the cost of the project, and the costs of the software and hardware are fixed. Hence, the selling price is not in terms of number of units, and most of the costs involved, except maybe for service, has to be spread out over the customer base in order to express them in per unit terms. According to John, the price allows for error and flexibility to learn from mistakes.

- **Profits after tax**

John exercised his right to refuse to answer the question regarding this.

- **Time to breakeven**

Collaborative required about 12 to 18 months to attain breakeven and positive cash flow. This suggests a higher potential opportunity in terms of breakeven time.

- **Return on investment (ROI) Potential**

John expects ROI to be 100 percent five years after startup, and 500 percent ten years after startup. By simply taking the average ROI per year, this would be 20 percent per years for
five years and 50 percent per year for ten years. The weighted average of these would be 40 percent per year. This suggests a higher potential opportunity in terms of ROI potential.

- **Capital requirements**

Collaborative’s capital requirements are high, consisting of computer servers that store the application and all the information generated by the projects. At the early, pre-revenue stage of the venture, its entire budget covered the capital requirements. John was, however, able to fund Collaborative’s capital requirements by using mostly personal funds and some financial capital from angel investors. Collaborative’s ability to fund its high capital requirements suggests a higher potential opportunity.

- **Internal rate of return (IRR) potential**

The IRR is not known.

- **Free cash flow characteristics**

Collaborative’s current annual sales growth is about 1000%, according to John. Its level of asset intensity per dollar of sales is moderate because the costs of its capital requirements are spread out over its customer base. The level of its spontaneous working capital is low because it has no inventory and its customers pay in-advance. Since its very high sales growth would more than offset asset intensity, the venture probably generates very robust free cash flows in the short run. In the long run, Collaborative is capable of sustaining a lesser but viable sales growth. Collaborative’s free cash flow characteristics suggest a higher potential opportunity.

### 6.1.3 Harvest Potential

Table A.4 in Appendix A.1 includes a summary of the following characteristics of Collaborative’s harvest potential.
• **Strategic value**

Collaborative's high strategic value in the industry is dependent on the potential of its product, FirstLine, to become the project communications standard for many users in the industry. Hence, its installed customer base and market niches have high value-added strategic importance to a potential acquirer. These suggest a higher potential opportunity in terms of strategic value.

• **Valuation multiples and comparables**

John thinks that a valuation multiple of 100 times revenues can be applied to the venture. This suggests a higher potential opportunity in terms of valuation multiple.

• **Exit mechanism and strategy**

John's exit mechanisms include Collaborative being a cashflow business, buying out investors, an initial public offering, or a strategic acquisition by another company, probably one that is larger and more established. The entrepreneur having a harvest objective in mind suggests a higher potential opportunity.

• **Capital market context**

As would be expected, the exit mechanism will be executed when capital market conditions are favorable. This suggest a higher potential opportunity.

6.1.4 **Competitive Advantage**

Collaborative's competitive advantage is based on its customer base, proprietary software, brand, and focused market niche. Table A.5 in Appendix A.1 includes a summary of the following characteristics of Collaborative's competitive advantage.
• **Fixed and variable costs**

Collaborative’s fixed costs would include the initial, operating, and maintenance costs of its computer servers, the costs of developing and updating its software product, and the cost for customer support. Its variable cost would mainly be the cost of providing the service to its customers. Thus, its operating leverage is high. As stated earlier, Collaborative is not a low-cost provider because it differentiates its product and service from its competitors. Although it has high costs of marketing and distribution, it probably has the lowest marketing cost against its competitors because of the reasons cited in the discussion of market structure. Its high operating leverage and lowest marketing cost suggest a higher potential opportunity.

• **Degree of control**

Collaborative has strong degree of control over costs, prices, and channels of distribution. There is no dominant competitor in its market. Nor has a market leader been established. Collaborative’s ability to exercise a strong degree of control suggest a higher potential opportunity.

• **Barriers to entry**

Collaborative erected barriers to entry in the form of a network of beneficial contacts accumulated over time through active engagement in the industry, a top-quality management team, and an installed customer base. Moreover, a high entry barrier it can potentially erect is by developing its brand, i.e., FirstLine is the standard web-based project communications solution for the construction industry. This is possible with a wide customer base comprised of a multitude of users. Collaborative’s ability to erect entry barriers indicate a higher potential opportunity.
Proprietary software, fast response/lead times in technology, product innovation, market innovation, location, resources, or capacity do not create competitive advantage in the market because all the market players probably have these as well. Collaborative competes against new entrants and smaller but growing competition by focusing on its market niches.

6.1.5 Fatal Flaw

Based on the above criteria and those in Subsection 6.2.1, Team Qualities, Collaborative has characteristics of lower potential opportunities in terms of market size, market capacity, and cost structure. According to the model, having one or more of these fatal flaws constitute a "lower potential opportunity." Table A.6 in Appendix A.1 includes a summary of these fatal flaw characteristics.

According to John, the fatal flaws of a new venture in this market are lack of differentiation, being unknown, and a poor business model. He corrected Collaborative's fatal flaws by marketing, careful differentiation, positioning, developing a good business model for additional revenue, and carving out distractions.

6.1.6 Strategic Differentiation

Table A.7 in Appendix A.1 includes a summary of the following characteristics of Collaborative's strategic differentiation.

- Degree of fit

There is a high degree of fit among the three driving forces of Collaborative's entrepreneurial process—the opportunity, the team, and the resources—suggesting it has a higher potential opportunity. This is discussed in more detail in Subsection 6.4.1, The Fit.
• **Team**

Collaborative has a high-quality venture team, suggesting it has a higher potential opportunity. This is discussed in more detail in Section 6.2, The Team.

• **Service management**

Collaborative differentiates itself from its competitors by its extensive commitment to service. Its service concept is called TeamStart, an orientation process that provides project team members with initial training and ongoing technical support, and also customized coaching which is tailored to the particular people issues of each project. Collaborative’s ability to consistently deliver its superior service concept suggests a higher potential opportunity.

• **Timing**

The window of opportunity was just starting to open when Collaborative was founded. This is discussed in more detail in Section 6.4.3, The Timing.

• **Technology**

Collaborative’s product, although proprietary in itself, is not based on proprietary and breakthrough technology. Its technology was adapted from other software developers and configured to its desired specifications. Its competitors probably underwent a similar process in developing their products. Furthermore, new entrants can do the same as well. Given these characteristics of Collaborative’s technology, the model would suggest a moderate potential opportunity.

• **Flexibility**

Collaborative is able to adapt its product to customer needs. Collaborative demonstrated this by reconfiguring its product from being software-based to web-based. This flexibility indicates a higher potential opportunity.
• **Opportunity orientation**

Collaborative’s typical customers and users include owners, contractors, architects, engineers, and consultants. It seeks out additional opportunities through other customers such as financial institutions and facilities managers. John keeps himself opportunity-oriented by reading, thinking, speaking in industry events, and teaching at MIT. Collaborative’s opportunity-orientation suggests its higher potential opportunity.

• **Pricing**

Collaborative prices its product and service as a function of the cost of the project, ranging from 0.10 to 1.0 percent. It is able to set its own price because it provides high value-added product and service to a growing market. Collaborative does not under-price its competition. Since the market is relatively new, there is no established market leader who sets the pricing standard for other market players to follow. These pricing characteristics suggest a higher potential opportunity.

• **Marketing and distribution channels**

Collaborative’s application service provider business model is a new distribution channel more accessible to customers than traditional software reseller channels. This suggests a higher potential opportunity.

• **Room for error**

John allowed room for errors in Collaborative’s business and financial strategies, such as its margins, leverage, estimates of revenues, costs, cash flows, timing, capital requirements, etc. These allowed Collaborative learn from mistakes and change or refine strategies. John’s provision of these allowances suggests a higher potential opportunity.
6.2 The Team

Collaborative's entrepreneurial team was composed of John as the lead entrepreneur, and some key managers he hired using a search firm. John did not have founding partners.

6.2.1 Team Qualities

Table A.8 in Appendix A.1 includes a summary of the following qualities of Collaborative's entrepreneurial team.

- **Team composition**

John hired key managers with complementary functional expertise such as software development, technical support, customer service, sales, network maintenance and administration, etc. They had varied work experiences and performed roles in Collaborative that were similar to their previous roles in other companies. The key managers have non-compete and non-disclosure agreements. Collaborative's team composition suggests a higher potential team.

- **Industry and technical experience**

Collaborative is basically an information technology (IT) company providing a product and service to the construction industry. John had about 16 years of mostly management experience in the construction industry when he started Collaborative in 1996. He also had a special interest in IT. Thus, it was necessary to hire technical and service-oriented key managers from the IT and construction industries. He considered experience and attitude as the two major factors in hiring his key managers. One of the early key managers he hired was a technical expert from the IT industry who fully understood software development. He also hired an architectural design professional who had experience in both project management
and IT-related work. Having these dual backgrounds allowed this person to successfully manage the development of Collaborative’s software product, FirstLine, and later became responsible for business development.

