

An Introduction to Business Plans

3.57 Materials Selection, Design, and Economics

Massachusetts Institute of Technology

The Business Plan

A business plan is not just the first step in a new business; it's a guide to any enterprise. A good business plan details the venture's current status, expected needs, and a projection of the future. Besides attracting investors, business plans help management focus on growth and future expectations.

General Outline

At some point, a winning business plan starts as an idea, a lot of questions, and some goals. The outline below covers the most important elements of a business plan for this class, with a description of each section and its components, to help organize what may be your first business plan. Although this is not a comprehensive guide, it covers the fundamentals with a focus on the tools we have at hand and the aspects that have not been explicitly covered in class.

I. Executive summary

An overview of the most important parts of the business plan, the executive summary is about one page long. It is the first and often the only part read. It should be written last, using key numbers and phrases from the rest of the business plan. Briefly touch upon the venture itself, market opportunities, financial needs/projections, special needs, opportunity conditions, and why they exist. Description of the business and its concepts, background, and uniqueness

- A. Opportunity – entry strategy, competitors' vulnerabilities, industry trends
- B. Competitive advantages
- C. Target market and projection – who your customers are and relevant changes in the market's size and growth rate
- D. Expected profitability and durability, key financial projections
- E. Management team – who the key members are and what qualifications they bring
- F. Offering – a brief mention of investment and commitment asked for at this time

II. The Industry, company, and products

Anyone interested in funding the new company needs a clear understanding of its background. This section is not only about how the company came to be, it is also a picture of the industry as a whole and the niche that this enterprise fits. Few technical details should be used in describing the product; instead, emphasize the product's applications and factors that set it apart from the competition. Potential investors know that nothing is perfect, and will prefer credible management with a realistic view of the company.

- A. Industry description
 - 1. Current status – market size, growth trends, new products or competitors
 - 2. Future needs and prospects

- B. Company description
 - 1. Concept – formation of the business and the opportunity it fulfills
 - 2. Interface with industry
- C. Product description
 - 1. Applications
 - 2. Unique features – what distinguishes this product from its competitors
 - 3. Possible drawbacks – it is important to be upfront here
 - 4. Present state and future potential
- D. Company potential – market niche
 - 1. Entry and growth strategy – how fast will the company grow?
- E. Advantages –
 - 1. Uniqueness of proposed enterprise
 - 2. Why it will succeed
- F. Management
 - 1. Who the upper management is – names and backgrounds
 - 2. Structure
 - a. Approximate organizational chart, even in a small company
 - b. Number of employees and consultants needed
 - c. Brief plans for wages and benefits
 - 3. Legals
 - a. Relevant stock and licensing agreements and permits needed
 - b. Form of company ownership and reasoning

III. Plans for product development

The cornerstone to the success of your business is the product, so investors have a vested interest in knowing the stage of development. This section, though rather brief, is critical, and forms a bridge between the proposed business and the manufacturing that can bring your product to success. A different structure will be necessary for service-oriented businesses, which are not the focus of this course.

- A. Status in terms of cost and time
- B. Delays – anticipated and possible
- C. Proprietary issues such as IP and contracts

IV. Marketing plans & analysis

This section should be the first to be fully worked out. Only by understanding the market can financials, manufacturing plans, and product development be realistically projected. The decisions made in market analysis influence all subsequent numbers and forecasts. The information from the multi-attribute utility analysis is best interpreted and exploited in this section.

- A. Market size and trends
 - 1. Who and how many they are – identifiable characteristics
 - 2. Where they are
 - 3. How to identify and contact them
 - 4. Large orders and contracts already in hand.
 - 5. Five year market expectancy including growth and demographic changes
- B. Competitive edge

1. What factors affect your clients' purchase decisions
2. Realistic assessment of strengths and weaknesses of your competitors
3. Multi-attribute utility analysis (MAUA)
 - a. What do your clients want?
 - b. How do they choose a product?
 - c. How does your product measure up? How will you price it? Include utility curves.
- C. Estimated market share and sales
 1. What makes this product saleable
 2. Estimated market share and sales (in units and \$) for 3 years
 3. Growth of company related to growth in market
- D. Marketing
 1. Kind of clients targeted initially and in later stages
 2. Product features to emphasize
 3. Sales tactics, especially using innovative approaches to reach potential clients

V. Plans for manufacturing

Knowing the client basis and product requirements begins to define the enterprise's manufacturing needs. The information presented here is research intensive, but pays off with accurate financial analysis and a thorough understanding of the company's new products. When sizing the operation, bear in mind the anticipated market share and the decision-making steps needed to expand the operation.

