

CHAPTER 2 – THE ART OF INNOVATION

OBJECTIVES

- Understand the changing role of innovation.
- Create frameworks for innovating.
- Source and filter ideas and build them into opportunities.
- Analyze opportunities using a five-step process.
- Use a framework to evaluate a business opportunity.

CHAPTER OVERVIEW AND TIPS ON TEACHING CHAPTER

This chapter covers two major topics: how to generate ideas, and then how to screen and build them into opportunities. To engage the students, we begin by using the Becky Minard Case at the chapter outset to show how a simple “point of pain” can be the start of something big. Also, we discuss how the internet is providing new opportunities for entrepreneurs as well as different customer expectations. Have the students discuss iPhone Apps. The Greif case can be used to show how “commodity products” can be repositioned with added services—an introduction to creative business models, which is expanded in chapter 3. There is a discussion of other “macro” changes in the business environment intended to broaden the view of students. Innovation types are covered using lighting as a unifying theme. The Blyth Candle case is used to illustrate how incremental innovation can be a powerful way to grow a business – disruptive innovation is not always required! We then provide a number of frameworks for innovation. The students may be asked to create their own personal innovation framework for class discussion and should look at the case Pizza on the Truck. The second part of the chapter covers tools for screening ideas. Students should attempt the study questions and the first two exercises at the end of the chapter. The management exercises may be used if management issues are to be explored more deeply.

INTRODUCTION

- Entrepreneurs are often considered highly innovative, always coming up with unique ideas for new businesses.
- Entrepreneurs do not have to be innovative to be successful, but they do have to understand and manage the innovation process within their companies.

- The frameworks in which a sustainable, high-profit company is constructed are called business models.
- A new company will usually start with an initial concept of how it will be structured to serve its customers, work with suppliers, and evolve. As the company grows, the entrepreneur will uncover knowledge about the company's environment that may not have been obvious at the outset. This new information must be fed into the company's plans to stimulate innovation, not only in products and services, but also in the very fabric of how the company will operate within a unique business model.

**INSTRUCTOR'S NOTES ON
PROFILE: BECKY MINARD AND PAAL GISHOLT—
FINDING A POINT OF PAIN**

Have students read the profile on Becky Minard and Paal Gisholt and discuss with them how new and innovative methods of doing things have resulted in entrepreneurial ideas and ventures. Have students provide real world examples of innovative methods that have been employed by other entrepreneurs.

WHY INNOVATION IS IMPORTANT

The Growth of the Internet and Access to Knowledge and Ideas

- Relatively recently, computers (and other digital devices) have become connected in networks, and companies such as Google have developed automated search techniques. This is resulting in a cataclysmic shift from an emphasis on local products and productivity to global knowledge sharing.
- To remain competitive today, it is no longer sufficient to rely on local knowhow; indeed it is vital to access the best ideas, technologies, research resources, and experts, wherever they are.
- Knowledge-centered structures are variously referred to as “virtual knowledge networks” or “virtual clusters.
- We can envision a world not long in the future where nearly everyone will be able to search the world's knowledge, locate experts on demand, and do this more or less for free.
- For an entrepreneur, this means access to more ideas, more stimulation, and more expertise when conceiving and growing a business opportunity.

The Internet and Customer Expectations

- The Internet is also changing the way customers view suppliers. It enables us to find and compare products, even sometimes having the product made to order instantly; to choose when and how to have it delivered; and to decide how to pay for or finance the purchase.
- The lesson is this: think service, not product; personalized solution, not third-party hand-off.

The Internet's Impact on Business Models and Funding

- The Internet is radically changing the way that entrepreneurs design new business models, access resources, market products, and fund their companies.

INSTRUCTOR'S NOTES ON MINI-CASE: GRIEF PACKAGING (WWW.GREIF.COM)

Have students read the mini- case on Grief packaging and discuss with them how a “traditional idea” can be extended to a more specialized entrepreneurial idea. In the case, this example was converting the business from shipping bulk chemicals to a “trip leasing company for shipping specialty chemicals. What other examples/ideas can the students think of? For example, a boutique toy story owner could move from providing unique toys to providing toys that focus on kids’ development (including autistic children).

Barriers to Trade

- Historical trade barriers for goods and services are rapidly being dismantled, opening up all markets to global suppliers.
- Any new product can be copied within days, then manufactured and shipped into most markets within a few weeks.
- The entrepreneur’s defenses against this happening are having a sound intellectual property strategy and an Innovative business model that supplies more than just a product.

