

# Addressing Intellectual Property in Business Plans

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## REQUIRED OUTLINE FOR BUSINESS PLANS

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### A BRIEF SYNOPSIS OF THE EXECUTIVE SUMMARY AND TWELVE MAJOR SECTIONS OF A GREAT BUSINESS PLAN

#### THE EXECUTIVE SUMMARY

Although this is the first section of the plan, the Executive Summary is the last written. The Executive Summary summarizes the essence of the business and the entrepreneurial team. It is not merely an abbreviated business plan – it should be a chance to “sell” the reader on the business opportunity. The reader should be so that she/he doesn’t have to read more, but at the same time be enticed to read more.

Many teams fail to consider adequately their markets, their customers and a plan that will enable them to achieve success. Instead they often get wrapped up in an interesting idea that is not the same thing as an attractive business. The questions below will help you develop your executive summary that are relevant to the business plan. These are some of the questions that first time readers (venture capitalists, banks, business plan judges, etc.) look for before going on to evaluate the members of the team and the soundness of any financial projections. Make sure that your executive summary provides answers to these questions in addition to giving the reader an overview of the highlights from your business plan for the new venture.

For technology-based ventures, the strategic use of intellectual property can be a key success determinant.

Presenting in your plan how your company will leverage its IP assets will be of prime importance to prospective investors and stakeholders.

#### Opportunity Statement:

- What is the nature of the opportunity or problem?
- Why is the opportunity now? What is the size of the opportunity?

#### Business Concept and Product or Service:

- How would you describe the business to a potential investor who had only a short elevator ride to share together? What is the best way to express your business concept.
- What is unique about this venture?
- Develop a brief concept statement for the product or service to your customers.
- How will the product be used? What are some of the problems you solve with your service or product offering? How does your solution improve or replace current offerings?

In a technology-driven market segment, proprietary technology advantages may be the only way to overcome otherwise strong barriers to entry. Without intellectual property there may be no real opportunity.

To be investable, the technology’s advantages must be immediately recognizable by customers willing to pay money for them.

#### Description of the Target Market:

- Briefly define your relevant market.
- What is the current size and expected growth of the market?
- What segments will you be targeting?
- What proof can you offer that your product or service is needed?
- What do you need to do very well in order to win this market? What will your pricing position be relative to the rest of the market?

By definition, intellectual property is unique. Cleverly used, IP can confer potentially durable competitive advantages:

- › Patents – differentiation
- › Trademarks – brand recognition & goodwill
- › Functional Copyrights – quasi trade secrets
- › Trade Secrets – control of employee IP transfer

Make sure not to torpedo your own IP by ignoring IP law:

- › Inadequate disclosure, premature disclosure, inventorship issues
- › Diligence, offers to sell
- › Inadequate measures to protect trade secrets
- › Ignoring international legal differences

Patents may or may not have deterrent value to competition. They teach the world the inner workings of your technology advantage but never confer more than a presumption of protection (validity) that can be very expensive to assert.

Trade secrets are protected only from misappropriation.

customer(s) be? What le

Any likely infringers with deep pockets?

**Competitive Advantage:**

- What special knowledge or technology do you possess and how will you protect it?
- What are the barriers to entry? Who will the competitors be?
- How will your service or product compare to those of your competitors in terms of usefulness, cost, styling, ergonomics, time-to-market, strategic alliances, technological innovations, compatibility with related product, etc?

Anticipate competitor responses to your IP. Will they work around, license from you, challenge validity, develop substitutes, or infringe?

margins and volumes?  
more fixed or variable?  
the firm will make money.

Analyze competitive patent clusters and comparative freedoms-to-operate. Avoid being a plaintiff or a defendant.

The useful life of patents depends on IP crowding, pace of innovation, switching costs, customer trends, etc.

**Technology and Operational Issues:**

- What technology will you employ?
- Where are you in terms of R&D on the products/services?
- Will production be handled by you or outsourced?
- What is unique about your approach to production or operations?

**The Team:**

- Who are you and why can you do this?
- Briefly summarize your team's qualifications.

**Financial Need:**

- How much money are you requesting?
- From what sources are you looking for money and in exchange for what?

Will infringement be visible? If you do, it's usually better to license to the infringer than to sue. It costs at least \$750k to begin an infringement action. A routine infringement defense is to challenge the validity of the patent. In over 50% of the cases, judges do invalidate the subject patent.

How long will it take to deploy your IP?  
How long will it take for the market to recognize it?  
How long will it take for competitors to recognize it?  
How long will it take for competitors to respond?  
How available are substitutes?

**SECTION I: THE INDUSTRY**

The "industry" refers to the larger landscape, as in "card and gift industry" or the "architectural service industry" and the relative attractiveness of the industry as a whole globally. As such, this section does not involve any description of your company or your local market. This section of your plan needs to include the following information:

- Summarize the industry using NAICS for classification.
- Discuss the industry's life cycle.
- Discuss the industry's structure. How many important players in the industry? Outline Porter's 5 forces and draw conclusions. Provide a diagram of the value added chain to illustrate the key players in the industry.
- Highlight key trends in the industry from the trade literature. Are costs going down or up? Discuss any new products or developments, new markets and customers, new selling approaches, new pricing methods, new requirements, new entrants and exits, and any other national or economic trends and factors that could affect the venture's business positively or negatively.
- Determine the key success factors for the industry and draw conclusions.

Where do your competitors get their innovation and technology? What options do they have for a technology response to your firm?

› In-house development	› Supply chain entities
› Strategic alliances	› Acquisition of other companies
› Licensing-In	› Acquiring you

- Find standard f

Proper corporate structuring enhances/preserves IP value.

