PB1642-Considerations for a Value-Added Agribusiness

The University of Tennessee Agricultural Extension Service

Follow this and additional works at: http://trace.tennessee.edu/utk_agexmkt

Part of the Agronomy and Crop Sciences Commons

Recommended Citation
"PB1642-Considerations for a Value-Added Agribusiness," The University of Tennessee Agricultural Extension Service, PB1642-3M-1/00 E12-2015-00-162-00, http://trace.tennessee.edu/utk_agexmkt/11

The publications in this collection represent the historical publishing record of the UT Agricultural Experiment Station and do not necessarily reflect current scientific knowledge or recommendations. Current information about UT Ag Research can be found at the UT Ag Research website. This Value-Added Agriculture is brought to you for free and open access by the UT Extension Publications at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Marketing, Finances and Value-Added Agriculture by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.
Considerations for a Value-Added Agribusiness
# Table of Contents

The *Agricultural Development Center*’s Role in Value-Added Agriculture .................................................. 3

Tennessee Agriculture ........................................................................................................................................ 4

Understanding Value-Added ......................................................................................................................... 4

Business Planning ............................................................................................................................................ 7
- A Worksheet Approach .............................................................................................................................. 8
- Small Business Failures ............................................................................................................................. 10
- Regulations .................................................................................................................................................. 11
- Insurance ..................................................................................................................................................... 11

Marketing .......................................................................................................................................................... 12
- Marketing Mix ................................................................................................................................................ 13
- Advertising, Promotion and Publicity .......................................................................................................... 14
- Word-of-Mouth Advertising ....................................................................................................................... 15
- Collateral Marketing Materials .................................................................................................................. 15
- Marketing Budget ....................................................................................................................................... 16
- Market Plan Check List .............................................................................................................................. 17

Feasibility .......................................................................................................................................................... 17
- Financial Feasibility .................................................................................................................................... 17
- Break-Even Analysis .................................................................................................................................. 19
- Price Determination .................................................................................................................................... 20

Product Development ..................................................................................................................................... 21

Value-Added Opportunities ........................................................................................................................... 23

Conclusions ....................................................................................................................................................... 24

Notes ................................................................................................................................................................. 25

*Rob Holland, Assistant Extension Specialist*

*Kent Wolfe, Assistant Extension Specialist*

*Agricultural Development Center*
The Agricultural Development Center's Role in Value-Added Agriculture

The Agricultural Development Center (ADC) was created by The University of Tennessee Agricultural Extension Service during the spring of 1998. The ADC’s mission is to increase the value of Tennessee’s economy through new, expanded and improved processing and marketing of agriculture, aquaculture and forestry commodities, i.e., “adding value!” Value can be added by processing, packaging and marketing products developed from agricultural sources.

To take advantage of Tennessee’s value-added agricultural potential, farmers and agri-entrepreneurs must be aware of value-added opportunities, as well as informed about the feasibility, planning and market development associated with a value-added business. There are also income opportunities for rural areas related to tourism, farm vacations, entertainment farming and other recreational activities and home-based industries.

The ADC assists new and existing producers, agri-entrepreneurs, service providers and agribusiness industries in Tennessee by providing educational and developmental services and technical support through a multi-disciplinary team approach. The areas of specialization include management, process engineering, business analysis, food technology, wood and wood products processing, market evaluation and feasibility analysis.

The ADC works with farmers, agribusinesses and entrepreneurs in the evaluation and planning of value-added agriculture, forestry and aquaculture enterprises and ideas. The ADC provides:

- economic analysis
- marketing and distribution strategies
- market research and analysis
- niche market identification
- technical information for market development
- feasibility analysis
- interpretation of regulations

Many farmers and entrepreneurs are trying to identify ways to generate additional farm income. This additional revenue may be created by adding a new enterprise, adopting new practices in cooperation with existing enterprises or by adding value to a commodity that is currently being produced. The ADC assists farmers and entrepreneurs in the evaluation, development and implementation of value-added considerations. For a project to be considered by the ADC, an application must be completed and submitted to the center. Application forms may be obtained from any county Extension office or at the ADC web-site: www.utextension.utk.edu/adc. All submitted applications are evaluated by the ADC faculty according to a set of established primary and secondary criteria.

The ADC is taking Extension’s traditional specialty areas of production, management and marketing education to the next level by working in multi-disciplinary teams to evaluate and address value-added agricultural ideas. Projects are addressed by a team of specialists and involve faculty members from a variety of disciplines. The team approach provides a complete investigation of the interactive production, financial and marketing aspects of the project. The ADC has the unique opportunity to assist Tennessee’s agriculture, aquaculture and forestry industries through pivotal transitions of change.
Agriculture is a significant contributor to Tennessee’s economy. Approximately 20 percent of all economic activity in the state is related to agriculture. Agricultural production alone generates nearly $2.5 billion annually in farm cash receipts. Food manufacturing, marketing and distribution, forestry-related industries, equine and other agricultural products make the economic impact even greater.

Tennessee’s agricultural impacts extend far beyond its geographical boundaries. International trade has a significant impact, as exports of raw agricultural commodities generally total more than $513 million each year. Raw and processed agricultural and forest products are by far the state’s top export category, totaling more than $2.1 billion.

Tennessee’s top agricultural products include cattle and calves, hardwood lumber, dairy products, cotton, tobacco, poultry, nursery stock, fruits and vegetables, hogs and pigs, soybeans and corn. Farming and forestry dominate Tennessee’s landscape, with farm production occurring on approximately 80,000 farms. About 11.8 million acres, or a little less than one half of the state’s land area, is in farms. Livestock and livestock production account for approximately 44 percent of the total farm cash receipts, while crop sales account for the remainder. Farm and non-farm forest land account for another 13.6 million acres. Tennessee’s forests produced timber to manufacture almost 840 million board feet of hardwood lumber, making the state one of the nation’s leading producers.

Understanding Value Added

Tennessee farmers are now more apt to consider new enterprises, activities and procedures than ever before. While Tennessee agricultural production generates approximately $2.5 billion annually in farm cash receipts, farmers have not been especially well paid for their efforts. In 1997, each Tennessee farmer returned an average net cash income of $2,296.25.2

One reason for this low net return is that the prices paid by farmers for inputs have been steadily increasing, while the prices received for products have been stagnant. Historically, stagnant farm prices in economies of growing retail prices have contributed to a steady decline in the farmer’s share of each dollar the consumer spends on food over the past 30 years. On average, less than 21 cents of today’s retail dollar spent on food makes it back to the farm. For food items purchased at food service establishments (fast food and restaurants) the farmer’s portion slips much lower, to less than 12 cents.

In 1997, consumers spent $561 billion on food items in the United States. Of that, farmers received $120 million, or 21 percent. Primarily as a result of the rising costs of labor, transportation, packaging, food services and other marketing inputs, the cost for marketing farm foods has increased greatly over the years. For example, the cost of marketing food beyond the farm gate increased by 55 percent from 1987 to 1997. An average breakdown of what a dollar spent on food in 1997 paid for is depicted in Figure 1.3
The difference in the prices that farmers receive for their production and the prices that consumers pay at the retail level is referred to as the “farm-to-retail price spread.” Since 1970, the farm-to-retail price spread has grown (Figure 2). The reason for this increase is that farm receipts have stagnated or even declined, while retail prices have tended upward with inflation, in some instances faster than inflation. An underlying principle of the farm share of food expenditures is that the more processing performed on a product before it reaches the retail level, the smaller the farm share. For example, fresh eggs require little processing and have a higher farm share than bakery products that require a great deal of processing.