Access to Capital

- Geographical location no longer provides any significant advantage for access to major sources of capital.
- Venture capital (VC) remains one source of funding that prefers proximity, but overall, VC funds are a very small part of total growth capital. Even venture capital is trending international.

- For the entrepreneur, this means that the competition for growth capital is becoming tougher.

Technological Obsolescence

A product life cycle is the time that a product is able to command a high profit margin in the market before it becomes obsolete or develops intense competition. Life cycles are continually declining. The budding entrepreneur can learn several lessons here:

- It is becoming more and more difficult to build a company around a single product idea without strong patent protection. This is particularly true for consumer products that have a very short life cycle.
- Protective barriers must become part of any business model, whether via patents, trade secrets, uniqueness in the business model, or fast movement to market to stay ahead of competitors.
- Innovation is not a single event; one should never stop innovating.
- You should always imagine that there is someone, somewhere, having the same idea.
- The entrepreneur needs to solve customers' problems: think service, not product.

DEFINITION AND TYPES OF INNOVATION

Definition of Innovation

Successful innovation is the use of new technological knowledge, and/or new market knowledge, employed within a business model that can deliver a new product and/or service to customers who will purchase at a price that will provide profits.

“Successful. . .”—to emphasize that we are not interested in innovation that fails to deliver and maintain value for the innovating enterprise, or in the case of social entrepreneurs (see Chapter 7) stakeholders and society in general.

“. . . employed within a business model. . .”—to stress that innovation in the business model is at least as important, as purely product or process technology. (This theme is developed in Chapter 3.)

“. . . who will purchase at a price that will provide profits”—to stress that success requires that the innovator be able to extract benefit from the value created and not allow it to migrate to partners, customers, or offshore manufacturers.

Types of Innovation

- There are two major classes of innovation: incremental and radical.
- Incremental innovations are continual improvements on an existing product or service or in the ways that products are manufactured and delivered.

- Radical innovations are the result of major changes in the ground rules of competition, culminating in either a customer satisfying her needs in an entirely new way or in a totally new need being created through innovation.

**INTSTRUCTOR'S NOTES ON
THE S CURVES OF INNOVATION AND THE EVOLUTION OF LIGHTING
VERSUS BLYTH CANDLES**

Have students look at Figure 2-1, the S Curves of Innovation and then read the Evolution of Lighting and the mini-case on Blyth Candles. Have them discuss The S Curve of Innovation as it relates to the lighting (including electric light, candles, as well as other types of lighting).

Disruptive Innovation

- The term disruptive innovation is often used to describe innovations that disrupt the status quo. As companies grow, they develop cultures and procedures that create internal barriers to change.
- The greater the mismatch of the innovation to the current know-how and the more it threatens to destroy existing product sales, the tougher it is for a large company to respond.

INSTRUCTOR'S NOTES ON DISRUPTIVE INNOVATION

Have students discuss from the examples in the paragraph on Disruptive Innovation how some companies have disrupted or thwarted the entrepreneurial path of other companies through the former company's innovation(s). What lessons can the students learn from such examples?

FRAMEWORKS FOR LEARNING INNOVATION SKILLS

If someone has the desire to be an entrepreneur, then innovation skills can be effectively learned. The best way to achieve this expertise is by using examples and practicing the learned skills.

**INSTRUCTOR'S NOTES ON IMPORTANT INNOVATIONS BY
US SMALL FIRMS IN THE LAST HALF CENTURY**

As a possible homework assignment, have students look at Table 2-1 and choose any two important innovations by U.S. small firms in the last century. In the follow up class have

students discuss what they researched. What was significant about the innovation? What struggles did the entrepreneur of the innovation encounter? What lessons did the student learn from the research?

Intersection of Technology Trends

We live in a world where technology is changing quickly. Watching cost and performance trends, particularly where they begin to intersect, can give rise to whole new innovative business opportunities.

INSTRUCTOR'S NOTES ON TECHNOLOGY TRENDS AND NETFLIX

Have students read the mini-case on Netflix and ask students how they think Netflix will/should respond to the disruption of their entrepreneurial venture. What are some additional future actions Netflix can take, so that they do not succumb to further disruption like Blockbuster or Borders did?

Analyzing Existing Businesses

Understanding how existing businesses work, their cost structure, and customer points of pain can lead to ideas about how they can be effectively attacked.

INSTRUCTOR'S NOTES ON PIZZA ON A TRUCK

Have students read the mini-case: Pizza-on-a Truck and answer the following questions provided in the case (from the company's perspective):

How can we totally restructure the pizza business on a national basis and grab the lion's share of the pizza market? Are there any technical advances that might impact the pizza business? Here you can get pretty creative. The following are some ideas culled from searching the patent database, surfing the web, and talking to experts in a number of different fields. (Remember: Use the vast sources of information now available at your fingertips.)