- A. Production needs
 1. Facilities – e.g., size needed, new or leased
 2. Equipment – significant part of cost for many businesses
 3. Suppliers
- B. Operating cycle
 1. Lead/lag times
 2. Effect of seasonal loads
- C. Location – consider proximity to customers, easy shipping routes both in and out, availability of space and labor, local regulations
- D. Manufacturing cost data
 1. Breakdown of material, labor, overhead, etc.
 2. Cost/volume
- E. Future needs and considerations for expansion

VI. Financial analysis

Many hours of work on production functions and cost models are distilled here into a few paragraphs and charts that carry the burden of proof for the new enterprise. Financial analysis is a science, and from the understanding of your clients and manufacturing needs, believable forecasts can be made to convince even the risk-averse investor.

Presenting two phases of business development, each with three estimates of market share growth, is a sound way to estimate your company's potential and make decisions with your investors' capital. Some figures that need to be presented include the income estimates for the first few years (usually 5), the cost to open business, the break-even point, and projected net worth.

- A. Financing stages
 1. Phase one – high, medium, and low market share potentials
 2. Rationale for initial production scale
 3. Phase two – decision making for possible business expansion
- B. Financial forecast
 1. Profit and loss statements over 5 years – what can you make or lose?
 2. Break even – number of units sold at what cost to break even

VII. Proposed offering

As compelling as the enterprise laid out above may be, potential investors have to have a clear idea of what is expected from them, what they will get in return and when they can have it. The capital estimates and timelines presented here should be realistic and educated guesses based on the data and analysis presented before. Investors, like graduate schools, like outside money – research loans and subsidies for your industry, location, or other company trait. For example, Northern Minnesota has a subsidized tax-free zone for businesses starting in the Iron Range, where mining has become unprofitable. Not only are rates for real estate and labor below national average, despite the Midwestern location with good shipping options, but the new enterprise has free money from all levels of government. For all information, stay realistic with an eye for the future to prevent derailing a new enterprise at the early stage of venture financing.

- A. Desired financing
 1. Capital to be obtained from this offering
 2. Other potential sources of money
 3. Use of funds
- B. Offering
 1. Type
 2. How much investors will hold when complete
- C. Investor's return
 1. Ownership
 2. Exit mechanism – e.g., IPO, sale, merger, MBO
- D. Timing and objectives
 1. Milestones – Timetable for investors on things like incorporation, development, prototype completion, hiring, production, first sales and deliveries
 2. Month by month or bar chart calendar
 3. Critical risks
 - a. Dealing with the competition
 - b. Weak areas – e.g., obsolescence, cheaper products, trends in market
 - c. Legal factors and IP protection issues
 - d. Are the risks calculated? What alternate courses are available?

VIII. Appendices

Anything critical to the understanding and funding of the business that could not be addressed in the plan itself belongs back here. This includes additional diagrams, blueprints, technical information, financial worksheets, curricula vitae, and anything else that must be included. For clarity, include a table of contents and a semblance of organization.

The Devil's in the Details

Once the business plan seems complete, it is time to start from the front page and read it straight through. When reading, pay attention to the questions that arise as you go through. They should be answered by the text and its appendices. It is doubly important to keep in mind the common shortcomings that plague otherwise good content and writing.

Common Pitfalls in Development

- Unrealistic planning
- Unanticipated obstacles
- Lack of commitment
- Lack of experience
- Lack of market niche

Writing Tips

- Keep the technical details to a minimum – business plans are read by many people without engineering backgrounds.
- Add a cover page, with the company's name, address and phone number, and the date of issue of the business plan.
- Maintain the third person in writing. "We" and "you" are overly personal and come across as amateurish and subjective.
- Keep your plan concise and specific.
- Avoid ambiguous or unsupported statements of important topics like key financial figures and management details
- Sloppy mistakes in spelling and grammar can be the undoing of an otherwise polished presentation. Edit carefully, and use a style manual like Strunk & White or the Mayfield Handbook (see references).

Other Resources

There are many publications available with more in-depth treatment of business plan development and good sample business plans. Some of them include:

Printed

Covello, J.A. and Hazelgren, B.J. *The Complete Book of Business Plans: Simple Steps to Writing a Powerful Business Plan*. Naperville, IL: Sourcebooks, Inc. 1994.

Kuratko, D.F. and Hodgetts, R.M. *Entrepreneurship: A Contemporary Approach*. 4th edition. Orlando, FL: Harcourt Brace & Co. 1998.

Timmons, J.A. *New Venture Creation: Entrepreneurship for the 21st Century*. 5th edition. Boston, MA: Irwin McGraw-Hill. 1999.

Online

Strunk, W. and White, E.B. *The Elements of Style*. Printed, or online at <http://www.bartleby.com/141/index.html>

Perelman, L.C., et al. *The Mayfield Handbook of Technical and Scientific Writing*. Printed, or online at <http://www.mhhe.com/mayfieldpub/tsw/home.htm> or <http://web.mit.edu/course/21/21.guide/Demo/web/> (MIT campus only).