CHAPTER 7

Developing and Implementing the Technology Business Plan

TaskRabbit SUCCESS DUE TO EFFECTIVE PLANNING

Who would have thought that a girl raised in a town so small that it had no street lights and who graduated from a small women's college in rural Virginia where dairy cows were a part of the campus would come up with a disruptive technology? But that is the background of Leah Busque founder of TaskRabbit in San Francisco. Leah built the original TaskRabbit product and created its original bunny logo. The company is a type of eBay for errands for anyone who has a need to find someone to take care of things for them from walking a dog, to cleaning dishes, to waiting in line for the new iPhone 5, to assembling IKEA furniture. Driven by the desire to help people (neighbors) connect with other people (neighbors), Busque wanted to develop a platform that allows people with skills and abilities to be able to share them with others who need them. The company started as RunMyErrand.com with advisor Scott Griffith, chief executive officer (CEO) of Zipcar, in an office space in Zipcar's company headquarters in Boston, Massachusetts. But the company did not get any traction, despite the plan, until Busque was selected to attend Facebook's 12-week startup boot camp run by Dave McLure, an angel investor, in Silicon Valley. During this boot camp, along with 24 other would-be entrepreneurs, Busque built a plan to launch a better version of the company that would fit into the very busy San Francisco lifestyle. In 2009, she met Tim Ferriss, author of *The 4-Hour Workweek*, who embodied the need for her services. Becoming an advisor, Ferriss introduced Busque and her plan for TaskRabbit to venture capitalists at Baseline Ventures and Floodgate. These venture capitalists became the seed investors of the company which still did not position itself totally as a disruptive technology but more as a company that could help people save time by employing others. This changed 2 years later after a venture capitalist in the Founders Fund heard Busque speak at Le Web in Paris. The Founders Fund, founded by an eccentric billionaire, Peter Thiel who co-founded PayPal with Luke Nosek, only backs startups with life-changing disruptive technologies that have the basis of a multibillion-dollar company with a large network effect. The Founders Fund was an early investor in Facebook. In June 2012, TaskRabbit received $13 million in additional Series C financing, $10 million of which was from the Founders Fund.

Today TaskRabbit has about 11,000 employees who have cleared background checks in 10 markets and are willing to do tasks desired by people in their market. Although a nice number, the business plan still needs to evolve to meet the goals established while continuing to attract more

Continued

Technology Entrepreneurship

people. It, as most companies, has refocused several times. One of the first was to make sure men were included after the initial focus on women. Now, the fast growing customers of TaskRabbit are small businesses who want to hire people from part-time receptionists to data-entry people. Competition is intense. On one side are the hire a gofer startups such as Fancy Hands, Gigwalk, and Zirtual. And on the other side there are more focused suppliers such as Lyft (offering services as a cabbie) or Exec (offering services as a housecleaner). Will TaskRabbit succeed and be acquired profitably by some giant like Amazon.com? Only time will tell.

Sources: *https://www.taskrabbit.com/*, *http://www.fastcompany.com/3012593/taskrabbit-leah-busque#1*

7.1 INTRODUCTION

A business plan or its modification is an important part of the new venture creation process and is often called the entrepreneur's roadmap for implementing the vision and the strategy of an entrepreneur such as Leah Busque. You would not think of building a house or a new product or service without a plan, so why do some entrepreneurs believe they can start something as complex as a new business venture without a plan?

A business plan is particularly needed in today's complex, global, hypercompetitive rapidly changing technology-driven environment. Today's environment, perhaps more than ever before, requires an understanding of the complexity of the inputs and outputs so that a new enterprise can be effectively established, launched, modified, and grown particularly for a technology entrepreneur.

This chapter explores aspects of writing a plan, the purpose of the business plan, the elements of a solid technology business plan, the methods for estimating and forecasting costs, and the development and update of the business plan.

7.2 WRITING THE BUSINESS PLAN

Creating and building a successful technology venture requires effective planning. Although indeed the process of thinking this through and developing the necessary strategies is important, the process and the discipline required to putting this in writing makes the thinking process more effective and give the venture a better opportunity for success. Often something conceptualized in the mind of a technology entrepreneur does not make sense once it is committed to writing.

