# File C5-66 November 2009 www.extension.iastate.edu/agdm

# **Feasibility Study Online**

feasibility study is an important step in business development. *Information File* C5-65, What is a Feasibility Study will help you understanding the concept of a feasibility analysis and what it means for business development. *Information File* C5-64, When to Do and How to Use a Feasibility Study provides you with a framework and the decision points needed for using a feasibility analysis in business development.

The outline below can be used to help you through the feasibility study process. However, not all feasibility studies are alike. The elements to include in a feasibility study vary according to the type of business venture analyzed and the kind of market opportunities identified. Below is a listing of typical factors to include. However, this may not be a complete listing of the factors that should be considered in your specific situation. The success of a feasibility study is based on the careful identification and assessment of all of the important issues for business success. Depending on the business project, additional items may also be important. Remember, the basic premise of a feasibility study is to determine the potential for success of a proposed business venture.

# **Description of the Project Identification and exploration of business scenarios**

- Identify alternative scenarios or business models of what the project will entail, how it will be organized, and how it will generate profits. These may come from the idea assessment or market assessment that you may have already completed.
- Eliminate scenarios that don't make sense.
- Flesh-out the scenario(s) that appear to have potential for further exploration.

#### Define the project and alternative scenarios

• Describe the type and quality of product(s) or service(s) to be marketed.

- Outline the general business model (i.e. how the business will make money).
- Include the technical processes including size, location, kind of inputs, etc.
- Specify the time horizon from the time the project is initiated until it is up and running at capacity.

### Relationship to the surrounding geographic area

- Outline the economic and social impact on local communities.
- Describe the environmental impact on the surrounding area.

## **Market Feasibility**

This can be based on a market assessment that you may have already completed.

#### **Industry description**

- Describe the size and scope of the industry, market and/or market segment(s).
- Estimate the future direction of the industry, market and/or market segment(s).
- Describe the nature of the industry, market and/ or market segment(s). Is it stable or going through rapid change and restructuring?
- Identify the life-cycle of the industry, market and/ or market segment(s). Is it emerging, growing, mature, declining?

#### **Industry competitiveness**

- Describe the industry concentration. Are there just a few large producers or many small producers?
- Describe the major competitors? Will you compete directly against them?
- Analyze the barriers to entry of new competitors into the market or industry. Can new competitive enter easily?
- Analyze the concentration and competitiveness of input suppliers and product/service buyers.

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 Describe the price competitiveness of your product/ service.

#### Market potential

- Identify whether the product be sold into a commodity market or a differentiated product/service market.
- Identify the demand and usage trends of the market or market segment in which the product or service will participate.
- Examine the potential for emerging, niche or segmented market opportunities.
- Explore the opportunity and potential for a branded product.
- Assess market usage and your potential share of the market or market segment.

#### Access to market outlets

- Identify the potential buyers of the product/service and the associated marketing costs.
- Investigate the product/service distribution system and the costs involved.

### **Sales projection**

- Estimate sales or usage.
- Carefully identify and assess the accuracy of the underlying assumptions in the sales projection.
- Project sales under various assumptions (i.e. selling prices, services provided, etc.).

# **Technical Feasibility**

## **Facility needs**

- Estimate the size and type of production facilities.
- Investigate the need for related buildings, equipment, rolling-stock, etc.

#### **Suitability of production technology**

- Investigate and compare technology providers.
- Determine reliability and competitiveness of technology (proven or unproven, state-of-the-art, etc.).
- Identify limitations or constraints of the technology.

#### Availability and suitability of site

Investigate access to:

- · raw materials
- transportation

- labor
- production inputs (electricity, natural gas, water, etc.)
- Investigate potential emissions problems.
- Analyze other environmental impacts.
- Identify regulatory requirements.
- Explore economic development incentives.

#### Raw materials

- Estimate the amount of raw materials needed.
- Investigate the current and future availability and access to raw materials.
- Assess the quality and cost of raw materials.

#### Other inputs

- Investigate the availability of labor including wage rates, skill level, etc.
- Assess the potential to access and attract qualified management personnel.

# Financial/Economic Feasibility Estimate the total capital requirements

- Assess the "seed capital" needs of the business project during the investigation process and start-up, and how these needs will be met.
- Estimate capital requirements for facilities, equipment and inventories.
- Estimate working capital needs.
- Estimate start-up capital needs until revenues are realized at full capacity.
- Estimate contingency capital needs due to construction delays, technology malfunction, market access delays, etc.
- Estimate other capital needs.

#### **Estimate equity and credit needs**

- Estimate equity needs.
- Identify alternative equity sources and capital availability family, producers, local investors, angle investors, venture capitalists, etc.
- Estimate credit needs.
- · Identify and assess alternative credit sources -

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banks, government (i.e. direct loans or loan guarantees), grants and local and state economic development incentives.

# **Budget expected costs and returns of various alternatives**

- Estimate the expected revenue, costs, profit margin and expected net profit.
- Estimate the sales or usage needed to break-even.
- Estimate the returns under various production, price and sales levels. This may involve identifying "best case", "typical", and "worst case" scenarios or more sophisticated analysis like a Monte Carlo simulation.
- Assess the reliability of the underlying assumptions of the analysis (prices, production, efficiencies, market access, market penetration, etc.)
- Benchmark against industry averages and/or competitors (cost, margin, profits, ROI, etc.).
- Identify limitations or constraints of the economic analysis.
- Calculate expected cash flows during the start-up period and when the business reaches capacity.
- Prepare pro forma income statement, balance sheet, and other statements of when the business is fully operating.

# Organizational/Managerial Feasibility Business structure

- Identify the proposed legal structure of the business.
- Outline the staffing and governance structure of the business along with lines of authority and decision making structure.
- Identify any potential joint venture partners, alliances or other important stakeholders.
- Identify the availability of skilled and experienced business managers.
- Identify the availability of consultants and service providers with the skills needed to realize the proj-

ect, including legal, accounting, industry experts, etc.

#### **Business founders**

- Character matters are the people involved of outstanding character?
- Do the founders have the "fire in the belly" required to take the project to completion?
- Do the founders have the skills and ability to complete the project?
- What key individuals will lead the project?
- Is there a reward system for the founders? Is it based on business performance?
- Have the founders organized other successful businesses?

### **Study Conclusions**

- Identify and describe alternative business scenarios and models.
- Compare and contrast scenarios based on goals of the producer group.
- Outline criteria for decision making among alternatives.

## **Next Step**

After the feasibility study has been completed and presented to the leaders of the project, they should carefully study and analysis the conclusions and underlying assumptions. Next, the leaders will be faced with deciding which course of action to pursue. Potential courses of action include:

- Choosing the most viable business scenario or model, developing a business plan and proceeding with creating and operating a business.
- Identifying additional scenarios for further study.
- Deciding that a viable business opportunity is not available and moving to end the business investigation process.
- Following another course of action.

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