Because of the increasing farm-to-retail price spread, the importance of value-added agriculture grows every year. Since 1950, the value added to agricultural products beyond the farm gate has greatly outpaced the value of raw agricultural goods. Therefore, many farmers are now evaluating ways to add value to their commodities to capture some of the value that is being added beyond the farm gate. Value added is one of today’s most common “buzzwords” in agriculture. Value may be added to agricultural commodities by processing, packaging and marketing. At the farm level, value can be added by retaining ownership of an item beyond the commodity stage, thereby increasing the value of the item by further processing, packaging or marketing. Value-added agriculture may convert items into products of greater value, increase the economic value of a commodity or increase the consumer appeal of agricultural products. Adding value is doing more of the preparation of a product/commodity for the consumer than was done before.

As a result of stagnant or declining farm receipts, many farmers are looking for ways that they can add value to their commodities to capture a larger proportion of the consumer’s food dollars. Some examples of opportunities for income improvement through adding value to agricultural commodities are listed on the next page.
• A pepper grower who processes a special hot sauce and hot salsa can add value to the raw commodity.
• Further processing rough lumber into end-use consumer products adds value to a commodity product.
• A poultry grower who bags his or her poultry waste compost and markets it as an organic soil conditioner can add value to the farm waste.
• A swine producer who opens his or her own retail butcher shop can “add value” by selling cuts of meat to the consumer rather than live hogs to a packer.
• A “pick-your-own-pumpkin” entertainment farming operation provides a direct market opportunity.

There is, however, a delicate “balance” between what it costs to add value to an agricultural commodity and what price the market will bear for the product. A venture will only be profitable if the price received is greater than the total cost of production, packaging, transportation, operation and marketing. The concept of value-added agriculture is an attempt to capture or obtain a portion of the marketing bill shown in Figure 1. As the farm share of the retail dollar spent on food shrinks, farmers may look for ways to obtain a portion of that which is growing.

Figure 2. Distribution of food expenditures

<table>
<thead>
<tr>
<th>Year</th>
<th>Billion dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>0</td>
</tr>
<tr>
<td>1972</td>
<td>100</td>
</tr>
<tr>
<td>1974</td>
<td>200</td>
</tr>
<tr>
<td>1976</td>
<td>300</td>
</tr>
<tr>
<td>1978</td>
<td>400</td>
</tr>
<tr>
<td>1980</td>
<td>500</td>
</tr>
<tr>
<td>1982</td>
<td>600</td>
</tr>
</tbody>
</table>
Adding value to agricultural commodities often requires significantly different business skills and information needs than an entrepreneur may possess. Adding value through packaging, processing and marketing may require adherence to and understanding of many different regulation, licensing, tax, insurance, labor and public relation considerations, as well as a thorough understanding of marketing concepts. Because the development of many value-added enterprises often constitutes a new business venture, such enterprises should not be undertaken lightly.

A good business plan can help identify potential characteristics that may cause business failure and improve the chances for business success. A business plan can be compared to a road map in that it identifies business goals and presents a plan for achieving them. It should force the business owner to:

- determine the feasibility of the proposed idea and its start-up requirements
- evaluate the need and potential payback of borrowed money
- develop the groundwork for detailed operational plans

The development of a business plan should be a basic management practice for any business venture. A business plan should provide a detailed description of the business and should address key factors such as:

- What products/services will be provided?
- Who are the potential customers?
- How will the product be produced, marketed, distributed and supported after the sale?
- Will the revenues cover the expenses?

Many failed businesses mention “lack of capital” as the primary contributor to business failure. However, because businesses often do not adequately plan, additional capital often just postpones the eventual failure of the business. A formal business plan should be written. It does not have to be long nor expensive, but it does require an investment of time and attention.

Many business plans are developed to secure funding from commercial lenders. In addition to seeking capital, a business plan should also be developed so it can be used to clearly communicate the plans of the business. The business plan can be very useful in evaluating the potential and actual results of the business venture. Farmers and agribusiness entrepreneurs need to be aware that it takes more than a good idea for a value-added agricultural business to succeed. Agribusiness entrepreneurs must plan for success. This includes conducting market research, identifying the target market and developing a five- to 10-year financial plan that includes cash flow, financing and expansion concerns.
A Worksheet Approach
Following is a worksheet to help evaluate an entrepreneur’s level of knowledge and familiarity with issues related to a value-added idea or enterprise. It allows for an assessment of the production, marketing, financial and personal attributes that should be considered for a new business. Rate the questions on a scale of one to 10.

The rating should reflect your level of familiarity or knowledge with the respective question. This worksheet is not intended to provide a definite YES or NO answer, but merely a relative indication of your familiarity and understanding with the project. The rating should help you determine areas of the project that require additional information and areas that offer a competitive advantage.

<table>
<thead>
<tr>
<th>- - - - - - - - - - - General Rating - - - - - - - - - - -</th>
<th>1</th>
<th>5</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Very Familiar/ Knowledgeable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat Familiar/ Knowledgeable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Familiar/ Knowledgeable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Raw Product Supply**
Required inputs (specifications, quantity, quality)...............................
Availability of required inputs (timing and price)................................
Location/accessibility of inputs............................................................
Alternative inputs..................................................................................
Dependability of the input suppliers.....................................................
Alternative for suppliers........................................................................
Long-term agreements with suppliers......................................................

**Production and Financial Planning**
Minimum facility requirements................................................................
Social issues..........................................................................................
Environmental issues.............................................................................
Start-up costs..........................................................................................
Money to be borrowed............................................................................
Interest rates..........................................................................................
Annual debt payment.............................................................................
Employees............................................................................................
Special skills needed for business....................................................... 
Employee training programs...................................................................
Labor management issues........................................................................
Product development............................................................................... 
Wage rates............................................................................................
Safety considerations............................................................................
Management costs..................................................................................
Fixed costs............................................................................................
Depreciation............................................................................................
Insurance costs.....................................................................................
Taxes.....................................................................................................
Projected cash flow............................................................................... 
Break-even point.................................................................................

8
## Market Determination

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption trends</td>
<td></td>
</tr>
<tr>
<td>Quality &amp; quantity restrictions/trends</td>
<td></td>
</tr>
<tr>
<td>Market characteristics</td>
<td></td>
</tr>
<tr>
<td>Target market</td>
<td></td>
</tr>
<tr>
<td>Market alternatives</td>
<td></td>
</tr>
<tr>
<td>Activity in the existing markets</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td></td>
</tr>
<tr>
<td>Distribution system</td>
<td></td>
</tr>
<tr>
<td>Delivery requirements/considerations/schedules</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
</tr>
<tr>
<td>Product/service launch</td>
<td></td>
</tr>
<tr>
<td>Sales volumes per customer</td>
<td></td>
</tr>
<tr>
<td>Target market</td>
<td></td>
</tr>
<tr>
<td>Market potential</td>
<td></td>
</tr>
<tr>
<td>Location of buyers</td>
<td></td>
</tr>
<tr>
<td>Signals by potential buyers</td>
<td></td>
</tr>
<tr>
<td>Reliability/stability of the buyers</td>
<td></td>
</tr>
<tr>
<td>Payment schedules</td>
<td></td>
</tr>
<tr>
<td>Special selling services</td>
<td></td>
</tr>
<tr>
<td>Seasonal price patterns</td>
<td></td>
</tr>
<tr>
<td>Historical price patterns</td>
<td></td>
</tr>
<tr>
<td>Average market price</td>
<td></td>
</tr>
</tbody>
</table>