A frequently asked question by a technology entrepreneur is how long a **business plan** should be (How many pages should it have?). Although there is no strict answer to this question, oftentimes it is too long.[1] The main body of the business plan, which is discussed later in this chapter, should be about 30–40 pages.[2] This does not include exhibits or appendices which contain additional market statistics, the actual patents, the résumés of the management team and scientists, and other material that can add another 20–100 pages of material. And, a two-page executive summary is needed to use as a door opener if capital needs to be raised.[3] One factor that impacts the length of the plan is its purpose, which is discussed in the next section.

Even though a technology entrepreneur needs to write the plan itself, he or she should get help with editing and laying out the plan in the most favorable way. No matter how good the content, the way it looks and is presented affects its evaluation. Any spelling errors, mathematical errors, numbers not making sense, or poor graphics impact the evaluation of the plan to some extent. And, a knowledgeable investor will easily discern whether the plan was written, at least initially, by the technology entrepreneur or prepared externally by someone hired to do so.

MINI-CASE

Startup Valley Provides Crowdfunding Platform

StartupValley is a crowdfunding website for technology startups. It is a similar platform to Kickstarter.com, but with a more narrow focus on technology start-ups. Any entrepreneur can present his or her business plan for a technology start-up to share with potential investors. Instead of relying on enough funds to reach its set funding goals, startup companies that successfully gain their needed investment are charged a flat 5% by the service. The site is currently in Beta pending the finalization of SEC regulations. Anyone making $200,000 within the last two years may be an accredited microinvestor in a technology venture of their choice. Once SEC regulations are finalized, investment will be open to unaccredited investors as well.

7.2.1 Purpose of the Plan

Besides providing a roadmap or direction for the new technology venture, a business plan can have several specific reasons for being written. The first and by far the most usual reason is to obtain financing.[4] Most technology entrepreneurs do not have all the resources needed to develop and launch a technology venture. External financing is needed whether provided by financial institutions, private individuals, venture capital firms, or private equity firms. This nonpublic capital called **enterprise capital** is essential to start and grow technology ventures. Each of these sources of capital, which are discussed in Chapter 8 of this book, needs a business plan in order to provide the capital needed. Keep in mind when writing a business plan for this purpose the private investor or venture capitalist who is receiving it may receive 50–100 plans each week. Of 100 business plans received, only 10 will not be discarded through the reading of the two-page executive summary. And, of these 10 remaining, only one or two will receive funding. This means that the business plan of a technology entrepreneur must be crafted to be a good selling document to survive the scrutiny that occurs before funding.

Another reason for writing a business plan is to determine all the resources needed including financial. This is usually an end result of a good technology business plan. A careful review of the current existing resources of the technology entrepreneur and the enterprise and the resources needed at various stages of development such as financial, human, technological, supply, or distribution provides insight into the plan that must be in place to make sure these resources are available in a timely fashion.[5] Potential suppliers of the resources need to be specifically identified along with a solid approach to each supplier.

The third reason for writing a business plan is to provide a direction for the new venture. In the development, launch, and growth of a technology venture there are many different directions and opportunities available.[6] A good business plan allows these to be more easily evaluated and best direction or opportunity selected.

Being able to evaluate the results of the venture is the fourth reason for writing a business plan.[7] Even though this may not be the most popular reason for the technology entrepreneur to write a business plan, particularly when the results may not be favorable, the business plan points out problems that need attention and focus. Pro forma income statements discussed in the next section are forecasted numbers which eventually become actual numbers once the plan is implemented and the time period reached. There is always a positive or negative deviation between the numbers forecasted and the numbers achieved.[8] When this difference is large and negatively affects the technology venture, corrective action is needed. Because a technology entrepreneur usually never has enough time or money, by focusing on these deviations attention can be paid to the most critical problems. This is called **management by deviation**.

