

## WHAT IS A FEASIBILITY STUDY

A Business Feasibility Study can be defined as a controlled process for identifying problems and opportunities, determining objectives, describing situations, defining successful outcomes and assessing the range of costs and benefits associated with several alternatives for solving a problem. The Business Feasibility Study is used to support the decision-making process based on a cost benefit analysis of the actual business or project viability. The feasibility study is conducted during the deliberation phase of the business development cycle prior to commencement of a formal Business Plan. It is an analytical tool that includes recommendations and limitations, which are utilised to assist the decision-makers when determining if the Business Concept is viable (Drucker 1985; Hoagland & Williamson 2000; Thompson 2003c; Thompson 2003a).

## THE IMPORTANCE OF A BUSINESS FEASIBILITY STUDY

It is estimated that only one in fifty business ideas are actually commercially viable. Therefore a Business Feasibility Study is an effective way to safeguard against wastage of further investment or resources (Goffon 1997; Bickerdyke et al. 2000). If a project is seen to be feasible from the results of the study, the next logical step is to proceed with the full Business Plan. The research and information uncovered in the feasibility study will support the business planning stage and reduce the research time. Hence, the cost of the Business Plan will also be reduced. A thorough viability analysis provides an abundance of information that is also necessary for the Business Plan. For example, a good market analysis is necessary in order to determine the business concept's feasibility. This information provides the basis for the market section of the Business Plan (Bangs 2000; Hoagland & Williamson 2000; Truitt 2002; Thompson 2003b).

Finally, a feasibility study should contain clear supporting evidence for its recommendations. The strength of the recommendations can be weighed against the study ability to demonstrate the continuity that exists between the research analysis and the proposed business model. Recommendations will be reliant on a mix of numerical data with qualitative, experience-based documentation. A Business Feasibility Study is heavily dependent on the market research and analysis. A feasibility study provides the stake holders with varying degrees of evidence that a Business Concept will in fact be viable (Hoagland & Williamson 2000; Thompson 2003c; Thompson 2003a; Wickham 2004).

## BUSINESS FEASIBILITY STUDY AND DIMENSIONS OF BUSINESS VIABILITY

The Business Feasibility Study findings will be assessed by potential investors and stakeholders regarding their credibility and depth of argument. The Business Feasibility Study places the findings of the Dimensions of Business Viability Model assessment into a formal business report. It also aligns the findings with functional processes of an enterprise which an audience can easily understand (Thompson 2003a). The Dimensions of Business Viability Model is discussed in more detail in Appendix H titled “Dimensions of Business Viability”. For the purposes of understanding the structure of a Business feasibility Study the following represents the framework of the Dimensions of Business Viability (Thompson 2003c; Thompson 2003a):

- Market Viability
- Technical Viability
- Business Model Viability
- Management Model Viability
- Economic and Financial Model Viability
- Exit Strategy Viability

Business and market analysis will contribute considerably to the Business Feasibility Study . Consideration should be given to using traditional business analysis techniques such as SWOT, Porters Five Forces and PEST. Although they may not provide information which is a perfect fit to the proposed business model, they will provide a strong starting point for future analysis.

## BUSINESS FEASIBILITY STUDY OUTLINE

Because putting together a Business Plan is a significant investment of time and money, the entrepreneur should make sure that there are no major roadblocks on their road to business success. The Business Feasibility Study will assist in identifying such obstacles and determine the true viability of the Business Concept.

The following represents a structural outline for a Business Feasibility Study:

### **Cover Sheet**

### **Executive Summary**

### **Table of Contents**

- Introduction
- Product or Service
- Technology
- Market Environment
- Competition
- Industry
- Business Model
- Marketing and Sales Strategy
- Production/Operating Requirements
- Management and Personnel Requirements
- Intellectual Property
- Regulations/Environmental Issues
- Critical Risk Factors

### **Financial Projections**

- Balance Sheet Projections
- Income Statement Projections
- Cash Flow Projections
- Break-even Analysis
- Capital Requirements & Strategy
- Recommendations & Findings
- Conclusion

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## BUSINESS FEASIBILITY STUDY OUTLINE

**EXECUTIVE SUMMARY**

The Executive Summary is a summary of all key sections of the Business Feasibility Study and should work as a separate, stand-alone document. Interested parties will read this section first in conjunction with a glance at the financial section when deciding whether or not they read the rest of the plan. Key points to remember include:

- Write this document after the content section of Business Feasibility Study is completed.
- Although the Executive Summary is written last, it is presented first.
- The Executive Summary should be no more than one page long.

