

Chapter 5: Conducting a Feasibility Study¹

This chapter provides a step-by-step overview of how to conduct a feasibility study and market research, including:

- the difference between a feasibility study and a business plan;
- major components of a feasibility study;
- key market analysis, organizational, financial questions in your feasibility study;
- techniques for conducting market research; and
- where to obtain information you need to conduct market research.

Although [an unsuccessful feasibility study] may appear to be a failure, it's not. The real failure would have been if you had invested your own and other's money and then lost it due to barriers you failed to research in advance.

... David E. Gumpert

How to Really Create a Successful Business Plan

Feasibility studies and business plans are identified in Chapter 4 as key steps to starting a cooperative. This section explains two vital issues: how to conduct a feasibility study and how to do market research. First, some definitions.

What is a Feasibility Study?

A feasibility study is designed to provide an overview of the primary issues related to a business idea. The purpose is to identify any make or break issues that would prevent your business from being successful in the marketplace. In other words, a feasibility study determines whether the business idea makes sense.

A thorough feasibility analysis provides a lot of information necessary for the business plan. For example, a good market analysis is necessary in order to determine the project's feasibility. This information provides the basis for the market section of the business plan.

Because putting together a business plan is a significant investment of time and money, you want to make sure that there are no major roadblocks facing your business idea before you make that investment. Identifying such roadblocks is the purpose of a feasibility study.

A feasibility study looks at three major areas:

- a. Market issues
- b. Organizational/technical issues
- c. Financial issues

Again, this is meant to be a first cut look at these issues. For example, a feasibility study should not do in-depth long-term financial projections, but it should do a basic break-even analysis to see how much revenue would be necessary to meet your operating expenses.

The purpose of the business plan is to minimize the risk associated with a new business and maximize the chances of success through research and maximize the chances of success through research and planning.

... University of California, Center for Cooperatives

A feasibility study is not necessary unless there is a REAL problem. The problem must be:

- a. Defined, understood, described and quantified,
- b. Significant, broad and large enough to warrant group action,
- c. Capable of solution from purely economical and financial point of view,
- d. Economically and socially (cultural/anthropological) fitting...capable of being considered a reasonable solution by members of the group.

¹From "Cooperatives: A Tool for Community Economic Development"

In sum, a "large enough" group of farmers must feel the need of solving a problem which is understood and believed to be solvable and which cannot be solved by individuals acting alone.

Strong leadership is necessary, but in dealing with the problem it is important that members of a cooperative (or potential members of a new cooperative) all are aware of the problem and all more or less feel a strong need for solution to the problem. There is danger that one or a few aggressive individuals may short cut the delving process and force a premature decisions to proceed with a feasibility study. Having said that, it can now be said that strong leadership is essential for the process of defining and understanding the problem and deciding if a feasibility study should be made. What is needed is enlightened leadership and enlightened self-interest. This leadership may come from outsiders who are obligated to work with groups--extension agents, lenders, etc. or from insiders who are an integral part of a group. Leaders must press forward and keep all parties in some degree of creative stress until there is a consensus to go or not to go with a feasibility study.

Careful consideration of whether or not to make a feasibility study will save much time and money; it will also increase the return on time and money spent if a feasibility study is made.

At this point it is appropriate to introduce a test which everyone should take in making any decision. This test has one question:

If I choose a course of action and my decision proves to be in error, what would the cost be?

If the cost of a wrong decision would be relatively small, do not spend much time and money on the decision making process. On the other hand, if the cost of an error would be large, take more time and spend more money delving into the pros and cons before choosing a course of action. This sounds simple. But, in practice, it is not easy to carry out, especially in group action. Some members may be slow to learn or have aversions to high risk. Sooner or later a decision must be made and further delving would cost more than it is worth.

The following guidelines should be followed:

1. It is not necessary to have unanimous agreement before going forward.
2. Never make a decision to proceed with a feasibility study or accept a feasibility study on negative reactions; for example, out of resentment or envy toward middlemen, money lenders, etc.
3. For group action, a few reliable and loyal persons are superior to a larger number of doubtful persons.
4. Extravagant promises of what the cooperative can or will do should be avoided. Expectations of participants should always be based on the economic and social facts of life.
5. A cooperative should not be considered an end in itself; rather it is a means to the end of improving the life of its members.

Three decisions regarding feasibility studies.

1. To make the feasibility study or not.
2. To accept the study once made.
3. To implement the study.

Although the above ideas have been pointed toward number one above, the ideas apply to the other kinds of decisions. Moreover, if the decision to make a feasibility study is done correctly, the other group decisions will come easier and will likely be correct.

What is a Business Plan?

If the feasibility study indicates that your business idea is sound, the next step is a business plan. The business plan continues the analysis at a deeper and more complex level, building on the foundation created by the feasibility study. For example, the financial section of the plan would include pro forma (estimated) financial statements and 2-3 years of financial projections.

A business plan gives you an opportunity to find any weaknesses and reveal any hidden problems ahead of time. It serves two purposes: first, it is an analysis of how well the business will work; and second, it is a written document necessary to obtain a loan.

Although business plans are often submitted to a bank as part of a loan request, that's not the most important thing about them. The really important thing about this process is that it forces you to think.

A business plan is sometimes described as a document of your thought processes as you analyze your competition, the market, your operating expenses, management and staffing needs, manufacturing process, etc. It forces you to clarify your goals and objectives. Therefore, the feasibility study and business plan are more important for the company's owners than for anyone else, including loan officers.

Planning, however, won't guarantee success in business. The plan must be realistic and based on valid assumptions. Most people have to work at retaining their objectivity if they are doing the feasibility study and/or business plan themselves. After all, if you are closely involved in organizing this business, you probably have some emotional investment in it. It is easy for people in this position to overlook or minimize potential problems or hazards. Remember that planning, no matter how good it is, will never make a bad business idea feasible.