- Set up an IP holding company
- Ownership benefits may be realized without change in ownership
- Royalty allocations may differ from operating equity allocations
- Fields of Use can be more flexibly managed
- Bankruptcy trustee not able to sell technology
- IP values are clarified and salvage value preserved
- Tax treatments can be managed more flexibly

**SECTION II: THE CO**

Now the focus turns to y  
you are in that process, f  
detail the products and s  
vision for growth over t

**A. The Company and the Concept**

- What form will the company take (e.g., partnership, S-corporation, LLC, etc.), where will it be based, and when will it commence operations?

It must be crystal clear why your IP will make your customer choose you over all the others equally devoted to their satisfaction.

nders as well as its current status. Spell out the t are your goals – do not assume the reader

- Describe generally the concept of the business (i.e. your **unique value proposition**...the core benefits you will provide to a user, the need or pain you will address)

**B. The Product(s) or Service(s)**

- Describe in some detail each product or service you will be selling (what it is and isn't – describe

To have commercial value, intellectual property must be a meaningful source of differentiation in the eyes of the buyer. It must also effectively hinder competitors (and ideally surprise them).

in the appendix if you can). Begin to sell your product or service.

or service and describe the primary end use as will use it and why).

and breadth of your product/service mix and which products will likely generate the lion's share of the revenue

- Emphasize any unique features of the product or service and how these will create or add significant value; also, highlight any differences between what is currently on the market and what you will offer that will account for your market penetration. Be sure to describe how value will be added and the payback period to the customer. More specifically, discuss how many months it will take for the customer to cover the initial time, cost or productivity improvement that differentiates you from competitors.

You may not have a patent head start if competitors have been simultaneously filing their own. Check for their applications at [www.USPTO.gov](http://www.USPTO.gov). If you find nothing, you probably have an 18 month lead.

- Include a description of any possible product or service.
- Discuss any head start you might have that would enable you to achieve a favored or entrenched position in the industry e.g. proprietary rights (patents, copyrights, trade secrets or non-compete agreements). Describe the key factors that dictate the success of your product/service. Describe any features of the product or service that give it an "unfair" advantage over the competition e.g. proprietary knowledge or skills.

Acquire other people's IP:

- license or get an option-to-license
- cross license with a strategic partner
- purchase patents
- purchase companies with IP

xpansion of the opportunities and

Trade secrets, if well protected legally and physically, can often be just as effective a competitive advantage as patents.

arket?

ed to grow during the first five years and your plans for growth beyond your initial product or service. Provide a clear vision for where you are going.

- Discuss how you will create barriers to entry in terms of others copying your success.

Having an IP litigation war chest (and letting everyone know that you'll use it) may be the best IP strategy.

### ***SECTION III: MARKET RESEARCH AND ANALYSIS***

This section of the business plan is one of the most difficult to prepare, yet it is arguably the most important. Other sections of the business plan depend on the market research and analysis presented here. Because of the importance of market analysis and the critical dependence of other parts of the plan on the information, you are advised to prepare this section of the business plan with great attention to detail. Take enough time to do this section thoroughly and to check alternative sources of market data.

This section should convince the reader or investor that **you truly know your customers**. It should convince the reader that your product or service a) will have a substantial market in a growing industry; and b) can achieve sales in the face of competition. For example, the predicted sales levels directly influence such factors as the size of the manufacturing operation, the marketing plan, and the amount of debt and equity capital you will require. Yet most entrepreneurs seem to have great difficulty preparing and presenting market research and analyses that show that their ventures' sales estimates are sound and attainable. Consult industry publications, articles in trade magazines and trade associations to understand how the industry defines, identifies and segments its customers. Then apply yourself creatively by integrating the information in a unique way.

#### **A. Definition of Your Relevant Market and Customer Overview**

- Provide a very specific definition of your relevant market. Where will your specific customers come from? What are the parameters that you are using to define the relevant market?
- Discuss who the customers for the product(s) or service(s) are or will be.
- Provide general demographics for the customers base in your defined market (note: below you will get into segmentation of this market and descriptors of segments).
- Make it clear if you must serve more than one market (e.g., a website that must sell both to advertisers and to users of the site). Include separate discussions of the issues below for each market.

#### **B. Market Size and Trends:**

- For your defined market, estimate market size and potential in dollars and units. You will need to invent an algorithm for making these estimates.
- Note the key assumptions that your projections are based upon.
- Estimate the size of the primary and selective demand gaps.
- Describe also the potential annual growth rate for at least three years of the total market for your product(s) or service(s) for each major customer group, region, or country, as appropriate.
- Discuss the major factors affecting market growth (e.g., industry trends, socioeconomic trends, government policy, and population shifts) and review previous trends in the market. Any differences between past and projected annual growth rates need to be explained.

#### **C. Buyer Behavior:**

- Here you want to get into who buys, when, why, where, what and how.
- Who is the actual purchase decision-maker? Does anyone else get involved in the buying decision-process?
- How long is the customer's buying process (from where they have never heard of your product through when they make a purchase).
- What are the key stages or steps in the customer's buying process and what happens in each stage that might have marketing implications?
- Show who and where the major purchasers for the product(s) or service(s) are in each market segment. Include regional and foreign countries, as appropriate.
- Indicate whether this is a high, medium or low involvement purchase and draw implications.

- Indicate whether customers are easily reached and receptive.
- Describe customers' purchasing processes, including the bases on which they make purchase decisions (e.g., price, quality, timing, delivery, training, service, personal contacts, or political pressures) and why they might change current purchasing decisions.
- Discuss interviews you have had with users of this product or service category.
- List any orders, contracts, or letters of commitment that you have in hand. These are far and away the most powerful data you can provide. List also any potential customers who have expressed an interest in the product(s) or service(s) and indicate why. Also list any potential customers who have shown no interest in the proposed product or service and explain why they are not interested and explain what you will do to overcome negative customer reaction. Indicate how quickly you believe your product or service will be accepted in the market.
- List and describe your five potentially largest customers. What percentage of your sales do they represent?
- In what way are customers dissatisfied with current offerings in the market place or what emerging customer groups are being ignored?