---

*Rate yourself on the following personal characteristics, with “1” being poor and “10” being excellent.*

### Personal Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patience</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Willingness to continue learning</td>
<td></td>
</tr>
<tr>
<td>Support of the family</td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td></td>
</tr>
<tr>
<td>Selling/marketing skills</td>
<td></td>
</tr>
<tr>
<td>Ability to “roll with the punches”</td>
<td></td>
</tr>
<tr>
<td>Courteous and understanding</td>
<td></td>
</tr>
<tr>
<td>Good public relations skills</td>
<td></td>
</tr>
<tr>
<td>Good organizational skills and abilities</td>
<td></td>
</tr>
<tr>
<td>Self-starter and desire to achieve results</td>
<td></td>
</tr>
<tr>
<td>Seeker of new opportunities</td>
<td></td>
</tr>
<tr>
<td>High degree of energy</td>
<td></td>
</tr>
<tr>
<td>Ability to motivate people and get along with others</td>
<td></td>
</tr>
<tr>
<td>Experience in several aspects of business</td>
<td></td>
</tr>
<tr>
<td>Proven ability to execute ideas</td>
<td></td>
</tr>
<tr>
<td>Ability to adjust your managerial style to suit a situation</td>
<td></td>
</tr>
<tr>
<td>Honesty</td>
<td></td>
</tr>
<tr>
<td>Foresight and planning abilities</td>
<td></td>
</tr>
<tr>
<td>Strong work ethic</td>
<td></td>
</tr>
<tr>
<td>Effective communicator</td>
<td></td>
</tr>
</tbody>
</table>

**How much money have you saved for investing in the business?** $__________

**How do you feel about never seeing this money again?** ____________
Small Business Failures
The old adage, “people don’t plan to fail, they fail to plan” certainly holds true when it comes to small business success. The first-year failure rate for new businesses is approximately 70 to 80 percent. Only about half of those who survive the first year will remain in business the next five years. Of these failed business, only 10 percent close involuntarily due to bankruptcy. The remaining 90 percent close because the business was not successful, did not provide the level of income desired or was too much work for the effort.

While no person should start a new venture prepared to fail, adequate planning should be invested in developing tactics to implement if things do go wrong. Every business has a life span that is depicted by its business life cycle. A business life cycle is normally defined by four stages: introduction, growth, maturity and decline. Figure 3 depicts the four stages of a typical business life cycle with regard to the introduction, growth, maturity and decline in sales over time.

Most business life cycles will experience a slow introduction and growth stage, a short maturity stage and a rather quick decline stage. It is important to understand the typical cyclical life span of small businesses — including value-added farm enterprises. Most single value-added farm enterprises will not remain at maturity long enough to provide a family’s sole source of income. Therefore, diverse product lines and new enterprise introductions are essential to maintaining a successful business.

Unfortunately, many businesses enter the decline phase shortly after introduction. Studying the reasons for most business failures can be helpful in extending the business life cycle. In a broad perspective, business failures can be classified into two categories: catastrophic failure and general lack of success. Catastrophic failures are the primary result of economic factors but also result from the death of a partner, fire, fraud, burglary and acts of God. According to Dun & Bradstreet statistics, 88.7 percent of all business failures are due to management mistakes. The following list summarizes the 10 leading management mistakes that lead to business failures.

1) Going into business for the wrong reasons
2) Advice from family and friends
3) Being in the wrong place at the wrong time
4) Entrepreneur gets worn out and/or

Figure 3. Four Stages of a Typical Business Life Cycle
underestimate the time requirements

5) Family pressure on time and money
6) Pride
7) Lack of market awareness
8) The entrepreneur falls in love with the product/business
9) Lack of financial responsibility and awareness
10) Lack of a clear focus

**Regulations**

Because many value-added agricultural enterprises result in direct sales to consumers, the person evaluating such an enterprise should be aware that local, state and federal laws are in place to protect the consumer. Such laws include the regulation and monitoring of weights & measures; health stipulations; sanitation regulations; meat, dairy and poultry inspections; pollution controls; labeling requirements; and justification of product claims. Workers' compensation laws protect workers in the event of injury on the job. Most states have mandatory worker's compensation laws.

A variety of local, state and federal agencies require license, permits and/or registrations for businesses and services. Most incorporated cities and many county governments in Tennessee have zoning laws to restrict and protect the use of property.

Many value-added businesses will also face a variety of tax-related issues during the development and implementation of their idea. The following revenue and tax issues may apply to value-added business ventures: corporate taxes, limited liability company fees, property taxes, sales and use taxes, business permits, license and fees, payroll taxes, franchise taxes, excise taxes, unemployment taxes, fuel taxes, health and sanitation taxes, workers' compensation and gross receipts taxes.

Maintaining adequate records is also essential for a value-added business. Sales, income, expenses, labor, inventory, purchases, invoices and delivery specifics should be maintained in a manner that will allow for efficient reporting and analysis. The business manager should be prepared to maintain complete records of sales, income, expenses, accounts payable and accounts receivable. A reliable system should be developed to handle payroll records, tax reports and payments. A complete, detailed and efficient system for recording and reporting financial and production information should be carefully considered, designed and implemented.

**Insurance**

Insurance coverage is a fairly standard cost of doing business. Insurance coverage for fire and other hazards, legal liability, property, rental, vehicle, worker’s compensation, crime, employee benefits, life & disability and business interruption should be thoroughly investigated and carefully evaluated. Sometimes, insurance coverage for small businesses may be included as part of a personal or homeowner’s policy. However, adequate coverage for the business must exist. A separate commercial policy for full protection of the business should be considered. All insurance policies and business records should be kept in a safe location.

While having insurance coverage often provides a false sense of security, it is more important to have the right type of coverage than to simply have coverage. It is important to understand the type of coverage your business needs and has. Read and understand the fine print in all policies and re-evaluate your business insurance needs periodically. The following types of coverage should be discussed with your insurance agent.

- Product liability coverage: protects you if your product causes injury to the consumer
- Auto liability and “non-owned” auto liability insurance: protects the business in the event of an accident involving an automobile that is used to support the business
- Medical payments insurance: protects the business if someone is injured whether or not the business was at fault
- Worker’s compensation: protects the business if employees are hurt on the job
- Business interruption insurance or earnings insurance: protects the business if it is damaged by fire or some other cause and you must totally or partially suspend operations
- Disability income protection: a form of health insurance in case you become disabled
- Business life insurance: provides funds for transition if you die
Unlike traditional markets for farm commodities, the marketing arena for value-added products, requires an understanding of new terms and concepts including market research, consumer preferences, niche marketing, target markets, market penetration, promotional activities, advertising and collateral marketing materials. An overview of these and other marketing concepts will be helpful for farmers and agri-entrepreneurs considering value-added enterprises.

Market analysis is an essential component of building a successful value-added business. Market analysis relies heavily on market research to obtain information on consumers, competitors and the overall industry. This information is critical to evaluating the market feasibility of a value-added business. To appropriately evaluate a value-added enterprise’s feasibility, an in-depth study of the industry and extensive research into consumer tastes and preferences are needed. This investigation will allow you to identify industry trends, changes in consumer tastes and preferences and how the competition is positioning its products. This type of strategic information is critical to effectively evaluating a product’s market potential.