John also hired key managers with project management and technical experience in design and construction, who became account managers handling sales and services. He also hired key managers with customer support and sales experience from the IT industry. Although few of his key managers have profit and loss experience, most were accomplished and possessed track records in the IT and construction industries. Some understood the technology, while others understood the market. The collective industry and technical experiences of the Collaborative team suggest a higher potential team.

- **Intellectual honesty**

John knew when he started the company that he understood well how the construction supply chain works. He also knew that he did not understand software development. Therefore, he compensate for this shortcoming by hiring key managers, staff, and consultants who knew this area well. John’s knowing what he did and did not know, and seeking other people with strengths to complement his weakness, as well as each other’s, suggest a higher potential team.

- **Integrity and reputation**

According to John, integrity and reputation are crucial in Collaborative’s market niche. He is a nationally recognized resource on information technology strategy for design and construction firms. John has written about strategic planning in construction, applying information technology in construction, and managing construction risks, which have been published in Harvard Business Review and Construction Business Review. In 1993, the Boston Jaycees named John as one of its Ten Outstanding Young Leaders, which recognizes
the young men and women in the Boston community who have made outstanding accomplishments based on personal achievements, public service, and professional accomplishments. His key managers include an industry leader as well and recognized experts in their respective fields. These characteristics suggest a higher potential team.

- **Team philosophies and attitudes**

Collaborative believes that people issues are as important as technology issues. Thus, it provides thoughtful and people-oriented service. Its compensation and incentive structures involve base pay at market rates, plus stock options based on company valuation and performance. These suggest a higher potential team.

### 6.2.2 Personal Qualities

**Table A.9** in Appendix A.1 includes a summary of the following personal qualities of Collaborative’s lead entrepreneur.

- **Apprenticeship**

John’s becoming an entrepreneur was part of his career plan, but he did not select prior work to prepare specifically for an entrepreneurial career. However, he sought out areas where intelligence, honesty, and energy were valued. He would then move on when the intelligence and energy have made their mark and others can take over. As mentioned earlier, he had about 16 years of experience in construction before starting his own company, which included seven years as a manager, and six years as owner, CEO, and an “intrapreneur.” An intrapreneur is a person within a large corporation who takes direct responsibility for turning an idea into a profitable finished product through assertive risk-taking and innovation. Intrapreneurship takes entrepreneurship a step further, applying entrepreneurial principles to the traditional corporation, creating a marriage between entrepreneurial creativity and
corporate discipline, cooperation, and teamwork. This constitutes the ultimate corporate balancing act. Cut back and grow. Trim down and build. Accomplish more, and do it in new areas, with fewer resources. He did all these with the George B.H. Macomber Construction Company. He created an entrepreneurial culture in an existing company. He acquired intimate knowledge of the customer, the market, and the marketing channels through his direct sales and marketing experience when he was the CEO. In order to gauge and fully appreciate what John did for the company, following are some pertinent facts:

John doubled the company's revenues from $75 million in 1990 to $150 million in 1996. He handed over the reins to a veteran manager in 1996 while remaining chairman, and today, annual revenues are over $200 million. The company is ranked 148th in the 1999 Engineering News Record Top 400 Contractors, significantly improving from 313th in 1998. It is important to note that according to the 1992 Census of the Construction Industry, the total number of construction companies in the U.S. was about two million, with 23 percent of them in building construction such as John's, 74 percent in special trades, and the remaining three percent in heavy construction. Ninety-four percent of them have less than 10 employees.

This impressive track record gave investors and creditors the necessary confidence in his ability to start a successful venture. John was 40 years old when he started Collaborative. He also accumulated enough net worth to contribute most of the initial funding to the venture. He found and nurtured relevant contacts and networks by teaching, speaking, being active and known in community circles, and showing good work products. He evolved from three generations of entrepreneurial heritage, beginning with his great-grandfather who started the construction company. The greatest influence on John becoming an entrepreneur was his
father, who had started many successful ventures, businesses, and partnerships. All of these characteristics clearly indicate a higher potential entrepreneur.

- **Goals and fit**

John understood the potential rewards from the venture, which so far, have met what he expected from it. Thus, there was an immediate meeting between John’s goals and what the venture provided. This suggests a higher potential entrepreneur.

- **Desirability**

John understood and willingly sacrificed many lifestyle factors to pursue the opportunity. The desirability of the opportunity for John suggests a higher potential entrepreneur.

- **Opportunity cost**

John considered his opportunity costs, which included a stable stream of earnings as CEO of the construction company he already owned. He also considered the lifestyle sacrifices he would have to make.

- **Upside/downside issues**

John considered the potential risks of the venture that could lead to failure. He was doing something that had never been done before. He was entering a new market, building a new product based on new technology, and building a new model with people who had to figure it out. His financial exposure to these risks was limited to most of the initial funding of the new venture. He did not make additional investments, which were funded by outside investors. His net worth was greater than his financial exposure and thus, he would have been able to bounce back had the venture failed. The venture was not too big for John’s capacity. These circumstances suggest a higher potential entrepreneur.


- **Risk/reward tolerance**

John considers himself a big risk-taker, but he took calculated risks by doing an “expected value analysis.” This suggests a higher potential entrepreneur.

- **Stress tolerance**

John coped with the stresses related to starting a venture in a new market, with a new product, using a new technology, and building a new model, through communication and focus. His ability to cope with stresses suggests a higher potential entrepreneur.

- **Attitudes and behaviors**

According to John, his creativity and energy helped him succeed as an entrepreneur. At this point, a number of John’s attitudes and behaviors have been illustrated—commitment and determination, leadership, tolerance of risk and stress, motivation to excel, and innovativeness. John’s attitudes and behaviors give further credence to his being a higher potential entrepreneur.

6.3 **The Resources**

John was very effective in making use of other people’s knowledge and expertise, particularly in the area of software development. He was also successful in raising subsequent rounds of financing from outside investors. He conserves financial resources by not spending on costly advertising campaigns, which his competitors are aggressively pursuing. He is letting his competitors inform the industry about the products and services they offer. He also arranged for customers to pay in advance.
6.3.1 People

Table A.10 in Appendix A.1 includes a summary of the following types, characteristics, and value-added benefits of Collaborative’s people resources.

- **Board of directors and advisors**
  John selected Collaborative’s board of directors from his past experience. They possessed experience and networks, and added value by thinking through issues posed by John and giving advice.

- **Attorney**
  John’s attorney had the experience and expertise in dealing with startups. He provided legal advice on specific issues facing a new venture.

- **Accountant**
  The accountant made occasional introductions to John.

- **Consultants**
  John hired technical consultants to assist in developing Collaborative’s software product. They provided detailed expertise with their specialized knowledge and experience. He also hired IT strategy consultants who provided a big-picture vision for Collaborative’s product and service.

6.3.2 Financial Capital

Table A.11 in Appendix A.1 includes a summary of the following types, characteristics, and value-added benefits of Collaborative’s financial capital resources.
• **Equity capital**

John did not really know how much capital the venture needed. John personally funded most of Collaborative's startup capital, with the rest coming from angel investors, whom he picked from prior knowledge. They added value with their networks, and functioned as sounding boards for John's ideas. Venture capital investors, whom John picked for their wisdom and comfort, funded succeeding rounds of financing, which have amounted to about $8 million to-date after two rounds.

• **Debt capital**

John raised debt capital from a bank with which he had a prior relationship.

### 6.3.3 The Business Plan

John's business plan for Collaborative was highly important as an effective tool in raising capital, guiding the policies and actions of the company, and providing internal direction. **Table A.12 in Appendix A.1** includes a summary of the characteristics of Collaborative's business plan.

### 6.4 The Fit, Balance and Timing

Collaborative possessed many characteristics of higher potential opportunity and team. John was very effective in marshaling and gaining control of people and financial resources with value-added benefits in order to pursue the opportunity. Integrating the driving forces—the opportunity, the team, and the resources—of Collaborative's entrepreneurial process are their fit, balance, and timing.
6.4.1 The Fit

Table A.13 in Appendix A.1 includes a summary of the following characteristics and benefits of Collaborative’s fit.

- **The Fit of the Opportunity with the Team and the Resources**

  John had the ability to pursue the opportunity while using the resources that were available. He had the industry experience and the personal qualities as an entrepreneur to pursue the opportunity. He understood particularly what people resources to acquire, when to acquire them, and how to acquire them.

- **The Fit of the Investors with the Opportunity and the Team**

  John’s angel and venture capital investors were capable of adding value to the venture. According to John, their chemistry is excellent.

- **The Fit within the Team**

  John hired key managers with complementary functional expertise with varied work experiences and performed similar roles in other companies. According to John, their chemistry is also excellent.