Conducting a Feasibility Study

As noted above, the feasibility study is organized into three major sections (market analysis, organizational/technical analysis, and financial analysis). Each section below discusses the key questions which must be addressed in the plan.

Market analysis begins by asking:

- What, precisely is the market?
- The more specific you can be, the better.
- Is the market growing, shrinking, or staying the same?
- Is it worth your while? Is the market you've identified big enough to make it worth the time?

Information generated in one part of the plan will reveal the need for more information on another part of the plan or answer questions that may have been left open in another section.

... William R. Osgood, Basics of Successful Business Planning

The purpose of market analysis is to thoroughly acquaint yourself with all aspects of your market so that you can formulate a plan to capture a share of it.

... Harold J. McLaughlin, Building Your Business Plan

1. *Market Analysis Research.* The key questions that should be answered in the Market Analysis section of the feasibility study are presented below. In nearly all cases, research is required in order to obtain enough information to answer the questions. See p. 7 of this chapter for techniques for conducting market research. If these questions cannot be answered adequately, the project is not feasible.

- a. What is the current or projected demand for your proposed products or services? In other words, how many units can you reasonably expect to sell each month?
- b. What are the target markets for this product or service? What demographic characteristics do these potential customers have in common? How many of them are there?
- c. What is the projected supply in your area of the products or services needed for your project?
- d. What competition exists in this market? Can you establish a market niche which will enable you to compete effectively with others providing this product or service?

- e. Is the location of your proposed business or project likely to affect its success? If so, is the identified site the most appropriate one available?

The market analysis should be conducted first because it is critical to the success of the business. If you cannot substantiate through research that adequate demand for your product or service exists, or if you cannot obtain sufficient quantity to meet expected demand, then your project is not feasible. You should not continue to the next step in the feasibility study.

One...major reason for business failure is incompatibility of goals among owners. This often leads to a breakdown of communication and conflict about use of resources.

. . . Harold MC Laughlin. Building Your Business Plan

- 2. *Key Organizational and Technological Issues.* Once market issues have been addressed, it is time to take a look at key organizational and technology issues that are relevant to your project.

Organizational Issues. Key questions to answer include:

- a. What organizational structure is the right one for your project?
Remember that cooperatives are not the best form of legal business structure for every project. Review Chapter 3 of this Manual to help you evaluate this.
- b. Who will serve on the board of directors? What are their qualifications?
- c. What qualifications are needed to manage this business?
- d. Who will manage the business (if possible)?
- e. What other staffing needs does the co-op have? How do you expect staffing needs to change over the next 2-3 years?

Because all subsequent decisions depend on the organization's legal business structure, the first question is critical and should be answered before you continue with the feasibility analysis. It is an important question and may take some research. Don't hesitate to call on a qualified attorney or other advisor if necessary.

While you need not know the answers to all the other questions in order for the business to be feasible, they must all be satisfactorily answered before you begin operations. This is a good time to begin the process of identifying appropriate individuals for the board, management and other staff positions, and to think carefully about what qualifications are necessary to manage this business.

Be specific, and detailed, yet concise as possible. Don't think bulk is a substitute for vigorous research and thinking.

. . . Harold MC Laughlin, Building Your Business Plan

Technological Issues

The cost and availability of technology may be of critical importance to the feasibility of a project, or it may not be an issue at all.

For example, a service organization, such as a child care center, will have a few equipment and other technology- related issues to address. A manufacturing enterprise, on the other hand, may have a number of complex technology questions to analyze in order to determine whether or not the business is feasible.

Key questions to answer include:

- a. What are the technology needs for the proposed business?
- b. What other equipment does your proposed business need?
- c. Where will you obtain this technology and equipment?
- d. When can you get the necessary equipment? How does your ability to obtain this technology and equipment affect your start-up timeline?

- e. How much will the equipment and technology cost?

Keep in mind that technology doesn't necessarily mean complex machinery; if your business simply needs a personal computer, printer, and fax machine, those are your technological needs.

However, making wise decisions on even simple purchases such as office machines may require some research. Obviously there are numerous types of personal computers on the market. You may want to check Consumer Reports for their recommendations, do some comparative shopping, and ask acquaintances about their experiences with different companies. Your cost estimates (question #e) will get plugged into your financial projections.

Naturally, the more complex the technology you need, the more research that will be required to make good decisions about it. Don't skimp on this foot work; you may regret it.

3. *Financial Issues*

Once your analyses of marketing, organizational and technology issues have been completed, the third and final step of a feasibility analysis is to take a look at key financial issues. Answer the following questions as well as you can at this point and identify key issues that will require additional research.

Note that some of the questions below -- specifically revenue projections -- are directly based on your market analysis (the first step in the feasibility study), in which you estimated the number of units of product or service you could sell. If you didn't do that part of the feasibility study thoroughly, you won't be able to do the financial analysis adequately.

- a. **Start-Up Costs:** These are the costs incurred in starting up a new business, including capital goods such as land, buildings, equipment, etc. The business may have to borrow money from a lending institution to cover these costs.
- b. **Operating Costs:** These are the ongoing costs, such as rent, utilities, and wages that are incurred in the everyday operation of a business. The total should include interest and principle payments on any debt for start-up costs.
- c. **Revenue Projections:** How will you price your goods or services? Assess what the estimated monthly revenue will be.
- d. **Sources of Financing:** If your proposed business will need to borrow money from a bank or other lending institution, you may need to research potential lending sources.
- e. **Profitability Analysis:** This is the bottom line for the proposed business. Given the costs and revenue analyses above, will your business bring in enough revenue to cover operating expenses? Will it break even, lose money or make a profit? Is there anything you can do to improve the bottom line?

Kinds of feasibility studies

1. Evaluate a new cooperative
2. To expand the service of an existing cooperative
 - a. Build or remodel facility
 - b. Move to a new location
 - c. Merger or consolidation with other cooperative
 - d. Buy out an existing business
 - e. Improve an operation to increase efficiency
 - f. Choosing among alternative development opportunities.

