

Feasibility Plan Framework

Frank Moyes and Stephen Lawrence

Deming Center for Entrepreneurship
Leeds School of Business
University of Colorado Boulder

Feasibility Plan Framework

Introduction

A feasibility plan asks two simple questions of a potential venture

- Will anyone buy the product or service?
- Can it make a profit?

While the questions are straightforward, the answers are anything but. These two questions quickly lead you to a raft of others that you will address in the following sections:

Part I Industry & Market Analysis

In this section you will analyze size and growth of the market; industry trends; market structure; identify problems and potential niches.

Part II Competitive Analysis

Identify current and future competitors and determine their strengths and weaknesses.

Part III Venture Analysis

In this section you will determine the product/service features; identify the target market; unique benefits; competitive advantage, risks and profitability.

For high-tech ventures there is a third question that needs to be addressed - will the design of the product/service actually work. Determining the technical feasibility is not within the direct scope of this Feasibility Plan.

Part I MARKET ANALYSIS

In this section you will evaluate the industry environment in which you will compete and the market that you will serve. Both primary and secondary research is required.

1. Determine the size of the industry you are considering. What is the historic growth rate? Future growth rate.
2. What trends are driving the market? How is the market changing? For example, what is the impact of aging baby boomers, single and dual income families, globalization, Ecommerce, etc?
3. How can the market be segmented? Consider the following:
 - Sector: industrial, consumer, government
 - Product/service attributes e.g. speed, quality, performance, etc.

- Price
 - Geography: local regional, national, international
 - Target market demographic, psychographic
 - Value Chain: level of integration
 - Distribution channels
 - Etc.
4. What threats exist, e.g. economic, political, technological, international, etc.?
 5. How is the market structured? (KR Allen, Launching New Ventures, 3rd ed)
 - Carrying capacity (degree of saturation). To what extent can the industry support growth? Does the capacity exceed demand? It is not easy to enter these markets, unless you have a new technology or can find a niche.
 - Uncertainty (degree of stability). What extent is the industry in constant flux? Dynamic industries have higher risks, but can offer new opportunities.
 - Complexity. Does the market require a new venture to negotiate with multiple entities? For example, if you must come to agreements with suppliers, distributors, and technology licensor, the risk is higher.
 - Industry Evolution (industry growth cycle). Is the industry in the birth, high growth, differentiation and competition, shakeout or maturity phase?
 - Emerging industries (no rules apply). Are there new opportunities that result from new technology?
 6. What niches exist that you could exploit? Are there customer groups or regions that are not adequately being served? Is there a segment where customers are dissatisfied?
 7. Are there new distribution channels that can be used to exploit existing markets?

Part II COMPETITIVE ANALYSIS

Analysis

1. Describe the major competitors in the market. Prepare a matrix analysis that compares your venture with the major competitors. Consider the following factors for each competitor. Do not be restricted to these, as each market will have its own.
 - Product/Service offering: breadth and depth
 - Price range and policy
 - Target market
 - Quality: define the type quality
 - Unique features

- Channels of distribution
 - Marketing/advertising strategy
 - Market perception of the company (branding strategy)
 - Strengths/Weaknesses
 - Market Share
 - Location
 - Operations: manufacturing and location, outsourcing, sources for services, materials
 - Company size: revenues, number of customers, number of employees, etc.
 - Financial resources: ownership, funding, investors, profitability, financial soundness, etc.
 - Strategic alliances
 - Management (backgrounds and experience)
 - Etc.
2. On what basis do the major companies in the marketplace compete: service, quality, price, new product/service introductions, customer support, etc.?
 3. How do your competitors perceive themselves? Obtain brochures, literature, and advertisements; look at the website.
 4. What barriers to entry do new companies face? Consider the following:
 - Economies of scale: manufacturing, marketing, technological
 - Customer loyalty: well established brands, long established relationships
 - Switching costs
 - Capital requirements: high investment
 - Access to distribution channels: exclusive distribution agreements, dominant position of competitors
 - Proprietary: patents, copyrights, know-how
 - Government regulations: defense contracts, import restrictions
 - Industry hostility to new entrants. Will use all means to drive out new competition: pricing, legal, spreading rumors.
 - Social
 - Etc.
 5. What is the degree of rivalry among competitors? A highly competitive industry means price competition. Most new firms can't compete on price.
 6. Competition can come from several different sources. Consider the following:
 - Direct: companies that produce same product/service; but, they may have different strategies to compete - price, quality, selection, performance, design, tech support.
 - Indirect: companies that satisfy same need with different product/services.