The final reason for writing a business plan is to obtain a co-venturer.[9] A business plan lays out the plan for the business for perspective co-venturers and helps them decide whether to be involved. Whether obtaining a member for the board of advisors, a firm in the distribution channel, a supplier firm, or a firm that could be a joint venture partner, the job is easier when a business plan has been prepared. Most seasoned entrepreneurs and business persons will not consent to be a member of any advisory board of a technology venture without having evaluated at least a preliminary business plan.

KEY POINT

Business Planning Software Can Help in Plan Writing

LivePlan is business plan writing software that has been used by over 200,000 entrepreneurs. The software asks questions about aspects of the business and creates financial spreadsheets and illustrated charts from the answers. It includes a feature to create a lean business plan pitch that encourages start-ups to stay adaptive and nimble in their early stages in order to refine the model when core assumptions are validated or dismissed. The feature further helps communicate the highlights of the business in a 60-second pitch and creates a customizable web link to get noticed by potential investors.

7.3 ELEMENTS OF A BUSINESS PLAN

Although there are some variations, most technology business plans have the same elements.[10] as indicate in Exhibit 7.1. These can be grouped into three main general sections:

MINI-CASE

Socialcast Founder Raises Capital with Five Slides

Socialcast is a social network platform that allows you to connect with people and online resources needed to get work done. Its founder, Tim Young, explained how he obtained investments for his company. He used a lean presentation of only five slides shown off of his laptop instead of a projector to offer a more intimate presentation to investors. He detailed guidelines for keeping the summary presentation relevant and efficient. He further researched their backgrounds and understood who he was pitching his business to. By having a well-organized business plan and efficient presentation, and understanding the investors he was pitching to, he was able to raise $10 million through three rounds of funding in just 1 year.

Sources: *http://techcrunch.com/2010/11/02/365-days-10-million-3-rounds-2-companies-all-with-5-magic-slides/;*

7.3.1 Section 1

Section 1 contains the title (cover) page, table of contents, and **executive summary**. The title (cover) page is an important part of every business plan because it has:

- The company name, address, telephone, fax, e-mail address, and website
- Name and position of each identified member of the management team
- The purpose of the plan, the amount of money needed, and funding increments
- At the bottom of the title page: "This is confidential business plan number ____." Put in a low number and then keep track of when and who received this numbered plan for a 30-day follow-up (Recognize, however, that this legend does NOT in itself make the business plan confidential. See Chapter 5).

The first page after the title (cover) page is the table of contents. This follows the usual format and lists at least the major subsections in each section and the corresponding page numbers, as well as each figure, table, and exhibit. Preferably each major subsection and smaller subsections should be labeled as 1.0, 1.1, 1.2, 2.0, 2.1, 2.3, and so on. The executive summary precedes the numbering and therefore either has no numbers, smaller letters, or Roman numerals. The tables and figures should have a separate list as should the exhibits (appendices).

The last item in Section 1, following the table of contents, is the all-important two-page executive summary. This is by far the most important document in the business plan because it is the screening section. Many readers, especially potential providers of capital, never read beyond the executive summary. One head of a very successful venture fund, who is now managing his eighth fund,

Section 1: Title page
- Table of contents
- Executive summary

Section 2:

1.0 Description of business
- Description of the venture
- Product(s) and/or service(s)
- Mission statement
- Business model

2.0 Description of industry
- Type of industry
- Future outlook and tends of industry
- Analysis of competitors
- Trends and market forecasts

3.0 Technology plan
- Description of technology
- Technology comparison
- Commercialization requirements

4.0 Marketing plan
- Market segment
- Pricing
- Distribution
- Promotion
- Product or service
- Sales for first 5 years

5.0 Financial plan
- Sources and applications of funds statement
- Pro forma income statement
- Pro forma cash flow statements
- Pro forma balance sheet

6.0 Production (outsourcing) plan
- Manufacturing process (amount subcontracted)
- Physical plant
- Machinery and equipment
- Suppliers of raw materials
- Outsourcing aspects

7.0 Organization plan
- Form of ownership
- Identification of partners and/or principal shareholders
- Management team background
- Roles and responsibilities of members of organization
- Organizational structure