Possible things to consider in a PRE-feasibility study.

1. Comparative advantage

- a. history and distinctive characteristics of industry
 - i. International-industry in the world
 - ii. National-industry in the nation
 - iii. Regional-industry in the region
 - iv. Local area-industry in the area.
 - v. Concerned producers-comparative advantage of local producers in total picture.
(This section is to re-evaluate the chances for success, keep in mind that it has NOT already been determined that the feasibility study should be made.
2. Need for cooperative in light of findings in number one above.
 - a. What kind of services are needed?
 - b. Is need felt by people who will use the cooperative, or is it being forced upon them by outside promoters?
3. Support commitment by: producers, community and potential lenders.
4. Volume: number and size of existing producers and possibility of expansion.
 - a. production history and experience in production of the commodities to be handled by the cooperative.
5. Marketing: Size of market area for:
 - a. Inputs-raw materials supply area
 - b. Outputs-market outlets: major competitors and their market shares and degree of competition: monopoly to perfect competition.
6. Competition-local and beyond.
7. Capital needs:
 - a. organizing cooperative
 - b. physical facilities
 - c. operating and commodity
 - d. financing member's production
8. Sources of Capital
 - a. stock: common and preferred
 - b. bank loans
 - c. from members
 - d. debenture bonds
 - e. delay in paying producers for products, ie pooling
 - f. revenue or pollution control tax exempt bonds.
9. Legal matters
 - a. articles of incorporation
 - b. bylaws
 - c. membership agreements/contracts
 - d. other contracts--pooling
 - e. legal obligations of board members
10. Facilities needed: purchase, build or lease (develop capital assets budget with established lives of depreciable assets specified)
11. External factors: environmental (EPA), local, state and national licenses, codes, zoning, etc., other factors.
12. Transportation: raw materials, selling finished product, other location considerations.

13. Management: Spell out methods of operation for the board of directors and management (written policies); is skilled management readily available and affordable?; are local producers willing to pay enough to attract good personnel? what will it cost?
14. Budgeting and finance:
 - a. balance sheet-minimum 3 years
 - b. operating statements
 - c. source and use of funds
 - d. cash flow--month to month and annual
15. Mergers or consolidations: how to handle assets, stock transfers, liabilities, and member and director representation.
16. General assessment of benefits to producers and the community:
 - a. Has the community had experience with other cooperatives? Have they been (un)successful, if so Why?
 - b. other assessments.

The above sixteen items are for use in the early stages of discussions about a feasibility study. The purpose is to get interested persons to think systematically about what is involved in making such a study.

Conclusion

Your feasibility study should give you a clear idea whether the proposed co-op is a sound business idea. Some techniques for conducting the Market Analysis part of the feasibility study are presented on the following pages.

FEASIBILITY STUDY

Table of Contents

The following is a Table of Contents for an actual feasibility study conducted by the authors. It is presented here as an example of a study that generally follows the guidelines presented in this chapter. Please see Appendix F for excerpts from additional feasibility studies.

A. Summary of the Important Findings and Recommendations:

1. Setting, Purpose and Description of Project
2. Summary of Market Potential and Source of Input Supply
3. Summary of Technical Features
4. Schedules if Net Benefits and Capital Requirements
5. Benefit-Cost Ratios and Internal Rate of Return
6. Summary of Associated Benefits and Costs
7. Proposed Financial Plan and Projected Cash Flows by Sector
8. Recommendations for Implementation
9. Impact on Members and Impact on the Cooperative

B. General Setting and Need for Project:

1. Physical, Economic, and Social Characteristics (members/Community) of the Project Area
2. Relevant Characteristics of the Regional, National, and International Economics
3. Relevant Governmental Policies and Programs
4. Description of the Problem Situation (which would be solved by the project)
5. Description and Consequences of Alternative Solutions on Members and the Community
6. Sampling Procedures and Survey Techniques

C. Description of the Project:

1. Nature of the Project (including technical processes, general size and location, kind of output, kinds of input, time horizon, etc.)
2. Relationships to the General Setting in the Area
3. Proposed Ownership, Structure and Management
4. Markets to be served and Existing Suppliers
5. Input Supplies and Competitive Users
6. Staffing Requirements and Sources

D. Market Analysis

1. Form and Quality of Product or Service, Markets to be Served and Channels to be Used
2. Domestic Market Profile
3. Overseas Market Potential
4. Target Market
5. Projected Total Demand in Markets to be Served
6. Projected Competitive Supplies and Services
7. Sales Potential and Projected Sales Prices
8. Marketing Plan and Projected Marketing Costs
9. Overall Market Feasibility

E. Raw Material Supply Potential and Procurement Plan:

1. Form and Quality of Materials Required and Potential Supply Sources
2. Projected Total Supply from Members and Non-members (Producer Survey and Supply Analysis)
3. Projected Competitive Demand
4. Procurement Potential and Projected Procurement Prices
5. Procurement Plant and Projected Procurement Costs
6. Form of Commitment of Raw Materials-Marketing Agreements, Etc.
7. Supply Outlook

F. Supply of Labor and Other Key Inputs:

1. Form and Quality of Labor and Other Inputs Required
2. Projected Total Supply from Sources Planned
3. Projected Competitive Demand for Inputs
4. Acquisition Plan, Training Program and Projected Acquisition Costs

G. Organization & Technology Analysis

1. Organizational Capacity Analysis
2. Technology & Equipment Needs
3. Operational Scenarios
4. General Design and Technical Requirements
5. Comparison of Design and Expected Performance with those of Existing Operations
6. Reasons for the Advantages of the Design Selected
7. Proposed Sources of Supply and Method of Acquisition
8. Proposed Procedures for Quality Control and Construction Performance
9. Estimated Unit Costs, and Sources Upon Which Based