Package delivery companies such as UPS and FedEx have invested heavily in software to optimize the most efficient routes for their vehicles depending on today's delivery

addresses. How can this be applied to pizza delivery?

Cars are commonly fitted with global positioning systems (GPSs) that determine where the car is and display a map and instructions on how to get to a desired location. How can this assist in our Pizza business?

Customers are increasingly becoming accustomed to using the Internet for ordering. Can this be applied to pizza ordering?

Because labor reliability and costs are major issues for pizza outlets, Pizza Hut has developed working prototype robots for assembling pizzas automatically based on an order input. The robots make the pizza and feed it into an oven. The time in the oven depends on the size and ingredients, so a perfect pizza comes out every time. How can all these apparently unconnected developments be combined to create an entirely new pizza business?

FINDING AND ASSESSING IDEAS

The world is full of ideas, but ideas are not opportunities, and opportunities are not ready-made to build a business around. Here are five ways to build upon already existing material and still provide a profit-driven concept:

- Develop ideas as an extension or redesign an existing service (Marriott Senior Living Services; Sam's Club—an extension of Wal-Mart).
- Resegment and create an improved service (overnight delivery, such as FedEx, or buying cheaper airline tickets from Priceline.com).
- Redifferentiate and market the product at a lower price (Internet shopping, Sam's Club).
- Add value to an existing product or service (linked brands, such as PCs just for the Internet).
- Develop or redesign a new version of an existing product (Snapple Iced Tea, fresh-baked chocolate chip cookies, and Krispy Kreme doughnuts).

Idea Assessment

The Internet has made idea searching much faster and broader, and it also makes it easy to check whether an idea has already been discovered and put into a business.

Entrepreneurs source ideas from many places.

OPPORTUNITY: FIVE PHASES TO SUCCESS

Identifying which business ideas have real commercial potential is one of the most difficult challenges that an entrepreneur will face. This section describes a will help entrepreneurs to know a winning business area when they see one. Have students also look at Figure 2-3, The Five Phases to Success.

Phase 1: Seize the Opportunity

- The basic objective is to define the criteria that would make a business opportunity worthwhile to pursue.
- Look at time horizons.
- Evaluate opportunity costs.

Phase 2: Investigate the Need through Market Research

- The first step is to identify, measure, and document the need for the product or service. This means making a specific financial forecast of the actual potential and anticipated return for this proposed product or service.
- Preliminary Questions (Need, Niche/Competition, Cost and Manufacture, Advertisement and Packaging, Sales, Transport and Employees).
- Start with Data Collection
- Design and execute a study to get answers.
- Analyze the Data

Phase 3: Develop the Plan

A business plan charts the current and future components of the business in about thirty to forty pages.

- Determine the viability of the business and application in selected markets.
- Provide guidance in planning and organizing the activities and goals.
- Serve as a vehicle to obtain financing and personnel for the business.

The business plan is the backbone of the business. This single document guides the entrepreneur at three critical junctures:

- It simplifies decision making during times of crisis.
- It is the roadmap at points of indecision.
- It is a motivational guide during setbacks or downturns.

An extremely valuable outcome of preparing and writing an outline plan at this stage is identifying flaws and creating contingencies.

Phase 4: Determine the Resources Needed

All businesses must address resource capabilities to foster venture development.

- Personal contacts and networking
- Financing requirements
- Sources of technical skills

Phase 5: Manage the Business

1. Deliver a Total Solution
2. Cultivate Advanced Resources

Evaluation Screening for Patent Protection

- Is the service, product, or idea unique to get a head start on the competition?
- Does the service or product represent a breakthrough (either high-tech or different from others)?
- Is the field changing so slowly that the innovation will be valuable for at least ten years?
- Have other, less expensive but adequate protective measures been explored?
- Has an attorney discussed the options and recommended that a patent be pursued?
- Is the fee for a patent search and application affordable?

If the answer to two or more of these questions was “yes,” patent protection for the idea and opportunity should be seriously considered. However, if a disclosure document, which essentially protects the idea for the first year, will suffice, then that option should be considered first.

Master Case Notes – Neoforma

At the end of chapters 1, 2, 3, 5, 7, 8, 9, 11, 12, 13, and in the Addendum there are a number of case questions based on the Neoforma Master Case. The instructor's notes for these case study exercises appear in the Instructor's Guide to the Managing a Start-up Course in the file entitled Instructor's Guides.