**PRODUCT/SERVICE**

- Describe the enterprises, product or service in simple language. Give product mix if the enterprise will initially be focusing on more than one product.
- Describe how customers would use and buy the product or service. Give enough detail to help the reader judge the effectiveness of your marketing and positioning plans.
- Describe key components or raw materials that will be used in the product, how the enterprise will source these and how available they are.
- Describe plans to test the product to ensure it works as planned and is sufficiently durable, rugged, secure, etc. (e.g. consumer product test, beta test with major company, etc.).
- Describe plans to upgrade product or expand product line.

**TECHNOLOGY**

- As necessary, provide further technical information about the product or service.
- Describe additional or ongoing research and development needs.

- Keep the description in lay terms and/or explain technical terms enough to be understood by business-savvy but not necessarily technology expert readers.

### **INTENDED MARKET ENVIRONMENT**

Target Market:

- Define and describe the target market(s). Distinguish between end users and customers.
- Be clear how end users and customers benefit. How and why would they buy the product or service?
- What is the projected need(s) your product or services fulfill so beautifully? How big is the opportunity? What level of actual market demand can be measured versus projected?

For business-to-business markets, include:

- What industry is the target market in, who are the key players, frequency of product purchase, replacement needs versus expansion, purchasing process
- Estimates of market size, initial targeted geographic area, enterprise's targeted market share.

For business-to-consumer markets, include:

- Demographic factors, such as income level, age range, gender, educational level, ethnicity.
- Psychographic factors.
- Relevant behavioural factors such as frequency of product purchase and shopping behaviour.

**COMPETITION**

- Describe direct and indirect competition (as it pertains to the target markets only).
- For key competitors, give market share, resources, product and market focus, goals, strategies, strengths and weaknesses.
- List all key barriers to entry.
- Describe what is unique about the enterprise's product/service compared to the competition. Make sure this is consistent with the unmet need of the target market(s).
- State how difficult it will be for competitors to copy the enterprise's product/service.
- Describe how competitors will most likely react to the enterprise's product launch and the enterprise's response strategy. Include estimates of the time it might take a competitor to copy your product or service.

**INDUSTRY**

- Clearly define and describe the industry in which the enterprise operates. Include the size, growth rate, and outlook. Define key industry segments and state where enterprise fits in.
- Describe demand and supply factors and trends.
- Describe the larger forces that drive the market - e.g. innovation, cultural change, regulation, whatever.

**BUSINESS MODEL**

- Describe the proposed enterprise's business model. How will the business generate revenue (i.e. sell the product; charge licensing, retail sales)? Will there be recurring revenue?
- Describe the model in enough detail to support financial projections presented later.

**MARKETING AND SALES STRATEGY**

- Lay out the basic marketing and sales strategies.
- Discuss any strategic partnership the enterprise has or is planning to form. Do they provide critical market access or other resources? What are their rights and responsibilities?
- Describe the distribution strategy (sell direct to customers through sales force, direct mail, or Internet; sell through manufacturers' representatives, wholesalers, distributors, or retailers). Provide projected profit margin or mark-up expectations, commissions, and other expected compensation (co-op advertising, slotting fees, etc.)
- Describe the pricing strategy and justification. Include the expected gross profit margins.
- Describe intended typical payment terms for customers.
- Other issues and their impact - e.g., warranties.
- Quantify the marketing budget for at least the first year (ideally three).