H. Development Schedule and Production Plan:

1. Sequence of Development and Construction; Critical Points in Sequence
2. Detailed Development and Construction Calendar
3. Procedures for Controlling Development Schedule
4. Production Start-up and Initial Performance (or Yields)
5. Schedule of Transition to Full Output, and Controls to Insure that Schedule will be Met
6. Schedules of Input and Output Based on Development and Production Plans

I. Capital Requirements and Investment Schedule:

1. Estimated Capital Cost for Major Facilities and Equipment
2. Estimated Capital Cost for Marketing and Other related Facilities
3. Replacement Schedules for Equipment and Facilities
4. Estimated Working Capital Requirements
5. Schedule of Estimated Total Capital Investment

J. Sales Plan and Revenue Schedule:

1. Seasonal Patterns of Product Demand and Prices
2. Storage Program and Projected Monthly Sales Schedule
3. Projected Net Monthly Product Prices
4. Projected Revenue Schedule over the Project Planning Period
5. Pooling Arrangements

K. Projected Operating Costs and Net Revenue:

1. Raw Material Costs
2. Labor Costs
3. Costs for Other Inputs
4. Management and Related Costs
5. Repair and Maintenance Costs
6. Costs for Research and Development, Overhead and Other Service Functions
7. Combined Annual Operating Costs
8. Projected Net Revenue over the Planning Period

L. Schedule of Net Benefits - Partial Budget:

1. Schedule of Added Net Income to Benefitted Sectors
2. Schedule of Net Revenue to be Replaced by Project
3. Schedule of Combined Total Net Benefits from Project

M. Economic Feasibility of Project:

1. Present Value of Investment and Net Benefits Schedules at Alternative Discount Rates
2. Benefit-Cost Ratios and Internal Rate of Return for Project
3. Sources and Schedule of Associated Benefits
4. Sources and Schedule of Associated Costs
5. Present Value of the Combined Schedules of Associated Benefits and Costs
6. Project Potential in Relation to the Opportunity Cost of Capital, and Summary of Economic Feasibility
7. Sensitivity Tests-What if Prices and Costs Changed by Various Amounts (Stress competitive price cutting by factors already in the market-key item!)

N. Financial Plan for Project Implementation:

1. Proposed Equity Investment by Source of Funds
2. Proposed Sources, Schedule and Terms of Loans for Meeting Balance of Capital Requirements
3. Projected Cash Flow by Sector under Proposed Financing Plan
4. Projected Schedules of Depreciation, Interest and Taxes
5. Pro forma Balance Sheets and Operating Statements
6. Pooling Arrangements
7. Pro forma Source and Application of Funds
8. Summary of Financial Plan and Recommendation for Implementation
9. Impacts of Members: Impact on the Cooperative

O. Transportation and Processing Analysis

1. Map of Producer Locations
2. Supply Outlook

Conducting Market Research

Now that you know what questions to ask, exactly how do you go about answering them? This section will explain some of the techniques used to conduct the market analysis research recommended as the first step in a feasibility study. This section reviews the key questions from Step 1 of the feasibility study instructions (p. 4 of this chapter), providing guidelines on how to answer each.

Don't think of market research as highly sophisticated, expensive and complicated. It can be very much a do-it yourself thing.

Market analysis results in information about the market potential, which provide the basis for accurate sales forecasts and your marketing strategy. Its basic components include:

- an estimate of the size of the market for the product/service;
- projected market share;
- information about your target market; and
- analysis of the competition.

Market research involves activities designed to obtain data about the market, and falls into two main categories:

- primary research is that which collects new data through market surveys and other field research -- specific studies that are conducted on behalf of your company; and
- secondary research includes gathering pre-existing information from published sources.

In addition to conducting research, it is valid to rely somewhat on your own opinions and observations, especially if they have to do with your local community. No one knows a community like the people who've spent their lives there. However, it is important to back up your opinions with data and research. Don't rely solely on your gut feelings; they're probably not enough to go to the bank with. Resist the temptation to only look for data that confirms your opinions!

All this information goes into estimating the sales your company will achieve during its first few years of operation. The rest of the feasibility study and business plan is built upon these estimates. Because it is one of the principal tools for determining whether the business will work, it is worth making an investment in market research. The quality of information in the market analysis is dependent on the amount of energy that went into obtaining it!

You need to be as specific as possible about the dimensions (size, trends) of the opportunity your business faces. Since a new business doesn't have a track record, your research must be thorough to enable you to make realistic sales estimates.

MARKET RESEARCH

- Have a need and a market been clearly identified?
- Has a clear, persuasive case been made as to how sales will be generated?
- Does this section serve as a sound basis for the implementation of a marketing strategy?

Eric S. Siegel, et. al., *The Ernst & Young Business Plan Guide*

It is beyond the scope of this Manual to cover the entire subject of market research. A good book on this subject is *Practical Marketing Research* by Jeffrey L. Pope, published by the American Management Association.

Cooperatives only work when they are market-driven... [You must] ensure that accurate market projections precede other development steps. *Madison Principles*

Existing Demand Adequate?

In the Market Analysis section of the feasibility study, we suggested that you determine whether adequate demand exists for your proposed co-op's products/services. How do you figure this out?

Much of this information can be obtained through secondary research. A lot of the information you need is available to the public, from government statistics, computerized data bases, and the Yellow Pages. And of course the Internet is a potential source of information. Many public libraries now have access to the Internet, if you don't. A lot of information exists out there; the best place to start is your local library. Talk to the research librarian!

Remember that the government collects a lot of information about you and others. Use your imagination to find the information you need. The U.S. Industry Outlook, for example, provides an economic and market overview of hundreds of industries. Other sources for industry information are in the sidebar below. Obtain Industry information from:

Dun & Bradstreet: 800-552-3867

Moody's Manual of Investments

Standard & Poor's 800-437-3528

Value Line 800-654-0508

Figures can be obtained for average sales in many industries (except for entirely new products). Robert Morris & Associates publishes an annual survey of major industries, organized by Standard Industry Classification (SIC) number. Using this book, you can look up the average sales of companies in each SIC category.