#### D. Market Segmentation and Targeting

- Discuss how your defined market can be both comprehensive and insightful in describing the existing market.
- Note that potential customers need to be segmented on the basis of common identifiable characteristics (e.g., geographic, demographic, psychographic characteristics define your target customer segments). List the information sources utilized, product usage, and other factors.
- Include a table summarizing the various segments.
- Which segments represent the greatest potential?
- Indicate which segments you will be pursuing.

#### E. Competition and Competitive Edges

- Identify potential/actual direct and indirect competitors. **NOT COMPETITION.** Make a realistic assessment of the strengths and weaknesses of competitors.
- Discuss the three or four key competitors and why customers buy from them, and determine and discuss why customers might leave them.
- Assess the substitute and/or alternative products/ services and list the companies that supply them, both domestic and foreign, as appropriate.
- Discuss the current advantages and disadvantages of these products and services and say why they are not meeting customer needs.
- Compare competing and substitute products or services on the basis of market share, sales, distribution methods, economies of scale, and production. Review the financial position, resources, costs, and profitability of the competition and their profit trends.
- Compare also important attributes such as quality, price, performance, delivery, timing, service, warranties, and pertinent features of your product/service with those of competitors.
- Compare the fundamental value that is added or created by your product or service, in terms of economic benefits to the customer and to your competitors.
- Indicate any knowledge of competitors' actions, or lack of action, that could lead you to new or improved products and an advantageous position. For example, discuss whether competitors are simply sluggish or non-responsive or are asleep at the switch.

Thoroughly analyze your competitors' IP profiles.  
 Understand the scope (if any) of their IP portfolio  
 Do they have lots of idle technology?  
 Do your own freedom-to-operate analysis for them  
 Understand the tempo of their R&D cycle and new products  
 Determine the funding they devote to innovation  
 Learn the sources of their innovation  
 If they are dependent on key suppliers for technology, you may want to avoid contact with those suppliers.  
 Check to see your competitors tend to sue people  
 Consider the intensity of their reaction to your innovation  
 Analyze their propensity to partner with you rather than fight

- Indicate who are the service, pricing, performance, cost, and quality leaders. Discuss why any companies have entered or dropped out of the market in recent years.
- From what you know about your competitors' operations, explain why you think that they are vulnerable and you can capture a share of their business. Discuss what makes you think it will be easy or difficult to compete with them.

#### F. Estimated Market Share and Sales:

- Summarize what it is about your product(s) or service(s) that will make it saleable in the face of current and potential competition. Measure the product(s) or service(s).
- Discuss which customers could be market leaders.
- Based on your assessment of the advantage of the customer, the competition and their percentage share of the market and the sales in your market over the years. Remember to show assumptions used to estimate market share.
- Show how the growth of the company compares to the growth of its industry and customers. List the assumptions used to estimate market share.

Don't rest on your current IP laurels. Keep scanning. If IP is a competitive advantage, keep re-investing in it. The average useful life of a technology is around 7 years. In high-tech segments, the useful life may be much shorter.

If some of your IP gets marooned, try to monetize it:

- Outlicensing may be an option – even to a competitor
- Sale of patents can enhance near-term cash flow
- Don't try to donate IP anymore
- Instead, set up a JV with what used to be a donee
- Spin out IP into another venture

#### G. Ongoing Market Evaluation:

- Explain how you will continue to evaluate your target markets so as to assess customer needs and service and to guide product-improvement programs and new-product programs, plan for expansions of your production facility, and guide product/service pricing. Explain how you make the necessary strategic changes in your plan.

### **SECTION IV: THE ECONOMICS OF THE BUSINESS**

The economic and financial characteristics, including the apparent magnitude and durability of margins and profits generated, need to support the fundamental attractiveness of the opportunity. The underlying operating costs and each conversion cycle of the business, the value chain, and so forth, need to make sense in terms of the opportunity and strategies planned.

#### A. Revenue Sources and Gross and Operating Margins:

- Summarize the major revenue sources (products and services) of the business and proportionately where you expect to make your money.
- Describe the size of the gross margins (i.e., selling price less costs of goods sold) and the operating margins for each of the product(s) and/or service(s) you are selling in the market niche(s) you plan to attach. Where you have multiple products or product lines, calculate weighted average margins. Include results of your contribution analysis.

#### B. Fixed and Variable Costs:

- Provide a detailed summary of fixed, variable, and semi-variable costs, in dollars and as percentages of total cost as appropriate, for the product or service you offer and the volume of purchases and sales upon which these are based. For analysis purposes, classify semi-variable as either fixed or variable.
- Show relevant industry benchmarks for costs.

#### C. Operating Leverage and its Implications

- Characterize whether your cost structure is predominantly fixed or variable and then indicate the implications. For example, if you have a high fixed cost structure, you have high operating leverage which means it takes longer to reach breakeven, but once there, much more of your revenue flows straight to the bottom line. Look at operating leverage as it relates to margins and volume to argue the viability of your business.

#### D. Breakeven Chart and Calculation

- Make clear what your unit of analysis is for the purpose of calculating breakeven.
- Calculate breakeven and prepare a chart that shows when breakeven will be reached and any stepwise changes in breakeven that may occur. Present a table and chart for the break-even point in the appendix.
- Discuss the breakeven shown for your venture and whether it will be easy or difficult to attain breakeven, including a discussion of the size of break-even sales volume relative to projected total sales, the size of gross margins and price sensitivity, and how the break-even point might be lowered in case the venture falls short of sales projections.