- Future: companies that have the capability to enter your market; they may have the same customers; but use different technology or channels
7. How much control do you have over:
- Setting prices. How are prices established in your marketplace (major competitor, industry practice, value added, etc.)? What is the bargaining strength of customers?
 - Costs. Can you gain an advantage through technology, process design, resource ownership or access to raw materials, low cost labor, economies of scale (difficult for a start-up), and capacity utilization. What is the bargaining strength of suppliers?
 - Channels of distribution. What channels of distribution exist? What access do you have to existing channels of distribution? Can you create new ones? What is the bargaining strength of channel companies?
8. Is your market place dominated by a few companies that control over 60% of the market? Unless these companies are SOT's (slow, old and traditional), you should not consider competing directly with them.

Part III VENTURE ANALYSIS

Opportunity or Need

1. Describe the market opportunity. What is the compelling need? What problem are you solving?
2. Consider the following needs when analyzing the product/service. It is not necessary for a product /service to address all of these.
 - Physical: food, warmth, shelter, sleep, etc.
 - Physiological: health, cleanliness, comfort, fitness, safety, etc.
 - Emotional: euphoria, love, prestige, stress, etc
 - Social: ethical, honesty, power, competitiveness, integrity, friendship, etc.
 - Intellectual: achievement, better decisions, artistry, etc.
 - Economic: revenues, productivity, cost savings, maintenance, etc.
 - Financial: ROI, DCF, payback, burn rate, etc.

Product or Service

1. Describe the product or service. Consider the following product attributes (Boyd, Walker and Larreche, Marketing Management 1995, Irwin Publishing):
 - Performance: durability, quality of materials, defect levels, tolerances, construction, dependability, functional performance (acceleration, nutrition, taste), efficiency, safety, styling, packaging, etc.
 - Cost: purchase price, quantity discounts, operating costs, repair costs, cost of extras or options, cost of installation, trade in allowance, likely resale value, etc.

- Availability: carried by local stores, credit terms, quality of service available from local dealer, delivery time, credit card, on-line transactions, etc.
 - Social: status, image, popularity with friends, popularity with family members, reputation of brand, style, fashion, etc.
 - Service: hours, warrant, guarantee, return/replacement policy, upgrades, maintenance, training, installation, repair service, spare parts, customer support, tech support, training, product design, make to order, level of inventory, quotation response time, lead time, quality certification, employee capabilities, etc.
 - Environment: location, atmosphere, layout, fixtures, aesthetics, style, sound, lighting, color, etc.
2. What range of product/services is being offered? What are the prices? Describe the environment (size, décor and layout, etc.). If it is a service business, what are the employee requirements (qualifications, number, dress, etc.)?
 3. Describe how your product is designed to meet the needs of your target customer.
 4. How will the product/service be produced and delivered?
 5. For technology products, what are the major technical milestones that must be achieved? What is the basis for believing that they are achievable?

Target Market

Most ventures address either a consumer market or a business market. The motivations of each are different. If the product/service is sold through a distribution channel, system integrator or OEM, consider both.

Consumer market

1. Characterize the target market according to the following criteria:
 - Demographics: gender, sex, age, race, education, occupation or profession, income, location, etc.
 - Psychographics or life style: attitudes, beliefs, opinions, interests, values, etc.
 - Social status: infers certain behavior: middle class values education, family activities, etc.
2. What distribution is required to reach the consumer?
3. What does the target market think about the product/services currently in the marketplace? How willing are they to change?

4. How are buying decisions made? Who makes the decision? Who influences the decision? Are buying decisions based primarily on price, quality, service, convenience, or others? Is there repeat business?

Business market

1. Describe the organizations that purchase the product/service. What industry or sector, e.g. automotive, state governments, nonprofit? What size, e.g. Fortune 100, number of employees, etc.? Where located?
2. What does the target market think about the product/services currently in the marketplace? How willing are they to change?
3. How are buying decisions made? Are there different approval levels? Are decisions made centrally or decentralized? At what level is the ultimate responsibility for approving expenditures? What is the budgeting cycle? How long does it take from the first contact to receipt of an order?
4. What criteria are used to make buying decisions: lowest price, service response, tech support, distance from supplier, global reach, ISO 9000, design capability, range of products, just-in-time, inventory levels, etc.?
5. What is the payment policy? Will organizations pay cash or by credit card, make a down payment, require credit, etc.? If credit terms are required, are discounts for early payment expected, e.g. 2/10, net 30 days? What is the actual payment practice?
6. Are purchases typically made directly from the supplier, through wholesalers, distributors, retailers, or other?