For example, if you plan to open a convenience store, you can find the annual sales, net margin, and lots of other financial information about retail convenience stores. These can be a very useful starting place for your sales estimates. Use them with some caution, however, as your sales will probably fall below those of more established businesses.

There is a national or regional association for almost every industry under the sun. Your public library may have a Directory of Associations in which you can look up the appropriate industry group. These groups are often a wealth of information, some of it free. Call them and explain you are considering going into this field, and ask for any information they may have available. If possible, get their membership list. The members of the association are doing exactly what you want to do, and many of them will be glad to talk to you (with the exception of the ones who will be your local direct competitors). If the association requires that you join in order to get their information, do so. It could be the best money you ever spent.

HELP WITH MARKET RESEARCH

Note that a local business school or small business development center can help guide you in conducting your own market research. College students may be a good source of labor for conducting telephone or other type of interviews.

Target Markets

- What are the target markets for this product or service?
- What demographic characteristics do these potential customers have in common?
- How many customers are there in your target market?
- How many units of your product or services is each customer likely to buy monthly?

Identifying a target market allows you to focus your efforts on marketing to a distinct class of customers. This is also called market segmentation. It is the act of dividing a large potential market into smaller groups, which are more easily approached.

One of the advantages you gain from targeting a particular niche is the ability to respond quickly when customer tastes and needs change. In order to serve your customers, you have to know who they are, where they live, what their behavioral characteristics are.

Describe your target market in terms of:

- Geographic Characteristics. Do your customers live primarily in a certain area or region?
- Demographic Characteristics. (Age, sex, family status, education, income, class, occupation, education; and, if relevant, religion and race.)
- Psychographic Characteristics. (Life style, personality types; attitudes; interests, and buying motives.)

For example, a manufacturer of educational computer games might identify its target market as primarily at-home users, with a secondary market segment of schools. Then the manufacturer would describe each target market in terms of its typical demographics (household income, education, family status, and using habits). Their description might read something like this: The typical buyer in our target market is married, living in a two-income household with an average of two children, has a college education, is employed as a professional, and has at least one personal computer at home. They buy our computer games to provide educational, yet fun experiences for their children.

If you find that you have more than one target market, you should discuss the relative importance of these target market segments. Do the in-home users generate a higher margin than the small businesses? Is the market among small businesses growing faster than that of home users? Will this relative importance change over the next few years?

Customers are natural allies, worthy of products that are safe, wholesome and priced fairly.

... Bill Patrie, North Dakota Assn. of Rural Electric Co-ops

Projected Supply

What is the projected supply in your area of the products or services needed for your proposed business?

This question should be a little easier to answer than the demand questions. Your projected supply is the amount you can obtain of the goods or the amount of the service(s) you can provide, within a given time period. Limitations on this will include your manufacturing capacity, supplier's ability to provide raw materials to you, and your personnel (how many services can your staff realistically provide in one month?).

Many cooperatives obtain supply information directly from the co-op's potential membership through a survey (surveys are also useful for collecting information about the co-ops potential customers). Please see Appendix E for information about how to conduct a survey.

What About the Competition

- What competition exists in this market?
- Can you establish a market niche which will enable you to compete effectively with others providing this product or service?
- How much is your competition charging for similar product?

Competition Analysis

Identify your 3-4 leading competitors and specifically explain why your company will be able to compete effectively with them. Be as realistic and as specific as possible; stay away from generalizations about your competition. Try to find out what market share each one has of the market. Also write up an assessment of their strengths and weaknesses; and how your product or service stacks up against each.

How crowded is the market? If your market is already crowded with competitors, what market share would be available to a new company? If the overall market is growing, then you may be able to capture part of the new market.

Competitors are not enemies, they do not need to be defeated. Alliances are possible with competitors.

... Bill Patrie, North Dakota Assn. of Rural Electric Co-ops

Conclusion

Feasibility studies require a lot of hard work, and the market analysis research is the most difficult part of the process. We hope the questions we've identified above and the guidelines for answering them are helpful.

Excerpts from actual feasibility studies are provided in Appendix F.

If the study indicates that your business idea is feasible, the next step is a business plan. The business plan continues the analysis you've begun at a deeper and more complex level, building on the foundation created by the feasibility study.

The following chapter provides an outline of a complete business plan.

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Appendix F. Excerpts from Actual Feasibility Studies

THIS APPENDIX includes excerpts from several different feasibility studies conducted by the authors. They are intended as samples to illustrate the guideline discussed in Chapter 5 of this Manual.

SAMPLE #1

E. Summary of Market Strengths, Weaknesses, and Opportunities

Strengths

- Excellent product: good taste, health benefits, versatile red meat
- Increasing supply of ostrich meat may result in lower prices
- Growth in consumer awareness and acceptance over last 2-3 years
- Potentially a good market overseas

Weaknesses

- High price of ostrich meat, both at retail and in restaurants
- Lack of consumer awareness and familiarity
- Consumer market will take years to develop
- Consumer reluctance to try new things at first
- Pressure to lower prices may threaten producers' profitability
- Product has shorter shelf life than other meats

Opportunities

- Ongoing health consciousness of Americans
- Willingness of retailers and chefs to try new things
- Increasing supply of ostrich is likely to result in progressively lower prices
- National and regional associations can promote together
- High degree of consumer interest in product once shoppers are introduced to it
- Pre-packaged specialty cuts and other value added products may serve to introduce new consumers to ostrich through a more convenient package.