One of the terms frequently referred to in the value-added industry is niche marketing. Niche marketing refers identifying a “need” that is not currently being met in the marketplace and marketing a product or service to meet the identified need. A niche market is one where there is a small segment of the population that desires a particular set of product attributes. For example, organic compost. A farmer supplying organic compost is competing in a niche market. To effectively market products in a niche market, or any market for that matter, it is essential that you understand the consumers who purchase the products. The group of people who are most likely to purchase a product or service are referred to as the target market or target audience.

The concept of a target market can apply to consumers and/or businesses and refers to a sub-segment of a total population that is most likely to use a product or service. The ability to identify a product’s consumers is essential in estimating market potential, as well as developing specific marketing strategies. It is likely that your target market will be a subset of the general population, i.e., affluent males, between 30-35 years of age. By identifying a product’s target market, the business can focus its marketing efforts on reaching this group of consumers and maximize its marketing resources. It is important to remember that the notion of identifying a target market does not exclude potential consumers outside the target; it simply focuses on the group of consumers with characteristics closely associated with the users of a particular product. For example, the target market for gourmet hot sauce products is young, college-educated, affluent males.

To successfully market a product or service, specific marketing objectives and goals must be outlined. By setting business goals and defining objectives, it is easier to develop a marketing strategy to ensure the objectives and goals will be met. However, before you develop marketing strategies, you must create a clear picture of expected accomplishments. For example, you need to set specific goals like selling 1,000 units of brand X and 2,500 units of brand Y in the next fiscal year. Again, you may want to set specific sales goals by product and market.

Marketing strategies are concepts that can be used to create a set of activities aimed at achieving specific marketing objectives and goals, that is “how” specified marketing objectives and goals are to be met. More simply stated, marketing strategies outline and describe what needs to be done to reach specific marketing goals and objectives. Once the business has determined its marketing goals and objectives, a method of achieving the goals and objectives must be outlined, formulated and implemented.

Four general marketing strategies are listed below with a brief description of each:

- **Market penetration** is a concept similar to market share and refers to the percentage of total product sales that is captured by a company. A company can increase its market share by capturing a larger share of the market or having greater market penetration. Market penetration may be expanded by cutting prices to attract competitors’ customers.
- **Market development** is a very simple strategy where a business tries to identify new markets or new uses for its existing products. If a business wants to expand and does not want to develop or produce a new product, it can use a market development strategy.

- **Product development** strategies occur when a business develops new products or services for customers in the business’ current markets. Product development may be as simple as adding value to existing products or developing an entirely new product.

- **Diversification** is a strategy that is typically used as a business grows. The purpose of diversification is to attract new groups of customers by producing new products and entering new markets. An example is adding a new flavor of preserves to a business’ product line.

**Marketing Mix**

The marketing mix, or marketing tactics, can be thought of as the set of specific methods used to implement a marketing strategy. Specifically, the marketing mix is a combination of the actions required to fully implement the strategy. Components of the marketing mix can be segmented into four broad categories, which are generally thought of as the four “Ps” of marketing:

- **Product** — refers to the physical product being introduced into the marketplace. The product can be thought of as the total of the individual product’s physical and perceived attributes, including packaging. It is important to remember that when entering a niche market, product packaging is a significant consideration that can impact the product’s success or failure in the marketplace.

- **Price** — determination is a critical marketing tactic. A product’s price must be high enough to cover the total cost of producing the product, yet not too high so that it discourages potential customers from purchasing the product. Also, pricing can help position your product. For example, a high-priced product found in a gourmet store may suggest quality.

- **Promotion** — is a term used to describe the advertising, promotion, publicity and sales of a product or service. Advertising, promotion and publicity are three different methods that are sometimes used together to convince consumers to purchase a product. The goal of each of the three strategies is to influence purchasing decisions. It is important to remember that advertising, promotion and publicity alone cannot generate significant demand for a product if consumers do not like the product or if it does not meet a specific need and/or it is priced incorrectly.

- **Place** — refers to a general concept describing how the product will get to consumers. The place component of the marketing mix includes all of the targeted market outlets and distribution tactics needed to deliver the product for sale to consumers. Opening a retail shop, direct marketing to customers (i.e., mail order or the Internet), selling to specialty retailers and wholesalers are examples of “places” where a business might plan to sell its products. The place tactic also needs to include how the product will be physically distributed and should address issues relating to what distribution services are needed, how the services should be provided and what resources are needed to distribute the product.

It is important to understand that the ultimate function of developing a marketing mix is to sell more product. There are numerous marketing tactics that can be used to pitch products to consumers. However, there is no single formula for success or a “silver bullet” marketing tactic that will guarantee success. Instead, developing a successful marketing strategy and implementing effective marketing tactics are more like an art than a science. Marketing is a creative process rather than an exact formula that should be followed in all situations.10
As mentioned previously, advertising, promotion and publicity are three distinctly different communication strategies frequently used together to increase sales. The goal of each of the three strategies is to influence consumers’ purchase decisions. Advertising, promotion and publicity cannot generate significant demand for a product if consumers do not like the product or it does not meet a specific need. Advertising relies on both printed and electronic communication to deliver information about a product or business to potential and existing customers. Your advertising campaign should be directed at your target market, both in terms of content and the media where the ad is going to be aired or printed. Advertising has a number of functions:

- to inform customers of the existence of your product
- to inform customers why they should purchase your product (i.e., a benefit to the customer, saves money)
- to remind existing and potential consumers that they might want to purchase your product (reinforcement of a benefit)
- to associate specific appealing qualities with your product (i.e., wearing Nike® shoes makes you a better athlete)
- to help differentiate your product from the competition (i.e., locally grown produce)

Sales promotion involves customer response and involvement as opposed to advertising, which involves delivering information about a product or business to potential and existing customers. However, product advertising and promotion are frequently used together. Promotions are a way to entice the customer to purchase a product through a special activity. Everybody is familiar with promotional strategies like clearance sales, in-store sampling and product give-a-ways. The following is a short list of common promotional or marketing techniques for small business owners.

- Build your image with well-designed product labels and promotional displays
- Design a point-of-purchase display for your various products
- Design and distribute company calendars, mugs, pens, note pad or other advertising specialties displaying your company name and logo
- Explore cross promotion with a non-competing company selling to your target market
- Hold a promotional contest (i.e., local radio giveaways)
- Provide free samples of your product or service whenever possible
- Donate your product to different fund-raising and charity events
- Sponsor an amateur sports team

Electronic and print advertising and promotions are particularly useful when starting a new, direct-to-consumer business. By advertising and promoting your product, you are able to reach more potential consumers. However, advertising via these media can be very expensive and should be considered carefully. When deciding on which advertising media are best for your business, it is a good idea to evaluate a number of factors associated with each advertising medium:

- the advantages and disadvantages of each medium
- the effectiveness of each medium in relaying your advertising message and objective
- the cost of advertising with each medium
- the medium’s coverage area (i.e., range of radio broadcast, geographical area)
- the medium’s audience demographics (i.e., newspaper subscriber demographics)
- audience attention (i.e., percent of exposed customers who are aware of or who can recall an advertisement)

Publicity might be considered inexpensive or free advertising, i.e., local television, radio or newspaper running a feature story on your business. Many times, advertising sources can also provide publicity if they can be convinced that the business has a good story. There are a number of sources of publicity. Publicity can achieve the same goals as advertising. However, it takes work and planning to obtain print and electronic media publicity. The following outlines possible methods that can be used to seek publicity.
• Develop a media list. The list should include local and regional media that are directed toward potential customers. These media provide a means of advertising your product to potential consumers or even generating publicity for your products through feature stories.