Unique Benefits

When considering the benefits of the product or service, remember that features are not the same as benefits. The fact that a bicycle is fast and red is important, but by itself, is not a benefit. The benefit is that you can win competitions and look cool. Think about the impact on the target market's feelings (emotions) and pocketbook (financial) (Levinson, Guerrilla Marketing, 3rd edition, Houghton Mifflin Co)

1. What are the major benefits of the product/service? How do the benefits address the needs described above? How do the product/service features support these benefits?

Think beyond a generic description of benefits, e.g.

- Best quality: do you mean appearance, durability, reliability, etc.?
- Good service: do you mean on-time delivery, maintenance, tech support, etc.?

- Efficiency: do you mean less time, easier to use, greater output, fewer resources, etc.?
 - Save time: to do what? It may not always be important to save time.
 - Convenience, for what?
2. How are these benefits unique? What company is the benchmark?
 3. Are the benefits well understood by the target market? How do the benefits affect the target market's feelings or pocketbook?

Competitive Advantage

Your sustainable competitive advantage is ultimately determined by how well you understand the market and the competition, and the resources and capabilities that you can marshal.

1. Identify the venture's resources:
 - Financial: access to capital (equity & debt), cash reserves, government grants, etc.
 - Physical assets: plant & equipment, raw materials, location, working capital, etc.
 - Human: social, employee knowledge, experience, accumulated wisdom, labor cost and skills, etc.
 - Intangible: patents, trade secrets, know-how, copyrights, databases, etc.
 - Organizational: culture, contacts, policies, Boards of Directors & Advisors, suppliers, service providers, etc.
2. Identify the venture's capabilities:
 - World class management (serial entrepreneur)
 - Well developed, high-quality, accessible contacts that take years to build
 - Sales and marketing experience
 - Science or technology expertise
 - Supply chain expertise
 - Product/service design expertise
 - Sales & distribution organization
 - Total operational approach (e.g. Dell, Wal-Mart)
 - Etc.
3. What barriers to entry do you face in entering your target market?
 - Intellectual property: patents, trade secrets, copyrights, trademarks, etc.
 - Switching costs to your target market
 - Customer loyalty
 - Agreements with customers, suppliers, strategic partners
 - Control of the distribution channel
 - Response of competition to your entry into the market
 - Etc.

4. What barriers can you establish that would restrict entry of competition?
 - Intellectual property: patents, trade secrets, copyrights, trademarks, etc
 - Switching costs to your target market
 - Customer loyalty
 - Agreements with customers, suppliers, strategic partners
 - Control of the distribution channel
 - Etc.

4. Is your market place dominated by a few companies that control over 60% of the market? Unless these companies are SOT's (slow, old and traditional), you should not consider competing directly with them.

Risks

Focus on the major risks faced by your venture. All businesses face generic risks such as convincing customers to buy, hiring the right people, or getting funding, etc. What events, if they occurred, would be fatal to your business? Equally important to what can go wrong, is what must go right for you to succeed? Consider some of the following:

- Marketing: size of market, price targets, sales cycle
- Technological: doesn't work, time and cost to develop, patentability
- Financial: exchange rate, interest rates
- Economic: sensitivity to swings in the economy
- Governmental: regulations; new law must be passed
- Competitive: competitor's response to your entry, potential competition
- Strategic: establishing strategic partnerships
- Operational: cost objectives, large number of interrelated components, scalability, prime location

Financial Projections

Use the Feasibility Plan Financial Projection Worksheet to prepare:

<u>Operating Income</u>	Year 1	Year 2	Year 3
Revenues	\$1,000,000	\$3,000,000	\$10,000,000
Cost of Revenues	500,000	1,200,000	4,000,000
Gross Profit	500,000	1,800,000	6,000,000
% Gross Profit	50%	60%	60%
<u>Operating Expenses</u>			
Sales & Marketing	150,000	750,000	1,500,000
Development	500,000	1,000,000	2,500,000
General & Administrative	150,000	250,000	600,000
Total	800,000	2,000,000	4,600,000
Operating Income	(\$300,000)	(\$200,000)	\$1,400,000
 <u>Break-even Revenue</u>	 \$1,200,000	 \$3,500,000	 \$7,500,000
 <u>Investment Required</u>			
Capital Expenditures	\$100,000	\$500,000	\$1,500,000
Working Capital	100,000	300,000	1,000,000
Other Major Expenses	500,000	0	0
Non-recurring	50,000	0	0
Total	\$750,000	\$800,000	\$2,500,000

Key Assumptions

Describe the 3-5 key financial assumptions, e.g. revenue, margins, operating expenses, investment required, etc.