In summary, the market for ostrich meat is in its infancy. Like most infants, it has tremendous potential to grow. However, it clearly will not reach its potential without help. It will require significant care and feeding to do so, and that is the challenge facing the

The market research indicates that the key to marketing ostrich is to make it as easy and affordable as possible for restaurants and grocery stores to sell it and for customers to buy it. Butchers and chefs indicate this is done most effectively by conducting demonstrations and samplings in retail stores and restaurants. The role of producers should be to participate in these events, while the co-op marketing staff organizes and coordinates them.

SAMPLE #2

II. MARKET ANALYSIS

Industry Description and Outlook

The poultry industry has a history of steady growth, especially during the last ten years. Concerns over health and nutrition have spurred consumers toward poultry and away from red meat. According to the U.S. Industrial Outlook, consumption of poultry in 1990, at 63.9 pounds per capita, equaled that of beef for the first time. While per capita consumption of beef declined nearly 8% between 1987 and 1990, poultry consumption increased 15.6% during the same period.

Sales in the poultry industry have grown accordingly. The U.S. Industrial Outlook reports that current-dollar value of shipments for the industry increased by 9% in 1990, to a total of over \$21 billion.

Industry trends include the recent emphasis on lower fat and cholesterol breeding methods and marketing efforts to continue growth in sales and consumption. Concentration of poultry producing companies is also a growing trend. There has been a 16% drop in the number of plants engaged in poultry processing, and the largest four companies now account for 50% of the total production.

Target Market

The primary target market for the company's products is the Southeast Asian community of the upper Midwest. This market is located primarily in large urban centers. Secondary markets are located on the West Coast, East Coast, and South. Marketing efforts will initially focus on the Midwest market, but will quickly move into the national market in order to support the plant's processing capacity.

The last few years have seen rapid growth in the size of the Asian community. According to Business Week June 10, 1991), the Asian community is the fastest growing ethnic group in the United States. The state of Minnesota estimated in April 1989 that 15,000 Southeast Asian refugees were living in or near St. Paul, and that this number was expected to grow by approximately 18% that year.

The demand for food items that have been produced according to Asian cultural standards has increased steadily along with the Asian population. According to sources familiar with the Asian food market, the current supply of Asian-style poultry does not meet the demand that exists.

Research

No published directory of U.S. Asian food distributors and brokers currently exists, which makes it difficult to estimate the exact number of wholesale and retail outlets in this country. In an effort to make up for this lack of information, research was conducted in two of the major metropolitan centers of the Midwest, Chicago and the Twin Cities. This research resulted in the following information and conclusions.

Chicago: The Asian poultry market is supplied by two processors who provide fresh-killed chickens on a daily basis to approximately 40 Asian food markets in the Chicago area. One source estimated the total number of chickens supplied by these processors to be between 400-500 per day. Because of the very strong Asian cultural preference for fresh poultry over frozen, the Chicago market will not support a frozen poultry supplier. There is simply no market for the proposed Hmong product in the Chicago area.

Twin Cities: This area appears to be a better market for the Hmong product. There is no fresh poultry supplier in this area as there is in Chicago. In addition, the area has a fairly sizable Asian community. A supplier to the Asian restaurant market in the Twin Cities estimates a need for approximately 40,000 pounds per week. He currently buys his chicken from a processor in the South, and is very interested in working with the Hmong plant. However, this distributor needs a younger, plumper chicken than the Hmong plant would process. In addition, he requires "American style" poultry (heads and feet removed). For these reasons, we believe the Hmong plant will be unable to effectively compete with established poultry processors such as Gold'n Plump.

We have identified a food wholesaler, Asian Food Specialties, who supplies approximately 75 Asian food stores in the Twin Cities and Wisconsin. The chart below illustrates the approximate sales to this distributor, based on his estimates of use. The attached financial projections are based on these figures.

POULTRY	Hard Chicken	Large Chicken	Pheasant
#CASES/MO	12	5	2
POUNDS/CASE	59	34	46
# STORES	75	75	75
POUNDS SOLD/MONTH	53,000	12,600	6,900

A direct survey was conducted with a sample of Asian food stores in the Twin Cities area in an attempt to substantiate the information received from other sources. This survey requested information regarding the amount of chicken or other poultry sold per week by each store, the store's supplier for poultry, the price paid for this poultry, and the store manager's satisfaction with his current poultry supplier(s). The information received through this survey indicated that current sales of poultry products was much lower than those projected by other sources. It was not possible to determine whether this inconsistency was due to a lack of adequate demand (pull factors) or the lack of an adequate supply (push factors).

Other Areas: At this time, we have not conducted primary research with wholesalers in other parts of the country. However, sources indicate that the West Coast is supplied with fresh-killed poultry, so the market for the Hmong product there would be minimal. Other areas have not been explored in detail.

The market research was unable to provide verifiable estimates of demand for Asian poultry products. Thus, no dependable information is available on which to base reasonable, well grounded sales projections. The market for Asian poultry products is a risky one at this time. Without additional proof that a substantial market exists, starting a Hmong-owned poultry process plant at this time is not advisable.

SAMPLE #3

II Market Analysis

The following points characterize the market environment for this product.

- Broad recognition that bypass protein supplements are an important feed ingredient for dairy cattle, especially in first half of lactation.
- Sources of bypass protein include cottonseed, roasted beans, bone/blood meal, and some corn and grain byproducts.
- Expeller/extruder meal can provide an excellent, palatable source of bypass protein with increased feed value relative to 44% protein soy meal.
- Feed Trial Analysis proves feed value benefits of expeller/extruder soymeal; if proper heat treatment is applied during processing.
- Larger dairy farms using TMR and nutrition consulting services are The company's most likely customers.
- Larger dairy farmers can be reached directly or via feed dealers.
- Competitor #1 is the leading commercial brand source of soy bypass protein, available through approximately one-third of Wisconsin feed dealers.
- Consistent higher feed value at lowest cost is what drives purchases. The company's new meal product must compete with Competitor #1, in both cost and performance.