8.0 Operational plan
- Description of company's operation
- Flow of orders and goods
- Exit strategy

9.0 Summary

Section 3: Appendices (exhibits)
- Exhibit A – résumés of principals
- Exhibit B – market statistics
- Exhibit C – market research data
- Exhibit D – competitive brochures
- Exhibit E – competitive price lists
- Exhibit F – leases and contracts
- Exhibit G – supplier price lists

EXHIBIT 7.1
Elements of the business plan.

indicated that he receives about 1500 business plans a year, discards 1400 based on the cover page or executive summary, and, of the remaining 100, discards 80 based on the initial one- to two-hour examination. Of the remaining 20, about four to six will receive a term sheet and probably an investment from his fund. So the executive summary needs to be really well written to invite further reading of the business plan. Some capital providers only want to initially have a copy of the executive summary. If this passes the first evaluation, then the entire business plan is requested.

The executive summary should have the name of the company and address at the top just as it appears on the title (cover) page. It should begin with defining the nature and size of the problem existing. In the case of TaskRabbit, the problem is a large one—the need for someone to do a task on a personal basis. The larger and more critical the problem, the more interest there will be on the part of investors and others.

Your proposed solution should follow this problem.[11] Again, for TaskRabbit, this is making available several individuals who have had a background check and are capable and willing to do the task on a fee basis. In this section, all competitive ways to solve the problem should be discussed, showing the uniqueness or the unique selling propositions of your solution. These would include: personal, capable, willing, certified, and having passed a background check for TaskRabbit.

Following the solution is the size of the market, trends for at least 3–5 years, and future growth rate. The market needs to be large enough and accessible to deliver the sales needed for the profits and returns expected by investors. The need for help for busy professionals to provide free time makes for a very exciting perspective for TaskRabbit.

The entrepreneur and team who will deliver these sales and profits then need to be described. The education, accomplishments, and industry experience of each known member of the top management team needs to be described. The individuals involved in TaskRabbit are very noteworthy and include: CEO Leah Busque and advisors Tim Ferriss (author of *The 4-Hour Workweek*) and Peter Thiel (founder of Founders Fund).

The team needs to deliver sales and profits, which should be summarized over a five-year period in the following format:

	Year 1	Year 2	Year 3	Year 4	Year 5
Total revenue					
Cost of goods sold					
Gross margin					
Operating expenses					
Profit (loss) before taxes					

These numbers are taken directly from the pro forma income statement summary in the financial plan in Section 2. Note the exact calendar year is not used, but rather year 1, 2, 3, 4, and 5, with 1 indicating the first year of company operations after the investment is received.

The two-page executive summary closes with a statement of the resources needed, the increments of capital accepted, and contact information. An example two-page executive summary is provided in Appendix 7.1.

7.3.2 Section 2

Following the executive summary, which is the end of Section 1 of the business plan, Section 2 starts on a new page with its first part: **Description of the Business**.

7.3.2.1 Description of the Business

In this section, the nature of the venture is described to provide an understanding on how the venture will operate and deliver the products or services to solve the problem identified.[12] Information on the products or services should be in enough detail to be easily understood; this will be expanded on in Section 3 if it is a technological product or service that employs a new technology and in the product section of the marketing plan (Section 7.3.2.4). The mission statement of the company should be described as well as the business model[13]—the entire picture of how the company does business—and if this business model significantly differs from the way business is presently being done in the industry.

7.3.2.2 Description of Industry

This section discusses the type and size of the industry, the industry trends for the last 3–5 years, future outlook and growth rate, and a thorough analysis of competition presently fulfilling the same need that the new idea does.[14] This is a large section with significant use of data from authoritative sources. Sometimes there is so much data that only part of it appears in the body of the plan, and the rest appears in an Appendix at the end of Section 3. Graphs, charts, histograms, and other graphics should be used to thoroughly explain the industry, its growth projection, and the competitors. A graph showing the market growing is important based on the trends of this market to date. The market, the market segment, and target market for the first year will be further discussed in the first section of the marketing plan.