6.4.2 The Balance

Table A.14 in Appendix A.1 includes a summary of the following characteristics and benefits of Collaborative’s balance.

- **The Three Driving Forces**

  When John started, he had the resources to pursue the opportunity, but needed a team that included technical people who were knowledgeable and experienced in software development. Thus, he hired key managers, staff, and consultants who can help him pursue
the opportunity using the resources that were available. Later, as the opportunity and team
grew larger, it became necessary to re-balance by raising outside capital to fund growth.
Thus, he raised capital from venture capital investors. He also re-balanced the opportunity
by adapting the product and service to customer needs. For example, he transformed the
product from being software-based to becoming web-based, which allowed users to access
the project website from a web browser instead of having to install the software.

- Risk and Reward

John aims for homeruns instead of just singles, doubles, or triples. He does take calculated
risks and also bases his decision on feeling.

6.4.3 The Timing

Timing is also important in Collaborative's market because of the sensitivity of the
construction industry to economic and business cycles. Collaborative's four-year
entrepreneurial process has covered only the startup stage and is currently undergoing rapid
growth. Table A.15 in Appendix A.1 includes a summary of the actual and possible timing
involved in Collaborative's entrepreneurial process.

- Startup

When John started the company, venture capital was just warming up to investing in Internet
companies. Hence, he was only able to turn to them after the initial round of financing,
which he funded mostly by himself. Internet usage was growing rapidly when John started.
The window of opportunity was just starting to open.
• Growth

John would know when the market is about to become mature and stable by observing the slowing down of overall sales growth. When that happens, John would extend the product line.

• Harvest

The timing of executing Collaborative’s harvest strategy will be driven by capital market conditions.
4 John Macomber, Answers to Questionnaire, 4/18/00.
7 "Macomber receives Young Leader Award," New England Real Estate Journal—Environmental, Design & Construction, 5/21/93, p. 23C.
7. CONCLUSION

This chapter concludes the study by describing the fit between the success pattern defined by Timmons’ model and the characteristics of Northland Investment and Collaborative Structures. There is strong fit between the model and the two successful ventures, which generally exhibited characteristics of higher potential ventures as described by the model. In each of the case studies, the entrepreneur’s personal qualities (with the exception of upside/downside issues), the resources, and the fit, balance and timing had characteristics of higher potential ventures as described by the model. Collaborative’s venture team had higher potential characteristics in all of its team qualities and personal qualities.

There are, however, some characteristics of the ventures that did not fit certain criteria of the model. Much of these criteria fall under the opportunity. Also, in each of these criteria, I mentioned in the analysis and discussion of the cases mitigating circumstances that tend to suggest that the opportunities were not necessarily lower potential. In this chapter, I comment on the appropriateness of certain criteria, which I think may not be considering other variables.

7.1 Lower Potential Characteristics in Both Cases

In each of the case studies, the model suggests that the opportunities of the two ventures had lower potential in terms of their market capacity, capital requirements, and fatal flaw. In each of these criteria, the ventures had characteristics that the model suggests as lower potential. The market capacities of the two ventures are both under capacity. The capital requirements of the two ventures were both high. The two ventures had fatal flaws.
A particular criterion of Timmons' model that requires commenting is the issue of fatal flaw, which I think is too strict, limiting, and over-encompassing. The model characterized the two successful ventures as having fatal flaws, which rendered them as lowest potential. According to Timmons' model, Northland had seven fatal flaw characteristics while Collaborative had three. In spite of these, the two ventures attained significant successes. I think that there is enough variety in venture opportunities and teams that should allow exceptional characteristics that will not meet the one or more of the model's criteria. The fatal flaw issue appears to remove the possibility of exceptions to its success pattern.

### 7.2 Lower Potential Characteristics in One Case

The model suggests that Northland opportunity had lower potential in terms of its return on investment, free cash flow characteristics, exit mechanism and strategy, and fixed and variable costs. Northland's fixed and variable costs did not position it to be a lowest-cost provider. Furthermore, it had the highest marketing cost. The model further suggests that the Northland team had lower potential in terms of its team composition, industry and technical experience, and upside/downside issues.

The model suggests that Collaborative's opportunity had lower potential in terms of its market size and cost structure. The cost structure of its market did not position it to be a low-cost provider. Furthermore, the market cost structure had significant economies of scale and significant costs of learning by doing.

Based on the model's cost structure, and fixed and variable cost criteria, ventures that can become low-cost providers have higher potential opportunities. The two successful ventures, however, did not position themselves to be low-cost providers, but rather, followed focused strategies to attain competitive advantage. In Competitive Strategy, Michael Porter defines
three generic strategies for firms to attain competitive advantage: overall cost leadership, differentiation, and focus. While the model defines certain criteria for a venture to gain strategic differentiation, it does not appear to consider differentiation and focus as possible sources of competitive advantage.

7.3 Concluding Remarks

I think that Timmons' model is a very useful guide for screening venture ideas and possible business opportunities, to assemble a venture team, to raise resources, and to figure out their timing and how all these fit with and balance against each other. However, a budding entrepreneur has to exercise judgment when applying the model, because not every successful venture will fit every single criteria of the model. The task is therefore, to identify these characteristics that do not fit well with the model and possibly figure out a way to reconfigure them in order to improve the venture's attractiveness and potential success.
### APPENDIX

#### A.1 Summary Tables

**Table A.1 The Cases**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneur</strong></td>
<td>Bob Danziger</td>
<td>John Macomber</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Newton, MA</td>
<td>Boston, MA</td>
</tr>
<tr>
<td><strong>Family Background</strong></td>
<td>Middle class</td>
<td>Upper class</td>
</tr>
<tr>
<td><strong>Occupation of Parents</strong></td>
<td>Father ran small sales agency;</td>
<td>Father started many new ventures, businesses, and partnerships</td>
</tr>
<tr>
<td></td>
<td>Mother was a housewife, but a risk-taker</td>
<td></td>
</tr>
<tr>
<td><strong>Education (School)</strong></td>
<td>AB (Dartmouth), MBA (Dartmouth)</td>
<td>AB (Dartmouth), MBA (Harvard)</td>
</tr>
<tr>
<td><strong>Work Experience</strong></td>
<td>Marketing</td>
<td>Construction</td>
</tr>
<tr>
<td><strong>Year founded</strong></td>
<td>1970</td>
<td>1996</td>
</tr>
<tr>
<td><strong>Age at founding (Today)</strong></td>
<td>36 (66)</td>
<td>40 (44)</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>Real Estate</td>
<td>Internet, Construction</td>
</tr>
<tr>
<td><strong>Product/Service</strong></td>
<td>Land subdivision; Later expanded into commercial real estate</td>
<td>Web-based project communications solution</td>
</tr>
<tr>
<td><strong>Current stage</strong></td>
<td>Harvested</td>
<td>Growth</td>
</tr>
</tbody>
</table>
In the following Tables A.2 to A.9, the columns under the headings “Criteria,” “The Model’s Highest Potential,” and “The Model’s Lowest Potential,” were adapted from Jeffry Timmons, New Venture Creation: Entrepreneurship for the 21st Century (Boston: Irwin/McGraw-Hill, 1999), p. 86-87.