A. Dairy Market Profile

1. Dairy farm numbers in Juneau, Adams, and Marquette counties:

	number of 1995 dairy farms	percent of 1985 farms
Juneau:	230	60
Adams:	49	48
Marquette:	99	59
2. Dairy farm numbers in adjacent counties:		
Columbia:	365	66
Jackson:	326	70
Monroe:	739	73
Portage:	309	61
Sauk:	529	64
Vernon:	918	70
Washara:	169	56
Wood	473	70

The data from Adams, Marquette, and Juneau counties indicate that this is not a high density dairy production area. In addition, dairy farms in the local vicinity are exiting at a somewhat greater rate than the state average. The data from surrounding counties suggest that adjacent counties offer greater market opportunities than Adams, Juneau, and Marquette counties, and thus should be sought after as sales territory.

B. Survey of Potential Buyers

A market analysis of local feed dealers (farm supply co-ops and feed mills) was conducted within a 20 mile radius of Mauston. See Appendix F for a list of dealers and feed mills surveyed.

80% of dealers surveyed carry a soy meal product with high bypass protein. Competitor #1 and Competitor #2 were the most frequently mentioned products in this class. Other high bypass protein products mentioned by respondents included roasted beans and a soy amino balancer.

The dealers indicated that, on average, about one-third of their customers are currently using these products. Respondents indicated that many producers don't know about soy meal products as a source of bypass protein; others choose to use a lower cost product; and some producers are not interested in changing their habits.

The extent to which their customers used these products seemed to be dependent on how enthusiastic the feed staff are in pushing the product, and how knowledgeable they are regarding it. Another variable was the amount of dairying in the local area of each dealer.

Respondents were also asked their opinion on whether the market for such products is growing, staying the same, or shrinking. The assessment on this was somewhat mixed, with a few respondents thinking the market would stay about the same, and several thinking it will grow. No one thought the market will shrink.

Reasons given for a growing market were: it's a cost effective product; attitudes toward bone/blood meal are changing and soy meal is a good substitute; and it has applications for large herds. Reasons for the market staying the same included that the product is more expensive than alternatives, and that there's not much dairying in this area.

The majority of respondents indicated they would be willing to consider carrying a new soy meal high bypass protein product. However, they felt the product must be able to prove its worth to their customers in order to find room for it on their shelves.

C. Competition Analysis

1. Competitor #1

Manufactured in Ralston, Iowa, by Competitor #1 is the market leader and primary competitor. It appears to be a well marketed product with high bypass protein content, being sold primarily through feed dealers. Competitor #1 commands a \$30-\$40 per ton price advantage over 44% soy meal at retail. According to the newsletter provided in Appendix E, is currently expanding its Competitor #1 plant. Volume sold in 1996 will be approximately 145,000 tons, 23% higher than in 1995.

The company does a good job of promoting Competitor #1 and training the staff of their marketing outlets about the product. As a result, the staff are knowledgeable about the product and know how to sell it. Competitor #1 has gained significant market share through this strategy (and expect to double their market share by the year 2000). Thus a new product would have to work hard to become established in the marketplace.

2. Competitor #2

This product is made by and distributed through local Cenex/Land O' Lakes farm supply cooperatives. Competitor #2 is a soy meal product with ligno sulfate added to increase bypass protein. This product is priced generally comparable to Competitor #1.

3. Competitor #3

Competitor #3 markets two products: one is an extruded product, the other is an extruded/ expelled product. Competitor #3 sold about 1,000 tons of the extruded product in 1996. The extruded/ expelled product has only been on the market for one year, yet Competitor #3 sold 2,000 tons of it in 1996 (its first year). This appears to be a growth product for them. 99% of Competitor #3's sales are direct to farmers, about one third of product going out as part of a mix, and the remainder sold straight.

4. Competitor #4

Manufactured in Nebraska, this is a similar product to Competitor #1. These two products compete head to head in many parts of the Midwest, but Competitor #4 is not marketed significantly in Wisconsin at this time. Competitor #4 displayed at the 1996 World Dairy Expo in Wisconsin, indicating a market expansion orientation.

5. Roasted Soybeans

Roasted beans are a good source of bypass protein. The main disadvantage of roasted beans is their higher fat content compared to commercial sources of bypass protein such as Competitor #1. Although roasted beans offer high feed value, they are less palatable and tend to produce oil in excess of dairy cows' need. Roasted beans are readily available in Wisconsin.

6. Summary

Because none of the competitors identified above is manufactured in Wisconsin, there appears to be a window of opportunity for the company to provide transportation cost savings over meal imported from other states, and to provide a higher feed value source of bypass protein relative to Competitor #1.

SAMPLE # 4

VII Financial Analysis

The discussion below presents a summary of major assumptions and major cash flow issues, and the table on page 21 contains a summary of cash flow projections. Complete five-year cash flow projections and accompanying assumptions are presented in Appendix E, along with a line by line narrative explanation of these assumptions and projections.

A. Major Assumptions

1. Funds Required

Total building and land costs are estimated to be \$327,500. Additional funds needed include working capital (equal to 6 months of operating expenses) and points and closing costs. Therefore, the total funds required are approximately \$338,467.

2. Sources of Funds

REA requires a borrower to obtain supplemental financing (funds from other sources) equal to at least 20% of the REA funds loaned to the project. These supplemental funds are assumed to be a combination of equity contributions and a low-interest loan from (see Chapter VI). Thus, the sources of funds are as follows:

\$270,650	REA loan (80%, of total)
\$ 33,908	loan (10% of total)
\$ 33,908	community equity (10% of total)
\$338,467	Total

The REA funds are interest free and the loan term is 120 months (10 years), although under normal circumstances REA defers payments for the first two years of the term.

The terms for a loan obtained from years). are 2% for 120 months (10 years)

3. Square Feet Available

Only 4,000 of the available 5,000 square feet of clinic space are rented during the first year (presumably to . The remaining 1,000 sq. ft. is assumed to be rented starting in the second year.