7.3.2.3 The Technology Plan

Following the description of the industry is the **Technology Plan**. Some business plans where there is not a technological advancement in the product or service being offered would not have a technology plan. For example, one author founded a rainbow decal and sticker company with no significantly new technology so there was no technology plan in the business plan of the company. Whenever the product or service has a patent, there will always be a technology plan because the patent adds value to the venture. A general rule is if you are having a hard time deciding whether to have a technology plan, then put one in because it is better to have one than not. The technology plan describes the state of the technology presently available and how the new technology revolutionizes the way things are done. The patent or patent filing should be discussed and the document itself put in an Appendix (exhibit) in Section 3.

7.3.2.4 The Marketing Plan

The **marketing plan**, the next section, begins with a discussion of the market segment and target market for the product or service.[15,16] It defines, usually through using one or more segmentation techniques, the most appropriate market and its size. Of the many available segmentation techniques[17] (demographic, geographic, psychological, benefit, volume of use, and controllable market elements), the two most widely used ones particularly for technology entrepreneurs are demographic and geographic because this is the way secondary data is published. If the venture is a business to consumer (B2C), the most important market data is the demographics of the selected geographic market. The most widely used demographic variables to determine the size of the market and a typical customer profile are age, income, and gender. For a business to business (B2B) venture, the business market needs to be identified using the classification (country) system of the country for the industrial (business) customer being served. The NAIC code in the United States, the SIC code in Korea, and the SIC code in China each uses a numbering system to classify each industry and specific products and services in that country. A sum of all the output of these numbers is the gross national product of the country. This procedure will provide the trends, size, and growth rate of the particular industry market that can be used to develop the typical customer profile.

Following the delineation of the target market, a marketing plan needs to be developed to successfully reach and sell to that target market. The marking plan has four major areas—product or service, price, distribution, and promotion (see Exhibit 7.2). These are thoroughly discussed in Chapter 10,“MarketingYour Venture.” The product or service part describes the characteristics and quality of the offering, the assortment of items to be offered, the guarantee, any servicing provided if needed, and the packaging. The latter can be very important for technology entrepreneurs in the B2C market because it can be a major area of distinctiveness as well as a sales tool in the distribution center(s) used.

The second variable, price, is closely related to the product or service, particularly the quality level. The price, the worst executed of the marketing areas by entrepreneurs, needs to reflect the competitive prices, the costs, and the consumer reaction to the price. If a distribution system is used, then there will be a chain of markups on the cost.

The distribution area has two major aspects: distribution channels and physical distribution. The distribution channels include entities handling the product such as retailers, wholesalers, or representatives. The physical distribution or logistics is becoming an increasingly important area and includes transportation, storage (warehousing), and inventory.[18]

Product/service
- Quality
- Assortment
- Guarantee
- Servicing (if needed)
- Package

Price
- Price/consumer reactions relationships
- Price/cost relationships
- Price/competitive reactions relationships

Distribution mix

Distribution channels	Physical distribution
• Retailers	• Storage
• Wholesalers	• Inventory
• Representatives	• Transportation

Promotion
- Advertising
- Personal selling
- Publicity
- Sales promotion
- Social media

EXHIBIT 7.2
Elements of the marketing plan.

The final area of the marketing plan is the promotion area, which is composed of advertising, personal selling, publicity, sales promotion, and social media. The latter three are particularly important for technology entrepreneurs because they can be used to produce multiple exposures cost effectively. Social media, including the website of the new venture, is a particularly useful part of the promotion area. A marketing budget needs to be prepared for the first year indicating where the money will be specifically allocated to promote the company and achieve the initial sales of the first year. This first-year sales figure concludes the marketing part of the business plan and is a good start for the next section—the financial plan.