#### E. Overall Economic Model

- Put the pieces above together. Indicate how you will make money in terms of the combination of

#### F. Profit Potential

- Describe (before intelligence) **Ideally, IP should lead to quasi-monopoly profits for a time. In a niche play, this can be a long time. In a very competitive market, this can be quite temporary or even nullified as the price of entry. Management must defer erosion of profitability toward the 'normal' economic rate of return through all of the business tools at hand, including the savvy use of IP law and lawyers.**
- Address the issue of how solid or vulnerable the profit stream appears to be. Provide reasons why your profit stream is solid or vulnerable, such as barriers to entry you can create, your technological and market lead time, and so on.

### SECTION V: THE MARKETING PLAN

The **Marketing Plan** describes how your projected sales will actually be attained. How will you make sales actually happen? A great idea is meaningless if you cannot find customers. Thus, it builds on the **Market Section**, where you defined your market and outlined your targeted segments and their buyer behavior. The marketing plan needs to provide detail on the overall marketing strategy that will exploit the opportunity and your competitive advantages. Include a discussion of sales and service policies, pricing, distribution, promotion and advertising strategies, and sales projections. The marketing plan needs to describe what is to be done, how it will be done, when it will be done, and who will do it.

#### A. Overall Marketing Strategy:

- Describe the specific channels of distribution of the kinds of customers to be targeted for either try to position your audiences. **How much you publicly feature your proprietary advantage depends on whether your customers value that advantage (versus having an internal, invisible advantage), whether you want to call competitor attention to your IP, whether you are strategically 'bluffing' to deter new entrants, etc.**
- How will you differentiate your product/service from your competitors?
- Make it clear how your marketing strategy reflects the characteristics of the priority market segments you will be targeting.
- Indicate whether the product(s) or service(s) will initially be introduced internationally, nationally, regionally, or locally; explain why, and if appropriate, indicate any plans for extending sales at a later date.
- From an overall standpoint, make it clear whether marketing efforts will center on personal selling, media advertising, or what (you will get into specifics below).

#### B. Pricing:

- Discuss pricing strategy, compare your price to competitors, and estimate your payback (in months). **You need to preserve your international IP rights as soon as (or even sooner in some cases) you apply for domestic rights. This can lead to some hefty international legal bills well in advance of market entry.**

- Explain maintain

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- Justify your pricing strategy and differences between your prices and those for competitive or substitute products or services in terms of economic payback to the customer and value added through newness, quality, warranty, timing performance, service, cost savings, efficiency, and the like.
- If your product is to be priced lower than those of the competition, explain how you will do this and maintain profitability (e.g., through greater value added via effectiveness in manufacturing and distribution, lower labor costs, lower material costs, lower overhead, or other component of cost).
- Discuss pricing structure, or how your prices will differ by aspect of the product or service, by customer group, and by time and form of payment (e.g., the discount structure).
- Discuss the use of special price offers, rebates, coupons, and so forth. This can be done under price or under sales promotion.

### C. The Selling Cycle

- In the MARKET section you described the customer's buying process. Now, map out a selling cycle or process that reflects that buying process. How do you plan to move a customer from never having heard of you to being a loyal user?
- Make it vividly clear how your overall use of personal selling, advertising, and publicity will reflect a blend of tools that moves your target customer through their buying process.

### D. Sales Tactics

- Describe the methods (e.g., own sales force, sales representatives, ready-made manufacturers' sales organizations, direct mail, or distributors) that will be used to make sales and distribute the product or service. Also include both the initial plans and longer-range plans for a sales force. Include a discussion of any special requirements (e.g., refrigeration).
- Describe how distributors or sales representatives, if they are used, will be selected when they will start to represent you, the areas they will cover and the build-up (a head count) of dealers and representatives by month, and the expected sales to be made by each.
- If a direct sales force is to be used, indicate how it will be structured and at what rate (a head count) it will be built up; indicate if it is to replace a dealer or representative organization and, if so, when and how. How will you recruit, train and compensate the sales force?
- Show the sales expected per salesperson per year and what commission, incentive, and/or salary they are slated to receive, and compare these figures to the average for your industry.
- Present a selling schedule and a sales budget that includes all marketing promotion and service costs.
- Discuss any seasonal trends that underlie the cash conversion cycle in the industry and what can be done to promote sales out of season.

### E. Advertising and Sales Promotions:

- Describe the media approaches the company will use to bring its product or service to the attention of prospective purchasers. How will you inform your target market about the availability of your product/service and continue to communicate the benefits you are offering to that market?
- If direct mail, magazine, newspaper, or other media, telemarketing, or catalog sales are to be used, indicate the specific channels or vehicles, costs (per 1,000), and expected response rates and yield (as percentage) from the various media, and so on, used. Discuss how these will be built up.
- For original equipment manufacturers and for manufacturers of industrial products, indicate the plans for trade show participation, trade magazine advertisements, direct mailings, the preparation of product sheets and promotional literature, and use of advertising agencies.



- For consumer products, indicate what kind of advertising and promotional campaign is planned to introduce the product. Specify types of media to be employed and what kinds of sales aids will be provided to dealers, what trade shows, and so forth, are required.
- Present a schedule and catalogs, etc.), and dis required.
- Note any viral or bu

Of course, breakthrough IP is always newsworthy. Even simple but 'cool' inventions can get valuable publicity through simple press releases. IP partnerships, co-development agreements, "guru" stories, 'technology-based economic development stories, etc. are all easy ways to get publicity.

#### F. Publicity

- What methods will you use to get free publicity for your business?
- What sort of guerrilla publicity tactics will you employ?
- How might you create news?

#### G. Customer Service (can be covered here or in the OPERATIONS section)

- How will customer service be defined and measured?
- What system will you have in place to manage customer service and ensure service levels are consistent?

#### H. Warranty or Guarantee Policies:

- If your company will offer a product that will require service, warranties, or training, indicate the importance of these to the customers' purchasing decisions and discuss your method of handling service problems.
- Describe the type and terms of any warranties to be offered, whether company service people, agencies, dealers and distributors will handle service, or simply return to the factory.
- Indicate the proposed charge for service calls and whether service will be a profitable or break-even operation.
- Compare your service, warranty, and customer training policies and practices to those of your principal competitors.