**Table A.2 Industry and Market**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>The Model's Highest Potential</th>
<th>The Model's Lowest Potential</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Market</td>
<td>Market driven; Identified;</td>
<td>Unfocused;</td>
<td>Subdividing lands for vacation and retirement homes; Later expanded into rehabilitation of under-utilized, distressed buildings</td>
<td>Managing information for the participants in the construction supply chain</td>
</tr>
<tr>
<td></td>
<td>Recurring revenue niche</td>
<td>One-time revenue</td>
<td>Subdivided large tracts into marketable sizes; Built improvements; Choice properties in choice locations</td>
<td></td>
</tr>
<tr>
<td>- Value added</td>
<td>High; Advance payments</td>
<td>Low; Minimal impact on market</td>
<td></td>
<td>High; Advance payments; Changes how projects are undertaken</td>
</tr>
<tr>
<td>Criteria</td>
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<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>-------------------------------------------</td>
</tr>
<tr>
<td>- Customers</td>
<td>Reachable; Purchase orders</td>
<td>Loyal to others or unreachable</td>
<td>Minimum brand or other loyalties; Big-ticket item</td>
<td>No brand or other loyalties yet; Can become the standard</td>
</tr>
<tr>
<td>- User benefits</td>
<td>Less than one-year payback</td>
<td>Three years plus payback</td>
<td>Difference in market values of improved land from raw land; Very durable</td>
<td>Three month payback</td>
</tr>
<tr>
<td>- Product life</td>
<td>Durable</td>
<td>Perishable</td>
<td></td>
<td>Durable</td>
</tr>
<tr>
<td>• Market structure</td>
<td>Imperfect, fragmented</td>
<td>Highly concentrated or mature or declining industry</td>
<td>Imperfect, emerging</td>
<td>New, imperfect market in a highly fragmented, mature, and intensely competitive industry</td>
</tr>
<tr>
<td>• Market size</td>
<td>100+ million to $1 billion sales potential</td>
<td>Unknown, less than $10 million or multibillion sales</td>
<td>Unknown, but existing and growing market</td>
<td>Under $10 million today, Maybe $1 billion to $10 billion someday</td>
</tr>
<tr>
<td>Criteria</td>
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<td>The Model's Lowest Potential</td>
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<td>-------------------------------------------</td>
</tr>
<tr>
<td>Market growth rate</td>
<td>Growth at 30-50% or more</td>
<td>Contracting or less than 10%</td>
<td>Unknown, but growing rapidly and starting to thrive</td>
<td>Unknown, but growing rapidly and creating new niches</td>
</tr>
<tr>
<td>Market capacity</td>
<td>At or near full capacity</td>
<td>Under capacity</td>
<td>Under capacity, but growing</td>
<td>Under capacity, but rapidly growing demand</td>
</tr>
<tr>
<td>Market share attainment</td>
<td>20% or more; Leader</td>
<td>Less than 5%</td>
<td>Unknown, but later became the leader</td>
<td>30% - 50%</td>
</tr>
<tr>
<td>Cost structure</td>
<td>Low-cost provider; Cost advantages; Insignificant economies of scale; Low costs of learning by doing</td>
<td>Declining cost</td>
<td>Not a low-cost provider; Insignificant economies of scale; Low costs of learning by doing</td>
<td>Not a low-cost provider; Significant economies of scale; Significant costs of learning by doing</td>
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### Table A.3 Economics

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<th>Criteria</th>
<th>The Model's Highest Potential</th>
<th>The Model's Lowest Potential</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Gross margins</td>
<td>Exceeding 40% and durable</td>
<td>Under 20%</td>
<td>Market-driven; Probably 20% - 40%</td>
<td>Not applicable</td>
</tr>
<tr>
<td>• Profits after tax</td>
<td>Durable; at least 10-15%</td>
<td>Less than 5%</td>
<td>15% - 20%</td>
<td>Refused to answer</td>
</tr>
<tr>
<td>• Time to breakeven</td>
<td>Less than two years; Breakeven not creeping</td>
<td>Greater than four years; Breakeven creeping up</td>
<td>One year; Made profits every year thereafter</td>
<td>12 – 18 months</td>
</tr>
<tr>
<td>• Return on investment (ROI) potential</td>
<td>25% or more; High value</td>
<td>Less than 15-20%; Low value</td>
<td>15 – 20%</td>
<td>40%</td>
</tr>
<tr>
<td>• Capital requirements</td>
<td>Low to moderate; Fundable</td>
<td>Very high; Unfundable</td>
<td>High but fundable</td>
<td>High but fundable</td>
</tr>
<tr>
<td>• Internal rate of return (IRR) potential</td>
<td>25% or more per year</td>
<td>Less than 15% per year</td>
<td>15 – 18% minimum; 22% average over 20-year period</td>
<td>Unknown</td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model’s Highest Potential</td>
<td>The Model’s Lowest Potential</td>
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<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Free cash flow characteristics</td>
<td>Favorable; sustainable; 20-30% or more of sales</td>
<td>Less than 10% of sales</td>
<td>Not favorable nor sustainable in land subdivision business; Unlike commercial real estate business</td>
<td>Very favorable in the short run; Favorable and sustainable in the long run</td>
</tr>
<tr>
<td>Sales growth</td>
<td>Moderate to high (15-20%)</td>
<td>Less than 10%</td>
<td>20%</td>
<td>1000% in the short run; Lesser but viable in the long run</td>
</tr>
<tr>
<td>Asset intensity</td>
<td>Low/sales $</td>
<td>High</td>
<td>High</td>
<td>Moderate</td>
</tr>
<tr>
<td>Spontaneous working capital</td>
<td>Low, incremental requirements</td>
<td>High requirements</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model’s Highest Potential</td>
<td>The Model’s Lowest Potential</td>
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</tr>
<tr>
<td>- Strategic value</td>
<td>High; Valuable technology, Distribution, Customer base, Geographic coverage, Proprietary technology, Contractual rights</td>
<td>Low or none</td>
<td>Moderate; Value of its large capital assets can be eroded by external circumstances; Tenant base, Regional concentration, Management expertise</td>
<td>High; Potential to become a standard; Installed customer base, Market niches</td>
</tr>
<tr>
<td>- Valuation multiples</td>
<td>Price/earnings ≥ 20x</td>
<td>Price/earnings ≤ 5x</td>
<td>Not given</td>
<td>100 x Revenue</td>
</tr>
<tr>
<td>and comparables</td>
<td>EBIT ≥ 8 to 10x</td>
<td>EBIT ≤ 3 to 4x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revenue ≥ 1.5 to 2x</td>
<td>Revenue ≤ 0.4x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free cash flow ≥ 8 to 10x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
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<td>Collaborative Structures</td>
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<td>--------------------------</td>
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<td>----------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Exit mechanism and</td>
<td>Present or envisioned options</td>
<td>Undefined; Illiquid investment</td>
<td>No harvest objective at startup in 1970; Executed an MBO in 1995</td>
<td>Cashflow business, Buying out investors, IPO, Strategic acquisition</td>
</tr>
<tr>
<td>strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital market context</td>
<td>Favorable valuations, timing, capital available; Realizable liquidity</td>
<td>Unfavorable; Credit crunch</td>
<td>Favorable valuations, Right timing, Capital available</td>
<td>Planned for harvest during favorable conditions</td>
</tr>
</tbody>
</table>
Table A.5 Competitive Advantage