• News leads should be sent to appropriate media each time there is an occasion or event associated with the business or product. It is very important that the news lead be formatted to meet a particular publication or media. Editors are not likely to spend the time and effort to rewrite a news lead. Such occasions or events could be the 10,000th jar sold, new product introductions (e.g., new re-sealable container) and/or the business visited by a notable person. Don’t “manufacture” news, however, or you risk hurting your credibility with the media.

• Key people in selected media should be identified and provided product samples or information at appropriate times, such as holidays or other special occasions. An extensive list of print, radio news and local television personnel should be compiled and provided samples on holidays or special occasions. These individuals look for interesting stories focusing on the region and could promote your business via a news article or feature story. Be sure to target these individuals carefully and don’t be blatant about giving goodies in exchange for stories!

Just like selling your business or products to consumers, you will have to sell your business or product to the media to be considered for a feature story. Below are some simple questions you should have answered to help you effectively and efficiently pitch your story:

• Why is this a good story? (How will the story affect the viewers or listeners?)
• What is the story? (Two sentence maximum — why should the editor or reporter care?)
• Who is in the story? (List the people who can be interviewed, and their area of expertise)
• When is the best time to air the story? (Think about the goal you want to achieve getting your story on the air. If you are trying to build participation, the story should be aired prior to your event)

• Where will the story take place? (What are the visuals? Will it look good on TV?)

It is critical to measure the effectiveness of your advertising and promotional activities. For example, if you spend $255 weekly for a 2” x 3” ad in the local newspaper and a $400/week for a radio spot aired twice daily, you need to know which, if either, of these two advertisements is having an impact on sales and by how much. By monitoring each advertisement’s impact on sales, you may find that one medium or advertisement works better than the other in attracting consumers. Experiment with your advertisements and promotional campaigns to determine what works and what does not work for your particular business. Monitoring the effectiveness of different advertising and promotional strategies can be as simple as asking the customer or inquirer where he or she heard about your business and your product or, run different ads in different media for short terms, and measure audience response.

Caution: Before you decide to advertise, promote or seek publicity for your business via print or electronic media, make sure that the viewer or listener demographics of the media are similar to the demographics of your target market (customer).

Word-of-mouth Advertising
Word-of-mouth advertising appears to be a very effective way of attracting customers. However, word-of-mouth advertising can be both positive and negative. As a general rule, people are more likely to complain about their experiences than they are to compliment them. As a result, if customers are less than satisfied with quality, price, service or any other aspect of the operation, they may actually hurt business by generating negative word-of-mouth advertising. Thus, it is critical that you maintain a quality product, deliver exceptional service and make the experience enjoyable for the customer. A simple formula to remember is that 20 percent of customers account for 80 percent of your business. Therefore, generating loyal repeat customers is a critical success factor.

Collateral Marketing Materials
Collateral marketing materials are essential for a small business. It is important to have material that
promotes your product in your absence. For example, if you plan on providing a supermarket buyer with a sample of your product, you need to include marketing literature explaining your product and its benefits as well as product pricing information. The following are five types of common marketing literature or material that can be used to educate potential consumers (both wholesale and retail) as well as to create name awareness.

- **A logo and/or trademark** should be developed and registered so it cannot be used by another individual or company. You could lose the right to use your logo if another individual or business applies for your trademark.

- **Brochures and/or flyers** have proven to be extremely valuable marketing tools for small businesses and should be considered a necessity. Many times the brochure or flyer is all that potential customers have to learn about your product and find your business. These brochures can be used as handouts or mail pieces. The brochure/flyer is a selling tool by which information about your business and its products are relayed to potential consumers. It should include a list of products, prices, activities, hours of operation, directions or any other pertinent business information. It is important that the brochure reflect your product’s desired image, as this may be your business’ only exposure to potential customers. A price list insert is suggested if you are ordering a large number of brochures or you expect to have a price change before you deplete your supply of brochures. This will allow you to change prices without having to print new brochures.

  Brochures can provide potential customers with information about your product or service in your absence. It is a good idea to leave brochures/flyers in locations that are frequented by your target market. For example, if you are operating an agritourism or entertainment business (such a pumpkin patch with a Halloween theme) you might display or distribute brochures in:

  • Area supermarkets — bulletin boards
  • Area convenience stores and gas stations — bulletin boards or tape to the door
  • Area schools — take a stack of brochures to the school secretaries and see if they will put them in the faculty congregation area or place in teachers’ mailboxes
  • Area preschools — take a stack and leave at the front desk for parents to see and pick up
  • Little League® and other sporting events
  • Facilities and organizations focused on children and children’s activities. For example, a gymnastic complex, karate school or Sunday school.

  Think of your target market and try to distribute these materials in locations where potential customers frequent.

- **Stationery** should be designed and purchased using the company logo. Using company stationery in written correspondence portrays a professional image and an official business. The stationery can also be used to send out news releases and official notices. The logo should be on everything associated with the business, such as brochures, invoices, signs, stationery, business cards, displays, etc. These items can be referred to as your business stationery system and they must be consistent in the image they send to customers.

- **Mailing lists** are a very important part of direct marketing. Start a guest book to collect basic information (names, address, city, state, ZIP code and telephone number). As you fill orders to ship to consumers, it is necessary to collect basic information. To ship the product, you will need to capture the consumer’s name, address, state, city, Zip code and telephone number. By collecting and saving customer information, you can gradually compile an extensive mailing list/database of consumers.

- **An answering machine** can provide a great service to a business operation. For example, the answering machine can free personnel from answering the phone and at the same time it can have a pre-recorded message that provides callers with pertinent business information such as hours of operation, general prices, products and/or attractions, or weather-related issues (“closed today because of rain” or “opening an hour late due to heavy dew”).

**Marketing Budget**

A marketing budget is a necessity. After a creative marketing plan has been developed, money is required to effectively implement the marketing plan. Money must be allocated from the operating
budget to cover marketing expenses (e.g., advertising and promotional materials, market research, marketing consultants, market development and marketing personnel). The marketing budget should include the cost for all of the advertising and promotional media to be used, travel expenses, the cost of collecting additional research data, monitoring trends and shifts in the marketplace, developing collateral marketing material and all other marketing-related expenses.

The marketing budget should be developed at the beginning of the year. For the existing business, a good place to start is using the past year’s expenses. Additional marketing costs can then be included based on any new marketing or promotional strategies to be implemented in the upcoming year. However, for a new business, marketing costs will have to be estimated based on the upcoming year’s marketing plan. The marketing budget costs should not be carved in stone, but should be used as a guide and modified according to the business’ marketing needs and projected income during the year. A rule-of-thumb would be 5 to 10 percent of expected annual sales or a specified set minimum.

**Market Plan Check List**
The marketing check list is to provide a simple means of tracking the company’s marketing activities and to establish marketing goals. Lee Iacocca said it best, “The discipline of writing things down is the first step toward achieving them.” The check list should be used to record which marketing activities the company intends to pursue and to track the progress in meeting its marketing goals. For example, the company may set a goal of placing its products in two mail order catalogs during the next year. The goals would then be written and would include which part of the activity is to be pursued, as only portions of each activity might be of interest.