#### I. Distribution:

- Describe the methods of distribution you will employ. Why is this best/better?
- Discuss the value chain and the resulting margins to be given to retailers, distributors, wholesalers, and salespeople and any special policies regarding discounts, exclusive distribution rights, and so on, given to distributors or sales representatives and compare these to those given by your competition.
- What distribution channel(s) will be important to your business? How will you gain access to these channels? Note any special issues or problems that need to be resolved, or present potential vulnerabilities.
- Explain any methods to be employed to obtain distributor cooperation and support.
- If international sales are involved, note how these sales will be handled, including distribution, shipping, insurance, credit, and collections.

### **SECTION VI: DESIGN AND DEVELOPMENT PLAN**

*This is a very important section for those teams developing a non-existent product, doing research and development, having technical obstacles to overcome, or seeking patent or copyright protection. However, if you're in a business where research and development is not a major issue (e.g., many consumer services), then you can leave this section out and just address the technologies you plan to employ in the OPERATIONS section.*

The nature and extent of any design and development work, and the time and money required before the product or service is marketable, need to be considered in detail. (Note that design and development costs are often underestimated.) Design and development might be the engineering work necessary to convert a laboratory prototype to a finished product; the design of special tooling; the work of an industrial designer to make a product more attractive and saleable; or the identification and organization of employees, equipment, and special techniques, such as the equipment, new computer software, and skills required for computerized credit checking, to implement a service business.

#### A. Development Status and Tasks:

- Define the present state of development of the product or service and how much time and money will be required to fully develop, test, and introduce the product or service. If appropriate provide a drawing, or a summary of the functional specifications and photographs of the product, if available.
- Explain what remains to be done to make the product fully useable and ready for sale.
- Describe briefly the competence or expertise that your company has or will require to complete this development.
- List any customers or end users who are participating in the development, design, and/or testing of the product or service. Indicate results to date or when results are expected.
- How do you intend to ramp-up your business? Give a roadmap of how you are going to get from where you are now to where you want to go.

#### B. Difficulties and Risks:

- Identify any major anticipated difficulties or risks.
- Discuss the possible effects of such problems on the introduction, and so forth, of such products.

As your product evolves, not only should you be alert to new patent opportunities, but you should keep track of when you've outgrown your existing patents (i.e. when features are no longer under a protective umbrella).

#### C. Product Improvement and New Products:

- In addition to describing the development of the initial products, discuss any ongoing design and development work that is planned to keep product(s) or service(s) competitive and to develop new related product(s) or service(s) that can be sold to the same group of customers. Discuss customers who have participated in these efforts and their reactions, and include any evidence that you may have.

#### D. Costs:

- Present and discuss the design and development budget, including costs of labor, materials, consulting fees, and so on.
- Discuss the impact on cash flow projections of a 15 to 30 percent contingency.

Budget for patent fees and associated legal expenses.

#### E. Proprietary Issues:

- Describe any patent, trademark, copyright, or intellectual property rights you own or are seeking.
- Describe any contractual rights or agreements that give you exclusive or proprietary rights.
- Discuss the impact of any unresolved issues or existing or possible actions pending, such as disputed rights of ownership, regulated to proprietary rights on timing and on any competitive edge you have assumed.

### SECTION VII: OPERATIONS PLAN

The operations section outlines how the product or service will be produced. Operations is defined as the process of producing goods or services. It includes the production process for manufacturing, transportation, logistics, travel, printing, consulting, and after-sales service. It also includes such factors as plant location, the type of facilities needed, space requirements, internal processes, capital equipment requirements, and labor force (both full- and part-time) requirements.

If you've done a good job weaving your IP story into the other plan sections, this will be a simple recap for the skimming reader with the context established throughout your plan for more serious readers.

For a manufacturing business, the manufacturing and operations plan needs to include policies on inventory control, purchasing, production control, and which parts of the product will be purchased and which operations will be performed by your workforce (called make-or-buy decisions).

A service business may require particular attention to location (proximity to customers is generally a must), the service delivery system, minimizing overhead, and obtaining competitive productivity from a labor force. In all likelihood 80% of your expenses will be for operations, 80% of your employees will be involved in operations and 80% of your time will be spent worrying about operating problems. You will probably have to make trade-offs with your operations ---it is impossible to have the lowest costs, highest quality, best on-time delivery and most flexibility in your industry all at the same time. This is where you have to make trade-off decisions that fit your other plans.

#### **A. Operating Model and Cycle:**

- Outline the operations process for your business. Identify the inputs, operations (key steps or stages) and outputs (present a flow diagram). This is a day in the life of actually producing your product or creating and delivering your service---walk us through the mechanics of doing so.
- Where are you likely to have bottlenecks in your service delivery or manufacturing process and how will these be anticipated and addressed.
- Describe the lead/lag times that characterize the fundamental operating cycle in your business.
- Explain how any seasonal production loads will be handled without severe dislocation (e.g., by building to inventory using part-time help in peak periods).
- What quality consistency issues exist and how will quality consistency be ensured? What controls exist, for instance, to ensure every burger is cooked exactly the same?

#### **B. Geographic Location:**

- Describe the planned geographic location of the business. Include any location analysis, site selection etc. that you have done.
- Discuss any advantages or disadvantages of the site location in terms of such factors as labor (including labor available, whether workers are unionized, and wage rate), closeness to customer and/or suppliers, access to transportation, state and local taxes and laws (including zoning regulations), access to utilities, and so forth.