<table>
<thead>
<tr>
<th>Criteria</th>
<th>The Model's Highest Potential</th>
<th>The Model's Lowest Potential</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed and variable costs</strong></td>
<td>Lowest-cost provider;</td>
<td>Highest</td>
<td>Not a low-cost</td>
<td>Not a low-cost</td>
</tr>
<tr>
<td></td>
<td>Lowest marketing and</td>
<td></td>
<td>provider; Highest</td>
<td>provider; Lowest</td>
</tr>
<tr>
<td></td>
<td>distribution costs;</td>
<td></td>
<td>marketing cost;</td>
<td>marketing cost; High</td>
</tr>
<tr>
<td></td>
<td>High operating leverage</td>
<td></td>
<td>Moderate operating</td>
<td>operating leverage</td>
</tr>
<tr>
<td><strong>Control over costs, prices, and marketing channels</strong></td>
<td>Moderate to strong</td>
<td>Weak</td>
<td>Moderate over costs;</td>
<td>Strong in all</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weak over prices;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strong over marketing channels</td>
<td></td>
</tr>
<tr>
<td><strong>Barriers to entry</strong></td>
<td>Have or can gain</td>
<td>None</td>
<td>None</td>
<td>Have, but so does</td>
</tr>
<tr>
<td>- Proprietary protection</td>
<td></td>
<td></td>
<td></td>
<td>competition</td>
</tr>
<tr>
<td>- Response/lead time</td>
<td>Competition slow;</td>
<td>Unable to gain edge</td>
<td>Market innovation;</td>
<td>Have, but so does</td>
</tr>
<tr>
<td></td>
<td>Napping</td>
<td></td>
<td>Regional focus</td>
<td>competition</td>
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<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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</tr>
<tr>
<td>- Legal, contractual advantage</td>
<td>Proprietary or exclusivity</td>
<td>None</td>
<td>Exclusive control over desirable land</td>
<td>None</td>
</tr>
<tr>
<td>- Contacts and networks</td>
<td>Well-developed; Accessible</td>
<td>Crude; Limited</td>
<td>Well-developed and accessible, obtained through time and experience</td>
<td>Well-developed and accessible; Accumulated through active engagement in industry over time</td>
</tr>
<tr>
<td>- Key people</td>
<td>Top talent; A team</td>
<td>B or C team</td>
<td>Top talent</td>
<td>Top talent</td>
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<tr>
<td>Criterion</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
</tr>
<tr>
<td>---------------</td>
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</tr>
<tr>
<td>Presence</td>
<td>None</td>
<td>One or more</td>
<td>Seven</td>
<td>Three</td>
</tr>
<tr>
<td>- The Opportunity</td>
<td></td>
<td></td>
<td>Market capacity,</td>
<td>Market size, Market</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Return on investment,</td>
<td>capacity, Cost structure</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Free cash flow</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>characteristics, Exit</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>mechanism and</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>strategy, Fixed and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>variable costs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Team composition,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Industry and technical</td>
<td>experience</td>
</tr>
<tr>
<td>- The Team</td>
<td></td>
<td></td>
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## Table A.7 Strategic Differentiation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>The Model's Highest Potential</th>
<th>The Model's Lowest Potential</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of fit</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Team</td>
<td>Best in class; Excellent</td>
<td>B team; No free agents</td>
<td>High-quality</td>
<td>High-quality</td>
</tr>
<tr>
<td>Service management</td>
<td>Superior service concept</td>
<td>Perceived as unimportant</td>
<td>Not applicable</td>
<td>TeamStart – training and ongoing technical support</td>
</tr>
<tr>
<td>Timing</td>
<td>Opportunity seized, grown,</td>
<td>Closing window of opportunity</td>
<td>Opportune entry and exit</td>
<td>Window of opportunity just starting to open</td>
</tr>
<tr>
<td></td>
<td>and harvested under favorable market conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Groundbreaking; One of a kind</td>
<td>Many substitutes or competitors</td>
<td>None</td>
<td>Neither proprietary nor breakthrough</td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>-----------------------------------------------</td>
</tr>
<tr>
<td>• Flexibility</td>
<td>Able to adapt; Commit and decommit quickly</td>
<td>Slow; Stubborn</td>
<td>Adapted quickly to changing market cycles and trends</td>
<td>Able to adapt product to customer needs</td>
</tr>
<tr>
<td>• Opportunity</td>
<td>Always searching for opportunities</td>
<td>Operating in a vacuum; Napping</td>
<td>Regional concentration; Manage its own properties; Reading periodicals; Participating in industry seminars; Network constantly</td>
<td>Seeks out other customers such as financial institutions and facilities managers; Reading, thinking, speaking, and teaching</td>
</tr>
<tr>
<td>orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pricing</td>
<td>At or near leader</td>
<td>Undercut competition; Low prices</td>
<td>Market-driven</td>
<td>No established market leader yet; Sets own price due to high value-added product and service</td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
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<td>Collaborative Structures</td>
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</tr>
<tr>
<td>• Marketing and distribution channels</td>
<td>Accessible; Networks in place</td>
<td>Unknown; Inaccessible</td>
<td>Unique, creative, ingenious; Paradigm shift</td>
<td>Application service provider over traditional software resellers</td>
</tr>
<tr>
<td>• Room for error</td>
<td>Forgiving strategy</td>
<td>Unforgiving, rigid strategy</td>
<td>Forgiving strategy</td>
<td>Forgiving strategy</td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>-----------------------------------------------</td>
</tr>
<tr>
<td>• Team composition</td>
<td>All-star combinations;</td>
<td>Weak or solo entrepreneur</td>
<td>Bob essentially started by himself; Hired key managers as company grew</td>
<td>Complementary functional expertise in construction, software development, customer support, sales, etc.</td>
</tr>
<tr>
<td></td>
<td>Free agents; complementary and compatible skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Industry and technical</td>
<td>Top of the field; Super track record</td>
<td>Underdeveloped</td>
<td>Bob had industry experience; Key managers had little or no experience</td>
<td>Management and technical experience in construction and IT industries, plus sales and customer support</td>
</tr>
<tr>
<td>experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Intellectual honesty</td>
<td>Know what they do not know</td>
<td>Do not want to know what they do not know</td>
<td>Knew marketing and sales, retail sector; Hired technical people</td>
<td>Knew construction; Hired software developers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Criteria</td>
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</tr>
<tr>
<td>• Integrity and</td>
<td>Highest standards</td>
<td>Questionable</td>
<td>Primary focus of</td>
<td>Nationally recognized;</td>
</tr>
<tr>
<td>reputation</td>
<td></td>
<td></td>
<td>organization and people</td>
<td>Pub. Articles; Awards</td>
</tr>
<tr>
<td>• Team philosophies</td>
<td>Guides how a team</td>
<td>None or few</td>
<td>Fair treatment of</td>
<td>Thoughtful and people-</td>
</tr>
<tr>
<td>and attitudes</td>
<td>works together:</td>
<td></td>
<td>everyone; Constant</td>
<td>oriented service;</td>
</tr>
<tr>
<td>- Unwritten ground</td>
<td>cohesion, teamwork,</td>
<td></td>
<td>customer focus; Integrity</td>
<td></td>
</tr>
<tr>
<td>rules</td>
<td>integrity, commitment to</td>
<td></td>
<td>in all dealings; Growth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the long haul and value</td>
<td></td>
<td>opportunities for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>creation, and fairness</td>
<td></td>
<td>employees</td>
<td></td>
</tr>
<tr>
<td>- Rewards,</td>
<td>harvest mind-set, equal</td>
<td>No ownership</td>
<td>Stock options, profit-</td>
<td>Base pay at market rates,</td>
</tr>
<tr>
<td>Compensation, and</td>
<td>inequality, sharing of the</td>
<td></td>
<td>sharing</td>
<td>stock options based on</td>
</tr>
<tr>
<td>Incentive Structures</td>
<td>harvest</td>
<td></td>
<td></td>
<td>company valuation and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td>performance</td>
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</table>
Table A.9 Personal Qualities

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<tr>
<th>Criteria</th>
<th>The Model's Highest Potential</th>
<th>The Model's Lowest Potential</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Apprenticeship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Career plan</td>
<td>Selected prior work or a</td>
<td>None, Unprepared,</td>
<td>Did not plan to be an</td>
<td>Planned to be an</td>
</tr>
<tr>
<td></td>
<td>career to prepare</td>
<td>Random selection</td>
<td>entrepreneur</td>
<td>entrepreneur, but did not</td>
</tr>
<tr>
<td></td>
<td>specifically for an</td>
<td></td>
<td></td>
<td>select prior work or</td>
</tr>
<tr>
<td></td>
<td>entrepreneurial career</td>
<td></td>
<td></td>
<td>career</td>
</tr>
<tr>
<td>- Experience</td>
<td>8 to 10 years of</td>
<td>None, Inexperienced,</td>
<td>12 years of marketing</td>
<td>16 years of construction</td>
</tr>
<tr>
<td></td>
<td>substantial experience in</td>
<td>Irrelevant</td>
<td>experience, including 4</td>
<td>experience, including 7</td>
</tr>
<tr>
<td></td>
<td>the industry, market, and</td>
<td></td>
<td>years of relevant real</td>
<td>years as a manager, and 6</td>
</tr>
<tr>
<td></td>
<td>technology niche within</td>
<td></td>
<td>estate experience, plus 1</td>
<td>years as owner, CEO, and</td>
</tr>
<tr>
<td></td>
<td>which they eventually</td>
<td></td>
<td>year of direct</td>
<td>“intrapreneur”</td>
</tr>
<tr>
<td></td>
<td>launch, acquire, or build a</td>
<td></td>
<td>apprenticeship after</td>
<td></td>
</tr>
<tr>
<td></td>
<td>business</td>
<td></td>
<td>startup</td>
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</tr>
<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>----------------------------------------</td>
</tr>
<tr>
<td>- Intimate knowledge</td>
<td>Acquired through direct sales and marketing experience</td>
<td>None</td>
<td>Direct sales and marketing experience</td>
<td>Direct sales and marketing experience</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td>Impressive enough to give investors and creditors the necessary confidence; Made money for their employer before doing it for themselves</td>
<td>None, Unimpressive; Lost money of other people</td>
<td>Very impressive; Made money for LandVest, the last two companies he worked for, and especially, his early investors, before doing it for himself</td>
<td>Very impressive; In six years, doubled revenues of family-owned construction company.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- Track record</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- Net worth</td>
<td>Accumulated enough to contribute to funding the venture</td>
<td>Zero, negative</td>
<td>Not enough</td>
<td>Enough; Contributed most of the initial funding requirements</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Criteria</td>
<td>The Model’s Highest Potential</td>
<td>The Model’s Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>- Contacts and networks</td>
<td>Found and nurtured; Relevant, ultimately contribute to the success of their ventures</td>
<td>None, Irrelevant</td>
<td>Constantly networking; Accumulated over time</td>
<td>Accumulated by teaching, speaking, being active in community, and showing good work product</td>
</tr>
<tr>
<td></td>
<td>Parents, relatives; Shaped and nurtured by their closeness to entrepreneurs.</td>
<td>None</td>
<td>Father, Mother, Entrepreneur of food-franchising company</td>
<td>Father, Others</td>
</tr>
<tr>
<td>- Entrepreneurial heritage, influences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Goals and fit</td>
<td>Getting what you want; But wanting what you get</td>
<td>Surprises</td>
<td>Meeting of rewards and goals</td>
<td>Rewards immediately met expectations</td>
</tr>
<tr>
<td>• Desirability</td>
<td>Fits with lifestyle</td>
<td>Simply pursuing big money</td>
<td>Independence, the ability to make his own decisions, and to determine his destiny</td>
<td>Understood and willingly sacrificed many lifestyle factors</td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Opportunity cost</td>
<td>Acceptable cuts in salary</td>
<td>Comfortable with status quo</td>
<td>Stable stream of earnings from a large and established company</td>
<td>Already owned a construction company; Lifestyle sacrifices</td>
</tr>
<tr>
<td>Upside/downside issues</td>
<td>Attainable success/limited risks</td>
<td>Linear; On same continuum</td>
<td>Considered risks; Risk of indebtedness; High probability of failure; Too big for Bob's capacity</td>
<td>Considered risks; New market, product, technology, and model; Limited financial exposure</td>
</tr>
<tr>
<td>Risk/reward tolerance</td>
<td>Calculated risk; Low risk/reward ratio</td>
<td>Risk averse or gambler</td>
<td>Mitigated risks by apprenticing with LandVest; Used other people’s resources</td>
<td>Big risk-taker but took calculated risks with “expected value analysis”</td>
</tr>
<tr>
<td>Criteria</td>
<td>The Model's Highest Potential</td>
<td>The Model's Lowest Potential</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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</tr>
<tr>
<td>Stress tolerance</td>
<td>Thrives under pressure</td>
<td>Cracks under pressure</td>
<td>Tolerated numerous stresses over the years and got relief by communicating with wife</td>
<td>Coped with stresses related to &quot;new-ness&quot; of everything about the venture through communication and focus</td>
</tr>
<tr>
<td>Attitudes and behaviors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Acquirable</td>
<td>Commitment and determination, Ability to adapt, Leadership, etc.</td>
<td>Having only few</td>
<td>Persuasiveness, Sharing, Opportunity orientation, Ability to adapt, etc.</td>
<td>Motivation to excel, Leadership, Commitment, etc.</td>
</tr>
<tr>
<td>- Not so acquirable</td>
<td>Energy, Creativity &amp; innovativeness, Health, Intelligence, Values, etc.</td>
<td>Absence of one or more</td>
<td>Integrity, Creativity and innovativeness, Vision, Intelligence, etc.</td>
<td>Intelligence, Creativity and innovativeness, Energy, Integrity, etc.</td>
</tr>
<tr>
<td>Type</td>
<td>The Model's Characteristics</td>
<td>The Model's Value-Added Benefits</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>--------------------------------------------------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>• Board of directors &amp; advisors</td>
<td>Relevant experience, knowledge, and networks</td>
<td>Expert advice, valuable guidance, objective oversight, contacts</td>
<td>Varying backgrounds; Original equity investors; Advisors and mentors; Attracted other investors</td>
<td>Brought experience and networks; Thinking through issues and giving advice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Attorney</td>
<td>Experience and expertise in dealing with startups</td>
<td>Legal advice on specific issues facing a new venture</td>
<td>Original equity investor, Director; Recruited another original equity investor; Mentor, Advisor, Confidante; Long-term relationship</td>
<td>Experience in dealing with startups</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Accountant</td>
<td>Experienced general business advisor</td>
<td>Assistance on strategy, raising capital, etc.</td>
<td>Himself initially, and later hired an experienced one to be a key manager</td>
<td>Made occasional introductions</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Type</th>
<th>The Model's Characteristics</th>
<th>The Model's Value-Added Benefits</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultants</td>
<td>Specialized knowledge and experience</td>
<td>Solve particular problems and to fill gaps not filled by the management team</td>
<td>Planners, architects, engineers, contractors provided technical expertise</td>
<td>Software developers provided detailed expertise; IT strategy consultants provided big-picture vision</td>
</tr>
</tbody>
</table>
### Table A.11 Financial Capital