Profitability

Project a simple Operating Income Statement. Your focus should be on what your business might look like in three years, once the company has passed through the start-up phase. Can this venture be profitable? How much investment is required?

1. Revenue

To project the total revenues of your product/service:

- Estimate the likely sales volume in number of customers, pieces, or transactions, etc. Show your assumptions.
- Determine the price of your product/service. What is your pricing strategy? Consider how prices are determined in your marketplace (market price, competitors' prices, cost plus, industry practice, keystone, savings, channel discounts, etc.). Show your assumptions.

2. Cost of Revenues

A. Decide whether you will produce the product/service in-house or subcontract. To project costs:

- Calculate the direct labor cost. Show your assumptions.
- Calculate the material cost. Show your assumptions.
- Alternatively, estimate the cost of subcontracting the production or service by interviewing potential subcontractors. Show your assumptions.

B. Estimate indirect costs, if they are significant, e.g. facility costs, utilities, energy. Show your assumptions.

C. Estimate depreciation expense, if there are large capital expenditures. Show your assumptions.

3. Operating Expenses

Determine the expenses (show your assumptions) for:

- Sales & Marketing
- Development
- General & Administrative

4. Research the financial statements of comparable companies to test the reality of your assumptions.

Break-even Revenue

Calculate the break-even revenue by categorizing all of the expenses as variable or fixed:

$$\text{B-E Rev} = \frac{\text{Fixed Costs}}{(1 - \text{Variable Costs/Revenue})}$$

Investment Requirements

Estimate the amount of funding that will be required for (show your assumptions).

- Capital Expenditures: describe each major expenditure and the amount
- Working Capital: accounts receivable, inventory, accounts payable
- Other Major Expenses: development expenses, product launch expenses, market research, etc.
- Non-recurring : legal, rent deposit, license, etc.

Conclusion

Draw conclusions on the feasibility of your concept. Consider:

- Why is there a compelling need?
- What is the proof that the target market is interested?
- How are the benefits truly unique?

- Do you have a sustainable competitive advantage?
- How can the risks be mitigated?
- Can you make a profit? How much investment is required?

If you conclude that your concept is not feasible, you face two alternatives: you can scrap the whole idea and get a real job. Or, you can rethink the concept based on what you have learned from this analysis. It is not unusual for an entrepreneur to go through several iterations before settling on a particular approach.

Recommendations

If you conclude that your concept is feasible, prepare an action plan of the next steps you will take. This could include: writing a business plan; building a prototype; doing in-depth market research; finding a location; identifying people that could help you start the business; raising funds, etc.

References:

This analysis draws on advice and work by:

- Kathleen Allen, Launching New Ventures (2003), 3rd edition, Houghton Mifflin
- Boyd, Walker and Larreche Marketing Management (1995), Irwin Publishing
- Bygrave & Zacharakis, 2003. The Portable MBA in Entrepreneurship, 3rd edition, Wiley
- Mac Davis, Boulder, Colorado
- Tom Dean, University of Colorado
- FastTrac (2001), Kauffman Center of Entrepreneurial Leadership.
- Lawrence & Moyes, Writing a Successful Business Plan (2003), University of Colorado.
- Levinson, Guerrilla Marketing, 3rd edition, Houghton Mifflin Co)
- O'Malia and Whistler (2003), The Entrepreneurial Journey , Thompson Southwest Publisher.
- John W. Mullin (2003), New Product Road Test, FT Publishing
- Dale Meyer, University of Colorado
- Morris, Kuratko, Schindehutte *Towards Integration: Understanding Entrepreneurship Through Frameworks* (2001).
- Morris, Schindehutte, Allen, Richardson, Brannon, *The Entrepreneur's Business Model: Theoretical, Conceptual, and Empirical Foundations*, working paper.
- Heidi Neck, Babson College
- Porter, M. E. (1980) Competitive Strategy: Techniques for Analyzing Industries and Competitors, New York, Free Press
- Jeff Timmons (1999), New Venture Creation, 5th edition, Irwin Publishing.