#### **C. Facilities and Improvements:**

- Describe the facilities, including plant and office space, storage and land areas, special tooling, machinery, and other equipment needed to conduct the company's business. Discuss any economies to scale.
- Provide a schematic diagram of the layout of your facility.
- Describe how and when the necessary facilities to start production will be acquired.
- Discuss whether equipment and space will be leased or acquired (new or used) and indicate the costs and timing of such actions and how much of the proposed financing will be devoted to plant and equipment.
- Discuss how and when, in the next three years, office/ retail site/ plant space and equipment will be expanded to the capacities required by future sales projections and any plans to improve or add to existing space or move the facility; indicate the timing and cost of such acquisitions.

#### **D. Strategy and Plans:**

- Describe the manufacturing processes involved in production of your product(s) – what will you do in-house and what will we purchase (i.e. make versus buy decision)? *or*
- Describe the service delivery processes involved in providing your service(s) and any aspects of the service that are outsourced or provided by others.

- Justify your proposed make-or-buy policy in terms of inventory financing, available labor skills, and other non-technical questions, as well as production, cost, and capability issues.
- Discuss who potential subcontractors and/or suppliers are likely to be and any information about, or any surveys which have been made of, these subcontractors and suppliers. What about relationships with them?
- Present a plan for operations that shows cost/volume information at various sales levels of operation with breakdowns of applicable material, labor, purchased components, and factory overhead, and that shows the inventory required at these various sales levels.
- Describe your approach to quality control, production control, inventory control, and explain what quality control and inspection procedures the company will use to minimize service problems and associated customer dissatisfaction. How will you win in the market place – on cost, quality, timeliness or flexibility?

### ***SECTION VIII: MANAGEMENT TEAM***

This section of the business plan includes a description of the functions that will need to be filled, a description of the key management personnel and their primary duties, an outline of the organizational structure for the venture, a description of the board of directors and key advisors, a description of the ownership position of any other investors, and so forth. You need to present indications of commitment, such as the willingness of team members to initially accept modest salaries, and of the existence of the proper balance of technical, managerial, and business skills and experience in doing what is proposed.

#### **A. Organization:**

- Present the key management roles and responsibilities in the company.
- Discuss the individuals who will fill each position.
- If it is not possible to fill each executive role with a full-time person without adding excessive overhead, indicate how these functions will be performed (e.g., using part-time specialists or consultants to perform some functions), who will perform them, and when they will be replaced by a full-time staff member.
- If any key individuals will not be on board at the start of the venture, indicate when they will join the company.
- Discuss any current or past situations where key management people have worked together that could indicate how their skills complement each other and result in an effective management team.

#### **B. Key Management Personnel:**

- For each key person, describe career highlights, particularly relevant know-how, skills, and track record of accomplishments that demonstrate his or her ability to perform the assigned role. Include in your description sales and profitability achievements (budget size, numbers of subordinates, new product introductions, etc.) and other prior entrepreneurial or general management results.
- Describe the exact duties and responsibilities of each of the key members of the management team.
- Complete resumes for each key management member need to be included here or as an exhibit and need to stress relevant training, experience, any concrete accomplishments, such as profit and sales improvement, labor management success, manufacturing or technical achievements, and meeting of budgets and schedules.

#### **C. Management Compensation and Ownership:**

- State the salary to be paid, the stock ownership planned, and the amount of their equity investment (if any) of each key member of the management team.

#### **D. Other Current Investors:**

- Describe here any other investors in your venture, the number and percentage of outstanding shares they own, when they were acquired, and at what price.

**E. Employment and Other Agreements, Stock Options and Bonus Plans:**

- Describe any existing or contemplated employment or other agreements with key members.
- Indicate any restrictions on stock and vesting that affect ownership and disposition of stock.
- Summarize any incentive stock option or other stock ownership plans planned or in effect for key people and employees.

**F. Board of Directors:**

- Discuss the company's philosophy about the size and composition of the board.
- Identify any proposed board members and include a one or two sentence statement of the member's background that shows what he or she can bring to the company.

**G. Other Shareholders, Rights and Restrictions:**

- Indicate any other shares as notes or guarantees, and note that there are no other

Also list your IP attorneys. They are much more important than your bankers. A blue chip IP legal firm is a great competitive deterrent.

**H. Supporting Professional Advisors and Services:**

- Indicate the names and affiliations of the legal, accounting, advertising, consulting, and banking advisors selected for your venture and the services each will provide.

***SECTION IX: OVERALL SCHEDULE***

A graphical schedule that shows the timing and interrelationship of the major events necessary to launch the venture and realize its objectives is an essential part of a business plan. The underlying cash conversion and operating cycle of the business will provide key inputs for the schedule. In addition to being a planning aid by showing deadlines critical to a venture's success, a well-presented schedule can be extremely valuable in convincing potential investors that the management team is able to plan for venture growth in a way that recognizes obstacles and minimizes investor risk. Since the time necessary to do things tends to be underestimated in most business plans, it is important to demonstrate that you have correctly estimated these amounts in determining the schedule.

Create your schedule as follows:

Step 1: Prepare a month-by-month schedule that shows the timing of such activities as product development, market planning, sales programs, production, and operations, and that includes sufficient detail to show the timing of the primary tasks required to accomplish an activity.

Step 2: Show on the schedule the deadlines or milestones critical to the venture's success, such as:

- Incorporation of the venture.
- Completion of design and development.
- Completion of prototypes.
- Rental of facilities.
- Obtaining of sales representatives.
- Obtaining product display at trade shows.
- Hiring of key managers.
- Obtaining critical financing.
- Initiating marketing activities and in what order.
- Signing up of distributors and dealers.

Ordering of materials in production quantities.

Starting of production or operation.

Receipt of first orders.

Delivery on first sale.

Receiving the first payment on accounts receivable.

Step 3: Show on the schedule the “ramp up” of the number of management personnel, the number of production and operations personnel, and plant or equipment and their relation to the development of the business.

Step 4: Discuss in a general way the activities most likely to cause a schedule slippage, what steps will be taken to correct such slippages, and the impact of schedule slippages of the venture’s operation, especially its potential viability and capital needs.