**Feasibility**
The mere mention of a feasibility study suggests a multitude of different concepts, definitions and ideas. Feasibility can be defined as the process of determining or assessing the capability and likelihood of a business idea being accomplished, brought about, used or dealt with successfully. Feasibility studies for a value-added enterprise may involve any portion or segment of a lengthy process that includes financial analysis, technical evaluation and market potential assessment. Some individuals adhere to a very narrow definition of feasibility that concentrates only on the financial capability of a business. That is, a project is feasible only if it is projected to cash flow or generate a profit. Others take a broader approach and include production, regulatory and marketing concerns in determining a project’s feasibility.

Evaluating the feasibility of a new project involves assessment of many different items. However, a primary component of a feasibility study should focus on the evaluation of economic feasibility. Important technical and physical relationships, as well as social and political issues, should also be addressed. For instance, a poultry waste processing center may be economically and physically feasible, but zoning regulations or public opposition may make it infeasible. Both economic and non-economic factors can be addressed and evaluated in a feasibility study.

Future costs and returns from investments cannot be forecast with certainty. Changing technologies and consumer demand may cause a project that is feasible today to become infeasible in the future. Similarly, a project that is feasible in one location may not be feasible in another.

**Financial Feasibility**
Simply stated, a feasibility study is a structured way to efficiently organize the information you need for confident decision making. A feasibility study involves assembling, analyzing and evaluating information to address the question: “Should I do it?” The saying “How it looks depends on where you stand” is very relevant to understanding the concept of feasibility.

If two people (A and B) enter into a contract that provides for the first (A) to pay the second (B) to perform a service, there are many ways for each to determine the feasibility of the agreement. Whether the venture is indeed feasible depends on how each party chooses to evaluate it. The person who is to pay money for the service (A) must decide whether the agreement is financially feasible, that is, whether he or she can afford the service. Besides this, he or she must
consider whether it is economically feasible — whether or not the service provides a benefit equal to or greater than the price. The contractor who will render the service (B) is concerned primarily with physical feasibility — whether or not the job can be done and whether or not available resources are adequate for it. B must also consider economic feasibility, in terms of whether or not the funds received are equal to or greater than the costs of providing the service.

Either party to such a contract can consider the proposal from a variety of viewpoints, but some factors will inevitably dominate. If the price requested exceeds the consumer’s available funds, he or she will not be able to enter the contract and the proposal will fail because it is not financially feasible. If the service requested cannot be provided because the necessary techniques or equipment are not available, then the proposal will fail because it is not physically feasible.\(^\text{12}\)

The actual financial analysis phase of a feasibility study should be considered part of the planning process and each component should be considered a planning tool. Financial analysis is easiest to structure for a given point in time and is often modeled for the start-up phase or assumes full development. A projected financial analysis will typically deal in constant dollars. However, future dollars can be discounted if it is necessary to put all projections in current dollars.

All references to revenues and costs should be treated as estimates in these analyses. The financial analysis will likely undergo continual adjustment and revision in an attempt to optimize the economic benefits of the project and to increase the chances of an optimal conclusion. If, for example, the cost estimates developed in the production plan exceed the revenue projections developed in the market study, then adjustments may need to be considered.

All variable cost elements should be carefully reviewed. Perhaps less costly inputs can be used. Less expensive marketing, advertisement and labeling systems may be considered. Certain amenities may be foregone and higher prices may be evaluated. It may be after a thorough financial analysis has been developed and scrutinized that the best designs of architects, engineers and market analysts may be set aside because the costs exceed what the market can bear.\(^\text{13}\) Profit is still a primary motivation for most projects that require a feasibility study. However, in today’s economic, agricultural and business environment, very few projects generate higher-than-average profits. Generally, after all production, marketing and distribution costs are considered, low or negative net returns may result.

A financial analysis is often best achieved through the development and interpretation of a balance sheet, projected income statement and projected cash flow analysis. A balance sheet provides a listing of all asset values and liabilities of the business. The difference in the values of assets and liabilities is the firm’s net worth. The ultimate measure of feasibility is the change in a company’s net worth over time. The generation of profit and cash surpluses over time can increase net worth. Depreciating assets, not being able to meet debt payments and continued capital expenditures in the absence of profitable operations can significantly decrease net worth.

To evaluate the ultimate consideration of feasibility (increasing net worth), projections must be made concerning a project’s profitability. This is best done by developing an income statement, which provides a listing of the expected earned revenues and cash and non-cash expenditures incurred by the business for a certain time period. The revenue section of the income statement records revenues that are generated by the firm. Income from the sales of assets, capital contributed by the owner and additional loan funds are not included in the income statement. Changes in accounts receivable and the gains or losses from the sales of assets are included. The expense section of the income statement includes production expenses necessary to produce and market products, make interest payments and cover depreciation. The difference in the revenue and expenditure sections of the income statement represents the true profit potential of the business. However, the profit of a business does not insure feasibility. A business may be profitable but unable to make debt payments or pay family and managerial labor, thus it is infeasible.

A cash flow statement is a financial planning tool that shows the projected cash income and expenses for a specific time period and is often the focal
point of a feasibility study. A projected cash flow statement is accurate only to the extent that input and product prices, quantities and other production, marketing and distribution estimates are accurate. The cash flow statement should reflect estimated price ranges, key results of the market study, projected capital investments, revenue, operating expenses and finance terms. These items can then be organized into the total report, reflecting the project’s potential financial results over the entire period analyzed. One of the first steps in developing a cash flow projection is to consolidate the estimates of various start-up costs, operating expenses, financing terms and revenue projections into a basic summary format.

The cash flow statement should be considered another planning tool and an integral part of the process of creating an optimal business plan. The majority of the financial feasibility analysis is static, in that it uses constant or fixed estimates. However, the cash flow statement is a dynamic planning tool that reflects the timing of cash inflows and cash outflows. An in-depth cash flow model can be developed once the preliminary investigation and technical aspects of production, processing and marketing establish a tentative “go” position. Successive revisions in the processing and marketing plans and cash flow projections are then undertaken until an optimal plan is developed.

**Break-Even Analysis**

Another useful financial analysis tool is the break-even analysis. The break-even point is also an excellent benchmark by which a company’s short-term goals can be measured. The break-even point is where revenue is exactly equal to cost — no profit is made and no losses are incurred. The break-even point can be expressed in terms of unit sales or dollar sales. Expressed in units, the break-even point indicates the units of sales required to cover costs. Expressed in level of sales, the break-even point indicates the gross revenue required to break even. Sales above the break-even point result in profit and sales below the break-even point result in loss.

It is important to realize that a company will not necessarily produce a product just because it is expected to break even. Many times, a minimum level of profitability or return on investment is desired before a business decides to implement an enterprise. Sales substantially higher than the break-even point are often required to meet profitability and return on investment objectives. While it may only serve as an intermediate step in an overall feasibility analysis, the break-even point calculation is an excellent tool for quantifying the level of production and sales needed for a business to evaluate the balance between production costs and sales.

Break-even analysis is based on two types of costs: fixed and variable. Fixed costs are overhead-related expenses that do not change as the level of output changes. Variable costs are expenses that do change with the level of output and are generally stated on a per-unit basis.

Once the break-even point is exceeded — assuming a constant selling price and constant fixed and variable costs — a profit in the amount of the difference in the selling price and the average per-unit variable cost will be recognized. A break-even analysis is rarely a straightforward process. In many instances, the selling price, fixed costs or variable costs are not constant and result in a dynamic break-even point. As a result, a break-even point should not be calculated only once, but should be calculated on a regular basis to reflect changes in a product’s selling price and associated costs.