7.3.2.5 The Financial Plan

The **financial plan**, the next part of Section 2, focuses on a discussion of the created statements indicated in Exhibit 7.3. The financial information contained in the financial plan consists primarily of these 12 financial statements. All but one of these become actual statements after the business is launched. Although these statements have the same content, they are different from the actual ones filed in that they are forecasted—pro forma—statements which will, upon the end of the time period, become actual statements.[19] How to determine estimates (forecasts of revenues and costs) are discussed in the next section of this chapter. The one new statement is the first one—the sources and

Exhibit 7.3 Financial Statements in the Business Plan

Sources and Uses of Funds Statement
Pro forma income statement—5-year summary
Pro forma income statement—first year by month
Pro forma income statement—second year by quarter
Pro forma income statement—third year by quarter
Pro forma cash flow statement—5-year summary
Pro forma cash flow statement—first year by month
Pro forma cash flow statement—second year by quarter
Pro forma cash flow statement—third year by quarter
Pro forma balance sheet—year 1
Pro forma balance sheet—year 2
Pro forma balance sheet—year 3

uses of funds statement—which describes how much money is needed (uses) and where it will come from (sources). The uses part often includes money for renovations, inventory, working capital, and reserve for contingencies. Each use statement will include working capital—the money needed until the venture positively cash flows, the point in time when the revenues from operations exceed the cost of operations. Sources of money will always include the entrepreneur and usually friends and family. The other sources of finance include banks, private investors, venture capitalists, and grants, which are discussed in Chapter 8, "Raising Capital."

7.3.2.6 The Production Plan

Following the financial plan is the **production or outsourcing plan** that indicates how the offering will be developed and produced. Some service ventures will not have this part in their business plan. Each individual cost needs to be specified so that an understanding is provided of the actual costs involved in the final offering and how much this can be reduced through economies of scale. All suppliers or outsourcing firms should be described in detail.

7.3.2.7 The Organizational Plan

The **organizational plan** discusses primarily two aspects of the venture: the form of ownership and lines of authority and responsibility. The selection of the general ownership form is country specific, but needs to take into account several aspects. These include taxation, number and location of investors, liability issues, and number and type of employees' perceived fringe benefits that will be paid.

Generally, the ownership form selected should have the lowest possible tax consequences and minimum liability. In some countries, there are also liability issues with the hiring and firing of employees and with closing the company.

Also, in some countries a foreign (resident) partner may need to have a specific ownership position, which in some cases can be over 50%. These are the overall organizational structures in the United States:

Individual legal entities:

- Proprietorship
- Partnership

Organization legal entities:

- LLC
- SC
- C-Corporation
- Professional Corporation
- Not-for-Profit Corporation
- Hybrid Corporation

Due to the organization becoming the legal entity in terms of liability, an entrepreneur should not establish his or her company as a proprietorship or partnership. And, due to the tax laws, most entrepreneurial companies in the United States are started as an LLC or SC.

The second aspect—lines of authority—can best be viewed in terms of an organizational chart. Although each functional area needs to be specified with a description of the duties and responsibilities, most of these will not have a specific person mentioned until the company becomes operational and sometimes, in terms of a chief financial officer and human resources manager, not until years after the start-up. The founding individuals of the company should be in the positions they are most capable of. Of course, the new venture needs a CEO/president, someone responsible for the operation of the venture.

7.3.2.8 The Operational Plan

Following the organizational plan is a short section—**the operational plan**. This describes in detail how the company will operate, including the flow of goods and orders. An important aspect discussed here is the exit strategy by which investors will get their equity and a return on equity hopefully in a 5–7 year period of time from the initial investment. There are only three mechanisms for having the capital to provide this exit and return desired: (1) generating retained earnings of the venture; (2) selling to another financial institution or firm; or (3) going public and being a publically traded company. The most likely exit avenue is selling to another company and, if this is mentioned, then three to four likely exit companies need to be identified and discussed. Section 2 concludes with a brief summary that completes this section of the business plan.

7.3.3 Section 3

Section 3 contains all the backup material to support areas in Section 2. This includes secondary support data, any research data, contracts or leases, the patent document, and most notably the résumés of the entrepreneur and any known members of the management team. Nothing new should be introduced in this section.

7.3.3.1 Estimating (Forecasting) Revenues and Expenses

Coming up with an estimate of revenues, expenses, and start-up costs is not an easy task for the technology entrepreneur, particularly an estimate based on a disruptive technology that is very unique and new. If the technology entrepreneur has worked in the industry, which is usually the case, he or she already has at least a sense of the possible volume of sales. Remember, this is usually optimistic because a new venture will typically not be able to achieve the level of sales of other companies already in the industry for a period of time. This is similar when it comes to expenses. The knowledge and experience of the technology entrepreneur as well as that of his or her personal network of people who can be trusted is the basis for the estimates of the sales and expenses.