4. Rent per Square Foot

The cash flow projections assume a rent charge of \$10.75 per square foot per year (approximately \$0.895 per square foot per month).

B. Major Cash Flow Issues

1. REA Loan

The cash flow projections assume that the facility will receive a 10-year, zero interest loan of \$270,650 from the Rural Electrification Administration. It is also assumed that REA will provide a 2-year deferment on principal payments. Thus, the clinic will not make payments on its REA loan for Years 1 and 2. Starting in Year 3, the clinic will make annual payments of \$33,381 on the REA loan.

2. Dairyland Loan

2% interest loan of \$33,908 from The cash flow projections also assume that the facility will receive a 10-year,. Payments on the principal and interest on this loan are made every year, starting in Year 1.

3. Total Debt Service

Total debt service equals the annual principal payment on the REA loan plus the interest and principal payment on the loan. In Years 1 and 2 the total debt service is estimated to be \$3,744 per year. In Year 3, when loan payments to the REA begin, total debt service is estimated to be \$37,575.

C. Facility's Cash Flow Ability

Assuming the facility receives a two-year deferment on the REA loan, the facility is projected to achieve a positive cash flow in Year 1 of \$21,392. In Year 2, cash flow is projected to equal \$33,697 due to the rental of the additional 1,000 square feet.

In Year 3, the facility shows a much smaller cash flow of \$500 due to the first payment on the REA loan. However, the building reserve fund, initially established with the working capital portion of debt financing and enhanced by the positive cash flows in Years 1 and 2 (due to the REA deferment) will enable the facility to survive the smaller cash flow projections in Years 3-5.

SAMPLE # 5**IX. FINANCIAL DATA**

Attached is a complete set of financial projections for the company for its first five years of operation. The projections include balance sheets, income statements, changes in balance sheets and statements of cash flow. The projections were prepared on a monthly basis for the first year, on a quarterly basis for the second and third years and on an annual basis for the fourth and fifth years. The table below provides a summary of major balance sheet and income statement items.

Summary of Financial projections(in thousands)

	Year 1	Year 2	Year 3	Year 4	Year 5
Balance Sheet					
Total Assets	297.4	256.9	228.1	206	189
Total Liabilities	194	188.1	181.3	171.1	159.3
Total Equity	103.4	68.7	46.8	34.9	30
Total Liabilities and Equity	297.4	256.9	228.1	206	189
Income Statement					
Net Sales	471.2	553.6	607.9	653.1	685.8
Cost of Sales	336.5	394.6	434.1	466.4	489.7
Gross Profit	134.8	158	173.8	186.8	196.1
Operating Expenses	168.1	169.7	173.6	177.6	181.6
Operating Profit	-33.4	-11.7	.2	9.2	14.5
Other Expenses	23.2	23	22.2	21	19.6
Net Profit	-56.6	-34.7	-22	-11.9	-5.1

The projections assume that the company will have total sales of \$471,240 in the first year. Total sales represent 138,600 pounds of hard chickens at 60 cent; per pound; 582,120 pounds of large chickens at 60 cent; per pound; and 76,230 pounds of pheasant at \$1.60 per pound. The projections assume that the company will realize a growth in sales of 10% per year for the second and third years and 5% per year for the fourth and fifth years. The company will operate at 54.51% capacity during the first year and increase to 72.72% by the end of the fifth year.

The company's gross profit margin is projected to remain consistent at 28.60% given the product mix. This margin is higher than the industry average of 14.5% according to Robert Morris Associates 1989 for poultry processing companies with assets in excess of one million dollars. The company is projected to have a relatively high gross profit margin due to the low cost of live birds (the types of birds purchased by the company are usually not utilized by conventional poultry processors) and the low cost of labor.

Although the company is projected to realize a generous gross profit margin, the gross profit generated is not large enough to cover operating and interest expenses in any of the first five years of operation. In the third year, the company begins to generate a gross profit that is adequate to cover operating expenses, but not interest expense. Thus, the company is not projected to realize any net profit during its first five years of operation. This inability to generate a profit is reflected on the balance sheet by a decline in equity and a decline in the company's cash line item.

SAMPLE #6**Sources Uses Option #1**

100% New Construction

SOURCES

Cash Reserve	250,000	8.57	1592 members @ \$100
Member Equity	159,200	5.46	90 members @ \$4000
Member Loans	360,000	12.34	
<u>Henry Financing</u>	<u>180,000</u>	<u>6.17</u>	
Owners Contribution	949,200	32.54	
Vendor Credit	98,000	3.36	
Vendor Loan	200,000	6.86	
City/Community	200,000	6.86	
NCBDC/Local Banks	1,470,000	50.39	
Total Sources	2,917,200	100.00%	

USES

	\$\$	\$\$	%	Explanation
Acquisition	1,100,000	600,000	20.57%	15,000 sq/ft @ \$40 sq/ft
Construction Costs	39,000			10,000 sq/ft @ \$80
Construction	25,000			5,000 sq/ft second story @ \$60
Demolition (Co-op Building)	44,000			
Demolition (Other Building)				7,800 sq/ft @ \$5
Site Costs		1,208,000	41.41	
Total Construction Costs		4,000,000	13.71	12,500 sq/ft @ \$3.50
Equipment		114,000	3.91	
Inventory, additional		150,000	5.14	10,000 sq/ft @ \$3.50
Fees		25,000	.86	7,000 sq/ft @ \$40
Start-up Promotion		25,000	.86	7,000 sq/ft 3,200=3,800
Start-up Staffing		25,000	.86	*\$30
Holding Costs		25,000	.86	6% - 12%
Business Disruption		80,000	2.74	
Working Capital Year 1		2,652,000	90.91	
Subtotal		265,000	9.09	
Overrun Allocation		2,917,200	100	
Total Uses				
Total Sites		22,500 sq/ft		
Footprint		10,000 sq/ft		
Retail		7,000 sq/ft		
2nd Story		5,000		