<table>
<thead>
<tr>
<th>Type</th>
<th>The Model's Characteristics</th>
<th>The Model's Value-Added Benefits</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equity capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Venture capital</td>
<td>Seeks high-growth potential and expects high rate of return</td>
<td>Tracking and coaching, attract additional capital, directors, management, suppliers, customers, etc.</td>
<td>None</td>
<td>Succeeding rounds; Picked for comfort; Added value with their wisdom</td>
</tr>
<tr>
<td>investors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Angel investors</td>
<td>Self-made, with relevant knowledge and experience</td>
<td>Business contacts and savvy business advice</td>
<td>Became directors, advisors, and mentors; Added value with their knowledge, experience, and contacts; Attracted succeeding investors</td>
<td>Initial round; Added value with their networks, by thinking through issues and giving advice</td>
</tr>
<tr>
<td>Type</td>
<td>The Model's Characteristics</td>
<td>The Model's Value-Added Benefits</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>--------------------------</td>
</tr>
<tr>
<td>Debt capital</td>
<td></td>
<td></td>
<td></td>
<td>Prior relationship, fine</td>
</tr>
<tr>
<td>- Bankers &amp; other lenders</td>
<td>Like partners, not difficult minority shareholders</td>
<td>Advice, guidance, and oversight</td>
<td>Original debt capital was from seller-financing; Later, bankers and lenders provided independent check on project viability; Mixed relationships</td>
<td></td>
</tr>
<tr>
<td>Criterion</td>
<td>The Model's Characteristics</td>
<td>The Model's Value-Added Benefits</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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<td>-------------------------</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Articulates the merits, requirements, risks, and potential rewards of the opportunity and how it will be seized</td>
<td>Raising capital from prospective investors; Guides company policies and actions later</td>
<td>Used effectively for raising capital; Guided company policies and strategies; Adapted to changing market conditions</td>
<td>Highly important for raising capital, guiding policies and actions of the company, and providing internal direction</td>
</tr>
</tbody>
</table>
### Table A.13 The Fit

<table>
<thead>
<tr>
<th>Criteria</th>
<th>The Model's Characteristics</th>
<th>The Model's Benefits</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunity with team and resources</strong></td>
<td>Industry and technical experience; Intellectual honesty; Personal qualities; Control of resources</td>
<td>Team using the available resources can pursue the opportunity.</td>
<td>Bob’s industry experience and personal qualities; Understood what people and financial resources to acquire, when and how</td>
<td>John’s industry experience and personal qualities; Understood what people resources to acquire, when and how</td>
</tr>
<tr>
<td><strong>Investors with opportunity and team</strong></td>
<td>Value-added investors; Chemistry with team</td>
<td>Valuable advice and guidance, network of contacts</td>
<td>Equity investors added a lot of value; Excellent chemistry</td>
<td>Angel and venture capital investors added value; Excellent chemistry</td>
</tr>
<tr>
<td><strong>Within the team</strong></td>
<td>Team chemistry</td>
<td>Voids are filled.</td>
<td>Inexperienced key managers initially but learned quickly and each developed competencies; Excellent chemistry</td>
<td>Varied work experiences; Performed similar roles before; Complementary functional expertise, Excellent chemistry</td>
</tr>
</tbody>
</table>
### Table A.14 The Balance

<table>
<thead>
<tr>
<th>Criteria</th>
<th>The Model’s Characteristics</th>
<th>The Model’s Benefits</th>
<th>Northland Investment</th>
<th>Collaborative Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Three driving forces</strong></td>
<td>Balance team and</td>
<td>Team using the available</td>
<td>Opportunity initially</td>
<td>Opportunity initially</td>
</tr>
<tr>
<td></td>
<td>resources with</td>
<td>resources can pursue the</td>
<td>outweighed Bob and his</td>
<td>outweighed John’s</td>
</tr>
<tr>
<td></td>
<td>opportunity; Rebalance in</td>
<td>opportunity</td>
<td>limited resources but he</td>
<td>abilities, but he hired key</td>
</tr>
<tr>
<td></td>
<td>later stages</td>
<td></td>
<td>learned the trade, raised</td>
<td>managers and consultants</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>capital, and slowly built</td>
<td>to help develop the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the team; Later re-</td>
<td>software; Raised venture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>balanced people and</td>
<td>capital to finance growth;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>resources to pursue</td>
<td>Adapted product and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>other opportunities</td>
<td>service to customer needs</td>
</tr>
<tr>
<td><strong>Risk and reward</strong></td>
<td>Taking calculated risks</td>
<td>Limits downside risks</td>
<td>Aimed for singles and</td>
<td>Aims for homeruns;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>doubles; Took calculated</td>
<td>Takes calculated risks and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>risks</td>
<td>also bases decision on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>feeling</td>
</tr>
<tr>
<td>Stages</td>
<td>The Model’s Characteristics</td>
<td>The Model’s Benefits</td>
<td>Northland Investment</td>
<td>Collaborative Structures</td>
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</tr>
<tr>
<td>• Startup</td>
<td>Opening window of opportunity</td>
<td>Able to recognize and decisive in seizing the opportunity</td>
<td>Limited availability of capital at startup; Window of opportunity just opening;</td>
<td>Venture capital warming up at startup; Internet use growing rapidly</td>
</tr>
<tr>
<td>• Growth</td>
<td>Changing market conditions</td>
<td>Able to adapt by changing business strategies</td>
<td>Changed business strategies in response to changing market conditions</td>
<td>Extend product line when market matures</td>
</tr>
<tr>
<td>• Harvest</td>
<td>Favorable capital market conditions</td>
<td>Maximize price</td>
<td>Personal timetable and real estate cycle dictated timing of harvest</td>
<td>Execution of harvest strategy driven by capital market conditions</td>
</tr>
</tbody>
</table>
A.2 Questionnaire

The thesis' conceptual framework is a model of the entrepreneurial process conceptualized by Jeffry Timmons, a teacher and practitioner of entrepreneurship. The model defines a success pattern common in the entrepreneurial process of high potential ventures. It consists of three driving forces—the opportunity, the team, and the resources—and the integrating elements—the fit, balance, and timing of these forces. This questionnaire follows this framework.