7.3.3.2 Estimating Sales (Revenue)

The sales forecast should be calculated first and is an appropriate way to end the marketing plan as a segue into the financial plan, which typically follows in most business plans. With a brand new or breakthrough technology product, the estimate is often based on market data gathered by others, on comparison of the sales of similar products, and on the opinions of "experts." As such, these estimates are difficult to make and often not very reliable.[20]

To improve the sales estimates for the first year, the technology entrepreneur should first think in units (numbers) of sales, not dollars or other currency sales. The unit sales multiplied by the price in currency such as US$ results in the revenue. Scenario and sensitivity analysis are useful tools for predicting consumer product or service (B2C) sales as well as industry product or service (B2B) sales.

To forecast a new consumer product or service, the technology entrepreneur should find any products or services that presently fill the same need and determine to the extent possible their sales. This can be facilitated through using the country code of the product (e.g., NAIC code in the United States and SIC code in China) to get total product category sales and any specific sales figures in government and trade publications. Care must be taken to make sure there is no significant difference occurring between the amount of product sold to the distribution (sell-in) versus the amount of product purchased at the distributor by the consumer (sell-through).

Once the sales in units for the first year for the new technology product or service have been determined, then future years (2, 3, 4, and 5) can be determined using as a basis a revision of the growth rate of the industry, which can be found in government publications, trade journals, and trade associations.

Estimating sales for technology industrial products or services (B2B) is somewhat easier than estimating sales for a new B2C product or service because the market is not as heterogeneous or geographically dispersed. Talking with experts or several potential customers, obtaining sales figures from products or services filling the same need, and talking with distributors can provide a good basis for estimating the unit sales in the first year.

7.3.3.3 Estimating Expenses

Once the unit sales for the first year have been determined as well as the unit sales for years 2, 3, 4, and 5, it is usually easier to determine expenses.[21] The most important and usually the most difficult expense to determine is the initial cost of the technology product. This is particularly the case when it is a radically new breakthrough innovation. Estimates from trusted engineers or outsource manufacturers can provide solid information for determining costs of the initial production that needs to take into account economies of scale of purchasing, manufacturing, and management knowledge that will reduce the cost in subsequent years. This cost of goods sold should be figured on a per-unit basis, which then can be multiplied by the number of units sold to obtain the cost of goods sold for the time period. Even a technology service can have a figure for cost of goods sold, which is preferable for control purposes, by determining the time-equivalent expenses involved in delivering the service.

The other general selling and administration expenses (operating expenses) are not as difficult to obtain and usually include such things as management salaries and fringe benefits, employee salaries and fringe benefits, vehicle lease and costs, packaging costs, distribution costs, lease/maintenance expenses, supplies, depreciation or any owned equipment, promotion expenses, travel expenses, manufacturer representative expenses, telephone expenses, utilities (water and electricity) expenses, office supplies, and insurance. Keep all financial spreadsheets and support figures as clean and as clear as possible to provide a rich understanding of the expenses of the new venture so that these can be effectively managed.

7.3.4 Business Plan Development and Update

The business plan is a very important document both for providing direction to the new venture and as a tool for raising financial resources. It is important that it be well written and edited. The best way for a technology entrepreneur to proceed is to write down all the information in a draft format and then go back and rewrite it. Keep in mind during this process the audience for your plan, and arrange the material in a way, such as the one suggested, that items flow smoothly from start to finish. Clear and concise writing is needed, and all numbers need to be consistent. If possible, have a friend or colleague critique the final business plan. If needed, you can always pay a professional writer to edit the plan to make sure the plan text flows smoothly.