**PRODUCTION/OPERATING REQUIREMENTS**

- Describe enough of how and where the enterprise will manufacture, source or create and deliver the final product or service to be able to estimate costs.
- What physical premises are required? Give location, size, age, condition, and capacity of planned production and warehouse facilities and number of shifts planned.
- Will space be owned or leased? Will renovations be required? At what cost?
- How complex is the manufacturing process? Describe equipment needed and costs.

## BUSINESS FEASIBILITY STUDY OUTLINE

If enterprise will outsource production or distribute others' materials:

- Describe supply sources. Are sources of supply readily available?
- Outline the relevant contract terms, manufacturer's capacity, minimum order and tooling requirements, reputation, size or financial condition.
- Describe the enterprise's plan to protect its proprietary processes and trade secrets and quality control.

If enterprise is providing a service:

- How will the service be designed, delivered, measured and improved?
- What stakeholders exist, who will be trading partners with the business? What will be the terms of the contract? Are there substitute partners?

### MANAGEMENT AND PERSONNEL

- List the proposed key managers, titles, responsibilities, relevant background, experience, skills, costs.
- Sketch personnel requirements: what people will be needed now, in a year, in the long term? What skills and qualifications are required and what financial implications result?

### INTELLECTUAL PROPERTY

- Briefly describe patents, copyrights, and trademarks obtained and in process. Give all names that are on issued patents; summarise results of patent searches.
- If enterprise is operating under a licensing agreement or patent assignment, give name of licensor/assignor, describe key terms (e.g. exclusivity, rights and responsibilities), and give termination or renewal date.

- If the business concept is a science (research orientated) business, the intellectual property is extremely important. The protocols in managing them, particularly at the initial planning stage are critical. For example, if a researcher has published their research findings in an industry journal or on the internet prior to ensuring intellectual ownership through copyright or patent, then the knowledge is considered in the open domain and therefore cannot be considered restricted.
- Often business planning associated with intellectual property must occur prior to a business (science – research & development) concept being developed and validated so that the strength and ownership of the findings can be assured.

### **REGULATIONS/ENVIRONMENTAL ISSUES**

Outline non-economic forces that might affect the prospects of the firm:

- Key government regulations and the enterprise's plans for compliance.
- Any environmental problems on property, plans to address the problems, and their cost.
- Environmental factors i.e. waste disposal plans, if needed.
- Political stability, if applicable.
- Any other regulatory or political issues. This may deal with proposed industry regulatory changes, stable versus unstable environments.

**CRITICAL RISK FACTORS**

Describe critical risks faced by the enterprise (currently or in the future). Much of these components will arise from the SWOT, Porters Five Forces and PEST analysis. Examples include internal characteristics, uniqueness, investment, economic forecasts, change in regulations and technical obsolescence, etc. Be sure to describe how you will mitigate each risk.

**START-UP SCHEDULE**

Sketch the major events in the life of the venture by listing the timetable/deadlines for completion of phases of venture start-up. Be sure to demonstrate the relationship of events and to keep the milestones, financial requirements, personnel requirements, etc consistent. If establish a formal project schedule for the start-up process.

**FINANCIAL PROJECTIONS**

Include a narrative highlighting key underlying assumptions and the logic governing your projections. Include financial history, if any (e.g. equity and debt), and likely financing stages including information about funding sources and uses. Provide a page or two of footnotes for each financial spreadsheet attached explaining the assumptions behind each major line item. Some core components of this part of the report are listed below.

- Balance Sheet Projections - Three Years & Highlight Inflows of Capital,
- Income Projections - Year 1: Monthly or quarterly; years 2 and 3: Annually,
- Cash Flow Projections - Year 1: Monthly or quarterly; Years 2 and 3: Annually,
- Break-Even Analysis - When will the firm begin to turn a profit, and
- Cost Benefit Analysis - Will the business provide a viable return on investment for the owner and/or the investors.

**CAPITAL REQUIREMENTS & STRATEGY**

- How much funding (equity) will the firm need, and when?
- What projected revenue or assets does the proposed business have to secure the financing?
- What sources will provide the funding, i.e. investors, lending institutions etc?
- What ratio of debt to equity financing will occur?
- When will investors begin to see a return? What is the expected return on investment (ROI)?