In order to apply the framework to the case studies, I developed specific questions, which are both closed-end and open-ended questions. The intent is to keep the questionnaire focused and at the same time, allowing for unexpected comments and insights. I also included comments that describe the context of the questions. The caveat of all these is that this questionnaire turned out to be quite long, which I am concerned the entrepreneur may find tedious to answer. Thus, it is understandable that the entrepreneur may make brief and concise comments, and I will try my best to extrapolate from them. The entrepreneur's patience and understanding is highly gratifying and very much appreciated.

With due consideration of the length of this questionnaire, I would like to propose the following strategy in accomplishing this questionnaire:

1. I email the questionnaire to the entrepreneur.

2. The entrepreneur answers the questions and emails them back to me.

(Note: Please write N.A. if the question is not applicable, and R.A. if you prefer not to answer the question.)
3. If necessary, I use a personal or phone interview to clarify some answers, expound on some questions, fill in missing information, and maybe ask questions that are more appropriate for an interview.

I believe this strategy allows for the entrepreneur to answer the questions in his own time, whereas in a pure Q&A interview, time is more limited, and answers may become constrained. In any case, I am flexible to your needs and convenience. Thank you very much for your participation and cooperation in my research.

Please outline the milestones of your entrepreneurial process, focusing on the key stages, i.e., startup, growth, distress (if applicable), maturity, and harvest. (Maybe better for interview)

A.2.1 The Opportunity

The opportunity is the first driving force of the entrepreneurial process. An opportunity has the qualities of being attractive, durable, timely, and is anchored in a product or service that creates or adds value for its buyer or end user.

- Can you please briefly and concisely describe your venture opportunity?

A.2.1.1 Industry and Market

The venture’s product or service has an identified market niche. It meets an important customer need and provides high value-added or value-created benefits to customers.

- What is the market for your product or service?
  - Who are your customers?
- What are the customer needs that you are meeting?
- How does your product or service add or create value for your customers?
- Can these benefits to customers be quantified, say, in monetary terms?
• Do customers in your market have brand or other loyalties?
• How long is the potential payback to the customer or user?
• How long is the product life?
• Is your company capable of expanding beyond a one-product company?
  o What are your plans?

Market structure is evidenced by the number of sellers, size distribution of sellers, whether products are differentiated, conditions of entry and exit, number of buyers, cost conditions, and sensitivity of demand to changes in price.
• What is your market structure?
  o Is it fragmented, imperfect, or emerging?
  o Or highly concentrated, perfectly competitive, mature, or declining?
• Are unfilled market niches identifiable?
• Are there information or knowledge gaps?
• Is the competitive environment profitable?
• How is the barrier to entry in your market?
• Does your market require high capital requirements and costs in order to achieve distribution and marketing presence?
• Are there price-cutting and other similar competitive strategies in your market?

Market size, growth, and cost structure
• What is the size of your market in terms of sales?
• What is your market share now?
  o What was or is going to be your market share five years after startup?
• What is the growth rate of your market?
  o Is it thriving and expansive, stable, or contracting?
• Does the growth of your market create new niches for new entrants?

• What is the capacity of your market, meaning, is there enough supply to meet growing demand?

• Is being a low-cost provider in your market important?
  o Is your company a low-cost provider?

• Are there significant economies of scale in your market? How?

• Are there significant costs of learning by doing?

A.2.1.2 Economics

• How do you price your product or service?
  o What is its current price?

• What costs are involved in providing your product or service?

  Gross margin is the unit selling price less direct and variable costs.

• What are your gross margins in percentage terms?
  o Do these allow for error and flexibility to learn from mistakes?

• What are your profits after-tax?
  o In percentage of sales?
  o And if possible, in absolute terms?

• What is your time to breakeven/positive cash flow?

• How much is your initial investment? (Personal and external sources)
  o How about succeeding major investments? (Personal and external sources)

• What is your return on investment (ROI) per year?
  o What was your ROI after five and ten years from startup?

• What are your capital requirements?
o How much are they in percentage of investment or annual budget terms?

• What is your internal rate of return (IRR) or annually compounded rate of return?

• What is your discount rate?
  o How did you arrive at this discount rate?

• What is your current valuation?

Unlevered free cash flow (FCF) is defined as earnings before interest but after taxes (EBIAT) plus amortization (A) and depreciation (D) less spontaneous working capital requirements (WC) less capital expenditures (CAPex), or mathematically,

\[ \text{FCF} = \text{EBIAT} + [A+D] - [\pm WC] - \text{CAPex}. \]

• What is your typical free cash flow as a percentage of sales?

• What is your annual sales growth?

• What is the level of your asset intensity per dollar of sales? (Low, moderate, or high)

• What is the level of your spontaneous working capital? (Low, moderate, or high)

### A.2.1.3 Harvest Potential

Harvest means realizing capital gains from exit mechanisms such as taking the company public or selling it to another company. Harvest potential can be measured by the opportunity’s strategic value in the industry, such as valuable technology, or the value-added strategic importance to the acquirer, such as distribution, customer base, geographic coverage, proprietary technology, contractual rights, and the like.

• What is your strategic value in the industry?

• What is your value-added strategic importance to a potential acquirer?

• What is your exit mechanism and strategy?
Part of the entrepreneur's analysis is to identify some of the historical boundaries for the valuations placed on comparable companies in the same industry, market, or technology area as the new venture.

- What do you think are some valuation multiples (x) that can be applied to your venture?
  - Price/earnings ≥ x
  - EBIT ≥ x
  - Revenue ≥ x
  - Free cash flow ≥ x

The context in which the sale or acquisition of the company takes place is largely driven by the capital market context at that particular point in time.

- What was the capital market context when you harvested the company?
- What was the capital market context when you started the company?

A.2.1.4 Competitive Advantage

- What is your competitive advantage?
- How did you attain your competitive advantage?
- Are you a low-cost producer?
- What is the level of your marketing and distribution costs? (Low, moderate, high)
- What is the level of your operating leverage, i.e., a measure of the division between fixed and variable costs? (Low, moderate, high)
- How sensitive are you to business cycles? (Low, moderate, high)
- How much degree of control do you have over costs, prices, and channels of distribution? (Weak, moderate, strong)
• Is there a dominant competitor in your market?
  o Does the dominant competitor exercise market power and influence over suppliers, customers, and pricing?
• What is the market share of the market leader?

Barriers to entry can be in the following forms:

1. Proprietary protection, regulatory advantage, or other legal or contractual advantage, such as exclusive rights to a market or with a distributor.
   • Do these create competitive advantage in your market?
   • Which of these do you have?
2. Fast response/lead times in technology, product innovation, market innovation, people, location, resources, or capacity.
   • Do these create competitive advantage in your market?
   • Which of these do you have?
3. Network of beneficial contacts accumulated over a considerable length of time, and a top-quality management team
   • Do these create competitive advantage in your market?
   • How did you obtain them?
   • What other entry barriers can you erect?
   • How do you compete against new entrants and smaller but growing competition?
   • What entry barriers did you face?
   • How do you compete against larger and more established competition?
A.2.1.5 Fatal Flaw Issue

A fatal flaw is a condition that makes an opportunity lower potential or unattractive. It relates to any one of the above criteria.

- What are the fatal flaws of a new venture in your industry/market?
- How did you correct your fatal flaws?

A.2.1.6 Strategic Differentiation

- Do you have a superior service concept that you deliver consistently?
  - What is it about?
- Do you have a product based on proprietary and breakthrough technology?
- Do you allow the flexibility to commit and decommit quickly, to adapt, and to abandon if necessary?
  - In what ways have you done this?

Opportunity-orientation is being constantly alert to the marketplace or continually searching for opportunities.

- How do you keep yourself opportunity-oriented?
- What is your pricing policy?
  - Do you price at or near the market leader’s price?
  - Do you under-price the competition?
- Do you have access to new distribution channels that can leapfrog and demolish traditional channels?
  - What are the traditional channels?
  - What are these new distribution channels?
A room for error allows the flexibility to learn and survive from mistakes and bad things that happen unexpectedly.