Besides being a blueprint for the launch, direction, and growth of the venture for the first five years and a presentation of a complete, comprehensive picture of the business, the business plan is a living document. It is based on estimates and assumptions on what the technology entrepreneur expects will happen once the business starts. Of course, it is impossible for any technology entrepreneur to exactly predict the future. Parts of the business plan, particularly the sales, costs, and financial projections, will not be right on the mark. A technology entrepreneur needs to review and update the business plan periodically the first year and then annually thereafter. In this way, the business plan reflects what the business is actually doing and where it is going and becomes a living guide for the technology venture.

7.4 CHAPTER SUMMARY

Every new venture needs a business plan to set the direction for the firm and to obtain financial resources. The essential elements of a business plan are contained in three sections, with the main elements being in Section 2. The most important document in the plan is the executive summary because most business plans are not read beyond this by potential investors.

Each business plan needs to be well written and organized and address as many anticipated questions as possible. It needs to flow smoothly and consistently without errors so that the reader has a clear understanding about the details and future success of the new venture.

KEYTERMS

Business plan Written document describing all relevant internal and external elements and strategies for starting a new venture.

Enterprise capital External financing provided by financial institutions, private individuals, venture capital firms, or private equity firms.

Management by deviation Corrective action needed by focusing on these deviations when there is a large difference between the numbers forecasted and the numbers achieved.

Executive summary Highlights the key points in the business plan.

Description of industry The type and size of the industry, industry trends, outlook and growth rate, and analysis of the competition.

Description of the business Provides complete overview of the product(s), service(s), and operation of the new business.

Marketing plan Describes market conditions and strategy related to how the product(s) and/or service(s) will be distributed, priced, and promoted.

Technology plan Describes the state of the technology presently available and how the new technology will revolutionize the way things are done.
Financial plan Projections of key financial data that determine economic feasibility and necessary financial investment commitment.
Production plan Details how the product(s) will be manufactured.
Organizational plan Describes the form of ownership and lines of authority and responsibility of members of the new business.
Operational plan Details how the company will operate.

ADDITIONAL READINGS

Cassar, G., 2009. Financial statement and projection preparation in start-up ventures. Accounting Review 84 (1), 27–51, The article details a study that explores the elements of preparing financial statements and financial forecasting for start-up entrepreneurs. It explains the importance of financial forecasting and sales projections for start-ups in high-tech industries.

Layton Turner, M., 2012. Short but sweet. Entrepreneur 40 (10), 105–9, This article describes the trend toward short business plans over lengthier plans for new business ventures. It provides advice for drafting short business plans as well as the role of interested investors in embracing shorter business plans.

McAdam, M., Marlow, S., 2011. Sense and sensibility: the role of business-incubator client advisors in assisting high-technology entrepreneurs to make sense of investment readiness status. Entrepreneurship & Regional Development 23 (7/8), 449–68, The article describes the problem of professional client advisor's lack of expertise in the field of technology. It examines how entrepreneurs starting ventures in the technology industry and business-incubator client advisors can combine their respective expertise to create a business plan.

Shelters, D., 2013. Start-Up Guide for the Technopreneur: Financial Planning, Decision Making and Negotiating from Incubation to Exit. John Wiley and Sons, Singapore, This book is a guide to fundraising and financial planning for the technology entrepreneur. It gives advice on business planning and strategic decision making relevant to the fast-paced technology industry.

Wilkins, P., 2012. The foundations of a successful strategy. EMDT: European Medical Device Technology 3 (3), 30–1, The article describes areas that medical technology start-ups need to focus on to ensure future success. It addresses the necessity of a timely business plan and how companies must respond to changes in investor strategy.

WEB RESOURCES

www.bplans.com: This site provides a wide sample of business plans in a number of technology and other industries.

http://www.sba.gov/smallbusinessplanner/index.html: This website has been set up by the U.S. SBA. It offers a number of references and other useful services to small and entrepreneurial business ventures.

www.businessplans.org: Similar to the bplans website, this site has a number of sample business plans and useful templates for creating your own business plan.

http://tech.seas.harvard.edu/home: This is the home page for the Technology and Entrepreneurship Center at Harvard University. It is a good starting point for understanding the relationship between high technology and entrepreneurial success in the global economy.

ENDNOTES

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