**HOW TO CONDUCT A BREAK EVEN ANALYSIS**

The entrepreneur will need to understand the following terms in order to understand and communicate the break-even analysis:

- **Selling Price (SP)** - Represents the price that each unit will sell or retail for. The SP is generally expressed as revenue in dollars per unit.
- **Variable Costs (VC)** - Consist of costs that vary in proportion to sales levels. They include direct material and labour costs, the variable part of manufacturing operating cost, transportation and sales expenses. The VC is usually expressed as a cost in dollars per unit.
- **Contribution Margin (CM)** - Equal to sales revenues less variable costs or  $SP - VC$ .
- **Fixed Costs (FC)** - These costs are considered those that remain constant within the projected range of sales levels. These can include facilities costs, general and administrative costs, capital interest and depreciation expenses. The FC is usually expressed as a lump-sum cost in dollars.
- **Units (X)** - Represents the number of items sold or produced. For the purpose of a break-even calculation, it is assumed that the number of units sold during a period is equal to the number of units produced during the same period.

## BUSINESS FEASIBILITY STUDY OUTLINE

To calculate break-even, the entrepreneur should determine the variables: FC, SP, and VC. The process of separating the selling price and variable costs is not always straight forward and alternatively a contribution margin is given. The CM can still be used in the break-even calculation, replacing the SP and VC.

To calculate the number of units sold ( or produced ) at break-even.

$$SP(X) = VC(X) + FC$$

Alternatively the formula to solve for X, the number of units at break-even will give you:

$$X = FC / (SP - VC) \text{ or } X = FC / CM$$

The formula to calculate the break-even revenue in \$ is as follows:

$$\text{Break-even revenue (\$)} = \text{Break-even units} \times \text{Selling Price}$$

### FINAL FINDINGS & RECOMMENDATIONS

Recommendations from the feasibility study regarding the viability of putting the business idea into practice should be honest, short and direct. When making the findings or recommendations arising from the Business Feasibility Study discussing the viability of the proposed business venture in terms of:

- Market Viability
- Technical Viability
- Business Model Viability
- Management Model Viability
- Economic and Financial Model Viability
- Exit Strategy Viability

A significant component of the findings should related to the likelihood of success, projected return on investment and how any identified risk should be mitigated.

The purpose of the feasibility study is to consolidate an argument based on factual evidence and analysis to help justify your decision in relation to the core question of whether the business venture in

questions is actually viable.

## SOURCES OF HELP

To write the Feasibility Study, you need to go to others for help and information. Look at recent history to demonstrate the best approach or business model. Suggested sources are:

- Business Enterprise Centres - Information, business counselling, training workshops, research facilities, back up and support facilities, networking and publications.
- Accountant - Advice on all financial issues, assist in feasibility study, legal structure suggestions, assist in funding estimates, sourcing and applications, check books if buying an existing business.
- Solicitor - Contracts, leases, legal representation.
- Bank - Finance, information and support, leasing, advice on contracts, specialist services.
- Business Advisers/Consultants - Someone to talk to, specialist advice, mentoring, negotiations, training, back-up.
- Trade Associations - Membership and support, group deals, training, advice, research, industrial relations expertise, and networking.
- Potential Suppliers - Information, back up, promotional support, training, etc.
- Sources of Information - Own research, government departments, information and publications available from many departments including the Australian Bureau of Statistics. Local council demographic reports, publications, studies and future plans for development.
- Competitors - Check the competition, their location, layout, advertising and service.
- University Libraries and Online Entrepreneurship Resources

### NOTE:

Remember a Business Feasibility Study supports the decision-making process as to whether the Business Concept is in fact viable. A No Viability answer is still a positive result as it saves the entrepreneur wasting financial resources and valuable time. The Business Feasibility Study outline and the Business Plan outline are very similar in nature and are normally designed to dovetail in pursuit of efficiencies of

development, evidentiary alignment and consistency of reporting.

## REFERENCES

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