There are three basic pieces of information needed to calculate a break-even point:

- average per-unit sales price
- average per-unit variable cost
- average annual fixed costs

The basic equation for determining the break-even units is:

$$\text{Total Fixed Cost} \div (\text{Average Per Unit Sales Price} - \text{Average Per Unit Variable Cost})$$

The basic equation for determining the break-even sales is:

$$\text{Total Fixed Cost} \div 1 - (\text{Average Per Unit Variable Cost} \div \text{Average Per Unit Sales Price})$$
Break-even analysis can be very helpful in the evaluation of a new venture. In most instances, success takes time. Many new enterprises and products actually operate at a loss (at a point below break-even) in the early stages of development. Knowing the price or volume necessary to break even is critical to evaluating the time frame in which losses are permissible.

**Price Determination**

Price determination for many value-added products is often a function of the cost of production and a desired level of mark up. Price determination by a desired level of mark up is often referred to as cost-plus pricing, mark-up pricing or full-cost pricing.\(^{16}\) Each phase of a product’s distribution system often requires a certain gain, or mark up, on the value of the product. For example, products that go from the manufacturer, to a broker, to a distributor and then to a retail facility will likely experience four different mark ups en route to the consumer. There are rules-of-thumb related to mark-up pricing. Food brokers and distributors generally apply a 15 percent fee, while food retailers generally apply a 30 percent fee.\(^{17}\) Some retailers often expect to price items at 20 to 100 percent above their cost.

It is interesting that most manufacturers, brokers, distributors and retailers use the term mark up to represent their pricing formula, when in reality, the standard pricing formula is that of a gross margin percent. While often minor, there is a difference in the price resulting from a mark up or gross margin calculation. As other segments of the distribution phase apply their commissions and fees based on the prices they pay, by the time a product reaches the consumer, minor differences in formulas are compounded to cause tremendous differences in consumer prices.

It is important to have a good understanding of all the terms, factors and calculations regarding price determination. The price the market will bear is actually a function of demand. Luxury goods and niche products may command price premiums that exceed the average markup. That is why cost of production, desired mark up and market demand should all be evaluated when establishing a product’s selling price.

Price determination using the mark-up method requires that the total cost of producing a product, on a per-unit basis, be known. Total cost should include all of the costs incurred in getting the product to the point of sale including, but not limited to, input, labor, overhead, transportation, warehousing, distribution and marketing costs.

The formula for determining a product’s selling price using a desired mark-up percent is:

\[
\text{Selling Price} = \text{Total Cost} \times (1 + \text{Mark-Up Percent})
\]

\[
\text{Selling Price} = \$2.00 \times (1 + 0.30)
\]

\[
\text{Selling Price} = \$2.00 \times (1.30)
\]

\[
\text{Selling Price} = \$2.60
\]

Therefore, if you want a mark up of 30 percent (a profit equal to 30 percent of total cost) the selling price must be set at $2.60. *Mark-up percent is the proportion of total cost represented by profit.*

In some instances, the selling price may be determined by simply comparing the cost of production with the price that the market will bear. For example, assume the cost of production is $2.00 per unit and the prices of competitors are clustered around a selling price of $2.60. This information can be used to determine the mark-up percent. In this scenario, the formula for determining the mark-up percent is:

\[
\text{Mark-up Percent} = \frac{(\text{Selling Price} - \text{Total Cost})}{\text{Total Cost}}
\]

\[
\text{Mark-up Percent} = \frac{($2.60 - $2.00)}{\$2.00}
\]

\[
\text{Mark-up Percent} = \frac{$0.60}{\$2.00}
\]

\[
\text{Mark-up Percent} = 30\%
\]

The notion of mark-up pricing should not be confused with profit margins and gross margins. A profit margin is the dollar value of the difference in the selling price and total cost. Therefore, the profit margin in the previous example is $0.60 per unit ($2.60 - $2.00). Consequently, while the gross margin is revenue minus the cost of goods sold, the gross margin percent is the percent of the selling price accounted for by the profit margin. Gross margin percent is calculated as the profit margin (difference in the selling price of $2.60 and the total cost of $2.00) divided by the selling price. The formula for gross margin percent is:
Gross Margin Percent = (Selling Price - Total Cost) ÷ Selling Price

Gross Margin Percent = ($2.60 - $2.00) ÷ $2.60
Gross Margin Percent = $0.60 ÷ $2.60
Gross Margin Percent = 23%

If a desired level of gross margin is known, the formula for calculating a gross margin can be modified to calculate the selling price. Using a desired gross margin percent, the formula for calculating the selling price is:

\[
\text{Selling Price} = \frac{\text{Total Cost}}{1 - \text{Gross Margin}}
\]

\[
\text{Selling Price} = \frac{$2.00}{1 - 0.23}
\]
\[
\text{Selling Price} = \frac{$2.00}{0.77}
\]
\[
\text{Selling Price} = $2.60
\]

It is clear that the gross margin percent of 23 percent is different from the mark up calculated earlier (27 percent), although both examples use a selling price of $2.60 and a total cost of $2.00. Mark up and gross margins are often used in calculating and evaluating selling prices. However, they should not be used interchangeably, as they are defined and calculated differently.

**Rules-of-Thumb**

* Mark-up percent is the percent of total cost that is profit
* Gross margin percent is the percent of the selling price that is profit
* Profit margin is the difference in selling price and total cost

---

**Product Development**

Complete development of a value-added agricultural, aquaculture or forestry product inevitably requires many steps. Some of these will be unanticipated, while others will follow a somewhat expected pattern. Many times, it is best to start by generating ideas. Then, a thorough evaluation of concepts and development of a prototype are in order. Appropriate processing and packaging steps should be followed by a pre-commercialization phase and a test-market procedure. Then, the product should be introduced on the commercial level.