**Note: You want to be fairly detailed for the first six months to a year, and then just hit key developments or benchmarks for years two and three. A three-year schedule is adequate**

### ***SECTION X: CRITICAL RISKS, PROBLEMS AND ASSUMPTIONS***

The development of a business has risks and problems, and the business plan invariably contains some implicit assumptions about these issues. You need to include a description of the risks and the consequences of adverse outcomes relating to your industry, your company and its personnel, your product’s market appeal, and the timing and financing of your startup. Be sure to discuss assumptions concerning sales projections, customer orders, and so forth. If the venture has anything that could be considered a fatal flaw, discuss why you do not see it as a problem or how you intend to overcome it. The discovery of any unstated negative factors by potential investors can undermine the credibility of the venture and endanger its financing. Be aware that most investors will read the section describing the management team first and then this section. It is therefore recommended that you not omit this section. If you do, the reader will most likely come to one or more of the following conclusions:

1. You think he or she is incredibly naïve or stupid, or both.
2. You hope to pull the wool over his or her eyes.
3. You do not have enough objectivity to recognize and deal with assumptions and problems.

Identifying and discussing the risks in your venture demonstrate your skills as a manager and increase credibility of you and your venture with a venture capital investor or a private investor. Taking the initiative on the identification and discussion of risks helps you to demonstrate to the investor that you have thought about them and can handle them. Risks then tend not to loom as large black clouds in the investor’s thinking about your venture.

I. Discuss assumptions implicit in your plan. Examples of key assumptions might include:

- Revenue forecasts (price, volumes, discounts, margins).
- Development expenses (number of people, key salaries, sub-contracts)
- Average cost of a unit.
- COGS (material, etc.).
- Working capital (accounts receivable, inventory, payables)
- Capital expenditures (major items)
- Ability to obtain key distribution channel.
- Getting a patent licenses or permit.
- Rate of growth in sales.
- Obtaining a particular site or facility that is key to the business.
- Hiring of key staff members with experience in a critical area.

- Approval of critical financing.
- Overcoming key obstacles in product design.

2. Identify and discuss any major problems and other risks, such as:

- Running out of cash before orders are secured.
- Competitor risks e.g. you are pre-empted in the market by a competitor
- Technological risks i.e. cannot make the product work
- Potential price-cutting by competitors.
- Any potential unfavorable industry-wide trends.
- Design or manufacturing costs in excess of estimates.
- Sales projections not achieved.
- Difficulties or long lead times encountered in the procurement of parts or raw materials.
- Difficulties encountered in obtaining needed bank credit.
- Larger-than-expected innovation and development costs.
- Running out of cash after orders pour in.

3. Indicate what assumptions or potential problems and risks are most critical to the success of the venture, and describe your plans for minimizing the impact of unfavorable developments in each case. What is the worst-case scenario and how will you respond? Focus on risks that are important and critical to your business, not the ordinary operating risks faced by any business.

### ***SECTION XI: FINANCIAL PLAN***

#### **Documents To Be Developed For This Section (Put In Appendix or in body of document)**

- i. Pro forma income statements
- ii. Pro forma balance sheets
- iii. Pro forma cash flow analysis

This section lays out exactly what you are requesting from investors; it is number-oriented. Give the investors the columns and rows that they want to see. The more you give them, the more difficult it will be for them to challenge the assumptions that you have made to produce those numbers.

The financial plan is basic to the evaluation of an investment opportunity and needs to represent your best estimates of financial requirements. The purpose of the financial plan is to indicate the venture's potential and to present a timetable for financial viability. It also can serve as an operating plan for financial management using financial benchmarks. In preparing the financial plan, you need to look creatively at your venture and consider alternative ways of launching or financing it.

As part of the financial plan, financial exhibits need to be prepared. To estimate cash flow needs, use cash-based, rather than an accrual-based, accounting (i.e., use a real-time cash flow analysis of expected receipts and disbursements). This analysis needs to cover three years (or five depending on your type of business). Included also are pro forma income statements and balance sheets; and a break-even chart.

On the appropriate exhibits, or in an attachment, assumptions behind such items as sales levels and growth, collections and payables periods, inventory requirements, cash balances, cost of goods, and so forth, need to be specified. Your analysis of the operating and cash conversion cycle in the business will enable you to identify these critical assumptions.

Pro forma income statements are the plan-for-profit part of financial management and can indicate the potential financial feasibility of a new venture. Usually the level of profits, particularly during the start-up years of a venture, will not be sufficient to finance operating asset needs, and since actual cash inflows do not always match the actual cash outflows on a short-term basis, a cash flow forecast that will indicate these

conditions and enable management to plan cash needs is recommended. Further, pro forma balance sheets are used to detail the assets required to support the projected level of operations and through liabilities, to show how these assets are to be financed. The projected balance sheets can indicate if debt-to-equity ratios, working capital, current ratios, inventory turnover and the like are within the acceptable limits required to justify future financing that are projected for the venture. Finally, a break-even chart showing the level of sales and production that will cover all costs, including those costs that vary with production level and those that do not, is very useful:

#### **A. Pro Forma Income Statements:**

- Using sales forecasts and the accompanying operating costs, prepare pro forma income statements for at least the first three years. Be sure these numbers are consistent with what is being proposed in all the earlier sections of the plan (marketing, operations, management team, etc.)
- Fully discuss assumptions (e.g., the amount allowed for bad debts and discounts, or any assumptions made with respect to sales expenses or general and administrative costs being a fixed percentage of costs or sales) made in preparing the pro forma income statement and document them.
- Draw on Section X of the business plan and highlight any major risks, such as the effect of a 20% reduction in sales from those projected or the adverse impact of having to climb a learning curve on the level of productivity over time, that could prevent the venture's sales and profit goals from being attained, plus the sensitivity of profits to these risks.