- How do you allow room for error in your business and financial strategies? (gross margins, operating margins, leverage, estimates of revenues, costs, cash flows, timing, capital requirements, etc.)

A.2.2 The Team

The entrepreneurial team is the second driving force of the entrepreneurial process. The team is composed of the lead entrepreneur, the founding partners, and the key managers.

- How did you pick your partners?
- How did you pick your key managers?

A.2.2.1 Team Qualities

Team qualities are evidenced by its composition, industry and technical experience, integrity and reputation, its team philosophies and attitudes, etc.

- What were your key skills that helped you succeed as an entrepreneur?
- What was your work experience prior to starting your own company?
- What were the work experiences of your partners and key managers?
- How did you and your partners complement each other?
- How did your key managers complement you and your partners?
- How important are integrity and reputation in your business?
- What were your team philosophies and attitudes?
- How did you formulate your rewards, compensation, and incentive structures?
Free agents are key people who are able to pursue the opportunity because they are clear of employment, non-compete, proprietary rights, and trade secret agreements.

- Are your partners and key managers free agents?
- Do you use such agreements on your key managers?

Intellectual honesty is knowing what you do and do not know.

- What were the things about the business you knew you understood well when you started your company?
- What were the things you knew you did not understand well?
  - How did you compensate for these shortcomings?

**A.2.2.2 Personal Qualities**

The concept of apprenticeship for entrepreneurs is selecting prior work or a career to prepare specifically for an entrepreneurial career.

- Is your becoming an entrepreneur part of your career plan?
- Did you select your prior work or career to prepare specifically for an entrepreneurial career?
  - How did you know what to prepare for?
  - How did you know where the windows for acquiring the relevant exposure lie?
  - How did you anticipate these?
  - How did you know where to position yourself?
  - How do you know when to move on?
  - Did you make money for your previous employers? How?
- How did you build contacts and nurture networks?
• How did you establish a track record or reputation in your industry, market, or technology niche?
  o Was this track record critical in giving investors and creditors the necessary confidence?
• How did you acquire intimate knowledge of the customer, distribution channels, and market?
• Do you have direct sales and marketing experience?
• Did you accumulate enough net worth to contribute to funding the venture?
• Did you evolve from an entrepreneurial heritage, i.e., parents or relatives?
• Who had the greatest influence on your becoming an entrepreneur?
  o What did this person do?
• Were you closely associated with non-relative entrepreneurs who influenced you?
  o Who were they and what did they do?

In addition to apprenticeship, the personal qualities of the founders, i.e., the lead entrepreneur and the partners, are also evidenced by their goals and fit, desirability, and opportunity costs, i.e., they may be foregoing a stable stream of earnings from an alternative occupation in a large and established company.
• Did the rewards from the venture meet your expectations from it at the beginning?
• Aside from the attractiveness or high potential of the opportunity, what were the personal factors you considered in deciding to pursue the opportunity? (Lifestyle)
• Did you consider your opportunity costs? What were they?

Founders’ personal qualities are also evidenced by upside/downside issues, risk/reward tolerance, and stress tolerance.
• Did you consider the potential risks of the venture?
o What were they?

- To what extent were you financially exposed to those risks?
- How much of a risk-taker are you?
- How did you take calculated risks?
- What were the stresses did you encounter in starting your company?
  o How did you cope with those stresses?
- What stresses did you encounter in later years?
  o How did you cope with those stresses?

There are desirable attitudes & behaviors that can be acquired to become a successful entrepreneur. Some examples are commitment and determination, leadership, and opportunity obsession. There are also some that are not so acquirable, such as energy & health, intelligence, and values.

- What do you think are the desirable and acquirable attitudes & behaviors of a successful entrepreneur?
- How about the not so acquirable ones?

A.2.3 The Resources

The resources is the third driving force of the entrepreneurial process. The resource requirements of a new venture include people, financial capital, and the business plan.

- How did you determine what resources are needed, when they are needed, and how to acquire them?
- What creative strategies and tactics did you undertake to use the minimum possible amount of resources, and to marshal and gain control of them?
  o What were the effects of these on your company?
• How did you gain control of other people's resources, e.g., money invested or loaned by other people, and special arrangements with customers and suppliers?

A.2.3.1 People

People resources include the boards of directors and advisors, the attorney, the accountant, and the consultants.

• How did you pick your directors and advisors?
• What are their characteristics? (Knowledge, experience, networks, etc.)
• How did their characteristics add value to the venture?
• What value-added benefits did you get from your attorney in addition to legal advice?
• What value-added benefits did you get from your accountant in addition to audits and taxation?
• What value-added benefits did you get from your consultants?

A.2.3.2 Financial Capital

Sources of financial capital include formal and informal investors, bankers and other lenders.

• Do you think financial capital comes first, ahead of the opportunity, the team, and other resources?
• How did you know how much capital to raise, and when and where to raise it?
• How did you raise startup capital?
• How did you raise growth capital?

Venture capitalists supply equity capital and other resources to entrepreneurs in business with high growth potential in hopes of achieving a high rate of return on invested funds.

• How did you pick your venture capital investors?
What value-added benefits do you get from them in addition to their money?

Angels are self-made entrepreneur millionaires who have made it on their own, and have substantial business and financial experience.

- How did you pick your angel investors?
- What value-added benefits do you get from them in addition to their money?

The banker or other lenders provide debt capital when the venture is stable.

- How did you pick your bankers and other lenders?
- How is your relationship with them?

A.2.3.3 The Business Plan

The business plan articulates the business opportunity, the product or service, the size of the market, the customers and competitors, the marketing and sales strategy, the sustainable competitive advantage, financial projections, the action plan, and lastly, it answers the all-important question, “Is the venture feasible?”

- Did you have a business plan?
  - Did you use it to raise capital? Was it an effective tool for raising capital?
  - Did it guide the policies and actions of your company over a number of years?
  - What other purpose did the business plan serve?
  - How important is having a business plan?

A.2.4 The Fit, Balance, and Timing

The integrating elements of the three driving forces of the entrepreneurial process are the fit, balance, and timing of these driving forces.
A.2.4.1 The Fit

The fit in the entrepreneurial process is evidenced by:

- The fit of the opportunity with the team and the resources;
- The fit of the investors with the opportunity and the team; and
- The fit within the team.

- How would you qualify the ability of the team to pursue the opportunity while using the resources that are available?
- How was the chemistry with your investors?
- How was the team chemistry between you, your partners, and key managers?

A.2.4.2 The Balance

This relates to the ability of the lead entrepreneur to balance and re-balance the opportunity and the resources that are available. For example, an opportunity with a huge potential can far outweigh a one-man team with very limited resources.

- Can you describe the imbalance of the opportunity, the team, and the resources at the outset?
- How did you achieve balance?
  - How did you refine the potential opportunity?
  - How did you build the team?
  - How did you fill-in the resource gaps?

In order to sustain growth, the entrepreneur assesses whether the size of the team is large enough or too small, whether the resources are sufficient or not, and whether the strategies...
and tactics are effective or not. The entrepreneur undertakes the constant re-balancing if and when necessary.

- What re-balancing did you undertake in order to sustain growth?
  - How did you refine the opportunity in later stages?
  - How do you assess the size of the team?
  - How do you assess the sufficiency of the resources?
  - How did you assess the effectiveness of your strategies?

Another constant balancing act involves the positive relationship between risk and reward.

- Do you aim for singles and doubles or triples and homeruns?
- How do you balance risk and reward?

### A.2.4.3 The Timing

The window of opportunity is a time interval wherein opportunities exist or are created in real time.

- What was the timing involved when you recognized and seized the opportunity, i.e., started the company?
- How do you know when the market is mature?
  - What do you do then?
- What is the timing involved in executing the harvest strategy, i.e., going public or selling the company?
A.3 Refinements to Timmons’ Model

The thesis’ conceptual framework deviates slightly from Timmons’ model as presented in his book. Following are the refinements I made:

A.3.1 The Opportunity

I transferred the model’s Management Team Issues and Personal Criteria into The Team. I renamed them into Team Qualities and Personal Qualities, respectively.

A.3.2 The Team

I added Team Philosophies into Team Qualities, and also Apprenticeship, and Attitudes and Behaviors into Personal Qualities. I also reorganized the various criteria under Team Qualities and Personal Qualities into a more logical order. I renamed Entrepreneurial Team into Team Composition, and Integrity into Integrity and Reputation.

A.3.3 The Resources

I organized this into a framework and tabulated the various types of resources. I distinguished key managers and investors from people resources, and reclassified them under The Team and Financial Capital, respectively.

A.3.4 The Fit, Balance, and Timing

I organized these into a framework and tabulated the criteria for evaluating them.