#### **B. Pro Forma Balance Sheets:**

- Prepare pro forma balance sheets semi-annually in the first year and at the end of each of the first three years.

#### **C. Pro Forma Cash Flow Analysis:**

- Project cash flows monthly for the first year of operation and quarterly for at least the next two years, detailing the amount and timing of expected cash inflows and outflows; determine the need for and timing of additional financing and indicate peak requirements for working capital; and indicate how needed additional financing is to be obtained, such as through equity financing, bank loans, or short-term lines of credit from banks, on what terms, and how it is to be repaid. Remember they are based on cash, not accrual, accounting. Explain how much money you will need. For debt funding, what will you use as collateral? How will the money be used—for working capital, R&D, marketing, capital acquisitions? This dictates the level of risk of the investment. Investors generally feel that expenditures for R&D and marketing are riskier than are expenditures for capital acquisitions.
- Discuss assumptions, such as those made on the timing of collection of receivables, trade discounts given, terms of payments to vendors, planned salary and wage increases, anticipated increases in any operating expenses, seasonality characteristics of the business as they affect inventory requirements, inventory turnovers per year, capital equipment purchases, and so forth. Again, these are real time (i.e., cash), not accrual.
- Discuss cash flow sensitivity to a variety of assumptions about business factors (e.g., possible changes in such crucial assumptions as an increase in the receivable collection period or a sales level lower than that forecasted).

#### **D. Months to Breakeven and to Positive Cashflow:**

- Given the above strategy and assumptions, show when the venture will attain a positive cash flow. Show if and when you will run out of cash. Note where the detailed assumptions can be found. Note any significant stepwise changes in cash flow that will occur as you grow and add capacity
- Given your entry strategy, marketing plan, and proposed financing, how long it will take to reach a unit breakeven sales level. How many months to breakeven? Briefly describe your break-even estimates. In other words, how many units (or dollars' worth) of the product (or how many hours of the service) must be sold to cover your costs?



#### **E. Cost Control:**

- Describe how you will obtain information about report costs and how often, who will be responsible for the control of various cost elements, and how you will take action on budget overruns. Explain any unusual items not identified in the financial statement.

#### **F. Highlights of the Financial Statements:**

- Highlight the important conclusions, such as what is the maximum amount of cash required is and when it will be required, the amount of debt and equity needed, how fast any debts can be repaid, etc., start up costs, etc.
- To help validate your financials compare critical financial ratios from your plan with those of your industry. Explain and justify significant differences.

### ***SECTION XII: PROPOSED COMPANY OFFERING***

The purpose of this section of the plan is to indicate the amount of any money that is being sought, the nature and amount of the securities offered to the investor, a brief description of the uses that will be made of the capital raised, and a summary of how the investor is expected to achieve its targeted rate of return.

It is important to realize the terms for financing your company that you propose here are only the first step in the negotiation process with those interested in investing, and it is very possible that your financing will involve different kinds of securities than originally proposed.

#### **A. Desired Financing:**

- Review the monthly real-time cash flow projections and your estimate of how much money is required over the next three years to carry out the development and/or expansion of your business as described.

- Determine the negative. Add to protect against

- Determine the negative. Add to protect against. Indicate how the negative is obtained via term loans or lines of credit.

Investors may need education about the role of the IP holding company and why the investee company is different. As a last resort, you can opt to separately pledge the IP (or fields of use therefrom) as collateral or even grant them rights in the holding company. Resist their urging to combine the IP into the investee company.

#### **B. Offering (deal structure – pitch for money):**

- If you have decided to seek equity capital, then you need to describe the type of security being offered (e.g., common stock, convertible debentures, debt with warrants, debt plus stock), the unit price, and the total amount of securities to be sold in this offering. If securities are not just common stock, indicate by type, interest, maturity, and conversion conditions.
- Show the percentage of the company that the investor of this offering will hold after it is completed or after exercise of any stock conversion or purchase rights in the case of convertible debentures or warrants i.e. what share of your company does the investor get for a specified investment.
- Securities sold through a private placement and that are therefore exempt from SEC registration should include the following statement in this part of the plan: “The shares being sold pursuant to this offering are restricted securities and may not be resold readily. The prospective investor should recognize that such securities might be restricted as to resale for indefinite period of time. Each purchaser will be required to execute a Non-Distribution Agreement satisfactory in form to corporate counsel”.
- If you are seeking a loan, then you need to indicate to the potential lender how the loan will be repaid and what the interest rate is. What is the collateral for the loan?

#### **C. Capitalization:**

- Present in tabular form the current and proposed (post-offering) number of outstanding shares of common stock. Indicate any shares offered by key management people and show the number of shares that they will hold after completion of the proposed financing.

- Indicate how many shares of your company's common stock will remain authorized but un-issued after the offering and how many of these will be reserved for stock options for future key employees.

**D. Use of Funds:**

Include your IP budget.

- Investors like to know how their money is going to be spent. Provide a brief description of how the capital raised will be used. Summarize as specifically as possible what amount will be used for such things as product design and development, capital equipment, marketing, and general working capital needs.

**E. Investors' Return (Exit Strategy).**

- What is the value of your company? How did you calculate this value?
- Indicate how your valuation and proposed ownership shares will result in the desired rate of return for the investors you have targeted. What will be the likely harvest or exit mechanism (IPO, outright sale, merger, MBO, operate and grow, etc.)?
- What is the exit strategy if the business doesn't develop as we hope?

Include (and highlight) the value of your IP in the context of your management. IP value determinants are:

- Patents – DCF of incremental cash derived from excluding others + any monetizing of idle IP from out-licensing
- Trademarks – DCF of incremental cash from brand recognition
- Copyrights – DCF of incremental cash from excluding others + any monetizing of idle IP from out-licensing
- Trade Secrets – DCF from excluding others

Include the IP salvage value available through other fields of use, out-licensing and divestiture.