Figure 4 is a systematic, step-by-step, product development guideline. This guideline may help minimize the risk of overlooking many product development details. Each step offers an opportunity for the project to be evaluated and requires consideration of whether or not to proceed.
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 1</td>
<td>Idea Generation</td>
</tr>
<tr>
<td></td>
<td>• Type of product, volumes, economics</td>
</tr>
<tr>
<td></td>
<td>• How to produce</td>
</tr>
<tr>
<td></td>
<td>• Discuss with others</td>
</tr>
<tr>
<td></td>
<td>• Competition, consumer trends</td>
</tr>
<tr>
<td></td>
<td>• Profit requirements/expectations</td>
</tr>
<tr>
<td>STEP 2</td>
<td>Concept Evaluation</td>
</tr>
<tr>
<td></td>
<td>• Is there a market?</td>
</tr>
<tr>
<td></td>
<td>• Can it be produced?</td>
</tr>
<tr>
<td></td>
<td>• What does it cost?</td>
</tr>
<tr>
<td></td>
<td>• What will it return?</td>
</tr>
<tr>
<td></td>
<td>• Is it technically feasible?</td>
</tr>
<tr>
<td></td>
<td>• Develop the product</td>
</tr>
<tr>
<td>STEP 3</td>
<td>Prototype Development</td>
</tr>
<tr>
<td></td>
<td>• Can it be mass produced?</td>
</tr>
<tr>
<td></td>
<td>• Does it meet your standards?</td>
</tr>
<tr>
<td></td>
<td>• Can it be replicated, consistently?</td>
</tr>
<tr>
<td></td>
<td>• Can adequate inputs be obtained?</td>
</tr>
<tr>
<td></td>
<td>• What are the labor requirements?</td>
</tr>
<tr>
<td></td>
<td>• Can it be transported, what is the shelf life?</td>
</tr>
<tr>
<td></td>
<td>• Is it feasible?</td>
</tr>
<tr>
<td>STEP 4</td>
<td>Process &amp; Package Development</td>
</tr>
<tr>
<td></td>
<td>• What type equipment &amp; facility is required?</td>
</tr>
<tr>
<td></td>
<td>• What are the packaging options, (labels, containers)?</td>
</tr>
<tr>
<td></td>
<td>• Are labor needs available?</td>
</tr>
<tr>
<td></td>
<td>• Can standards and regulations be met?</td>
</tr>
<tr>
<td></td>
<td>• What other distribution materials are needed?</td>
</tr>
<tr>
<td></td>
<td>• What are the costs per unit &amp; operating costs?</td>
</tr>
<tr>
<td>STEP 5</td>
<td>Pre Commercialization</td>
</tr>
<tr>
<td></td>
<td>• Finalize marketing plans</td>
</tr>
<tr>
<td></td>
<td>• Consider test-market plans</td>
</tr>
<tr>
<td></td>
<td>• Finalize financial analysis</td>
</tr>
<tr>
<td></td>
<td>• Develop product introduction materials</td>
</tr>
<tr>
<td></td>
<td>• Finalize production plan &amp; schedule</td>
</tr>
<tr>
<td></td>
<td>• Finalize quality control &amp; regulatory issues</td>
</tr>
<tr>
<td>STEP 6</td>
<td>Test Market</td>
</tr>
<tr>
<td></td>
<td>• Prepare test-market procedures &amp; materials</td>
</tr>
<tr>
<td></td>
<td>• Conduct preliminary production run</td>
</tr>
<tr>
<td></td>
<td>• Conduct test market</td>
</tr>
<tr>
<td></td>
<td>• Analyze test-market results</td>
</tr>
<tr>
<td>STEP 7</td>
<td>Product Introduction</td>
</tr>
<tr>
<td></td>
<td>• Finalize marketing arrangements, estimate sales</td>
</tr>
<tr>
<td></td>
<td>• Start full production</td>
</tr>
<tr>
<td></td>
<td>• Introduce product to market</td>
</tr>
<tr>
<td></td>
<td>• Distribute, make sales</td>
</tr>
<tr>
<td>STEP 8</td>
<td>Commercialization</td>
</tr>
<tr>
<td></td>
<td>• Continue production</td>
</tr>
<tr>
<td></td>
<td>• Implement &amp; evaluate marketing strategies</td>
</tr>
<tr>
<td></td>
<td>• Provide sales support materials</td>
</tr>
<tr>
<td></td>
<td>• Test quality control standards</td>
</tr>
<tr>
<td></td>
<td>• Monitor and evaluate cost of production, cash flow &amp; sales</td>
</tr>
</tbody>
</table>
Value-Added Opportunities

Figure 5 is a partial listing of common agricultural, aquacultural and forestry commodities and examples of how they could be used in the development of a value-added enterprise.

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>EXAMPLE VALUE-ADDED PRODUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot peppers</td>
<td>Sauces, salsa</td>
</tr>
<tr>
<td>Strawberries</td>
<td>Preserves</td>
</tr>
<tr>
<td>Milk</td>
<td>Ice cream, cheese, pasturized milk</td>
</tr>
<tr>
<td>Ostrich</td>
<td>Meat products</td>
</tr>
<tr>
<td>Hogs</td>
<td>Retail pork products</td>
</tr>
<tr>
<td>Livestock waste</td>
<td>Composted soil amendments</td>
</tr>
<tr>
<td>Natural &amp; unique farm resources</td>
<td>Entertainment farming activities and agritourism</td>
</tr>
<tr>
<td>Sweet potatoes</td>
<td>Sweet potato pies, muffins, chips, breads</td>
</tr>
<tr>
<td>Honey</td>
<td>Gourmet honey products</td>
</tr>
<tr>
<td>Sawmill lumber</td>
<td>Cabinet panels, doors, flooring, furniture</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Salsa</td>
</tr>
</tbody>
</table>

In addition to traditional agricultural commodities, other farm resources may be used in a value-added enterprise. Farm byproducts such as livestock wastes, cotton gin trash and low-quality products (culls) may be prime candidates for commercial fertilizers, soil amendments and processed products, respectively. Other farm resources such as unused equipment, nonproductive land and antique/novelty resources may be used to develop additional value-added product lines, entertainment farming activities and agritourism attractions.

Other value-added income opportunities, such as hunting and fishing, water sports, horseback riding and farm vacations also exist. A recent resurgence of interest in rural and farm life has created additional value-added, agricultural activities and enterprises. Farm-related, commercial entertainment and tourism activities have been traced back to the early 1900s, when families visited farm relatives in an attempt to escape from the city’s summer heat. Today’s demand for a cool and slower-paced farm experience seems to be somewhat difficult to satisfy by relatives because of the four and five-generation gap between farm and non-farm citizens. “Increased leisure time and discretionary, disposable income; greater mobility; and the social thrust toward relaxation, leisure and satisfying personal wants are creating exciting, new recreation opportunities that did not exist a decade ago.” Entertainment farming and agritourism activities offer opportunities for on-site farm visits, the chance to talk with farm personnel and the opportunity to observe and understand modern farm methods. Farm tours and activities offer access to working family farms, educational tours, photo opportunities, take-home products, farm lunches and friendly and informative workers.
Conclusions

Tennessee has long been home to value-added agricultural businesses. Many of the world’s largest food manufacturing companies have production facilities in the state. However, the roles of processing, packaging and marketing farm commodities have traditionally not been tapped by Tennessee farmers and agri-entrepreneurs.

To enhance the economic viability and sustainability of Tennessee’s rural communities and farm families, the Agricultural Development Center has been created to provide technical, financial and marketing educational programs related to value-added enterprises. With the farm portion of the consumer dollar steadily declining, value-added enterprises offer farmers and agri-entrepreneurs opportunities to improve the economic viability of their operations and communities.

Transition by farmers and agri-entrepreneurs into a value-added enterprise is not a straightforward process. New regulations must be understood, new business contacts must be developed, new procedures must be implemented and new marketing techniques must be explored. Evaluations of value-added agricultural enterprises require significant investigations into product development, market research and economic feasibility. However, with the right combination and balance of many concepts and criteria, farmers and agri-entrepreneurs can take advantage of opportunities to add value to Tennessee agricultural commodities.
Notes


2 Cash receipts from farm marketings ($2,291.7) + government payments ($76.2) + other farm income ($150.7) minus annual production expenses ($2,334.9) divided by number of Tennessee farms (80,000). \[\frac{[$2,518,600,000 - $2,334,900,000]}{80,000} = $2,296.25.\]


5 The Business Plan, Small Business Development Center, Bradley University, Peoria, IL.


7 The Business Plan, Small Business Development Center, Bradley University, Peoria, IL.


9 “Small Business: Preventing Failure - Promoting Success,” Lewis A Paul, Jr., the Wichita State University, Small Business Development Center.

10 Creating a Marketing Plan; E.A. Estes and C.W. Coale, Jr., 1995 North American Farmers’ Direct Marketing Conference, Knoxville, TN.

11 “Story Pitch Sheet.” Tammy Algood, Food Marketing Specialist, University of Tennessee Agricultural Extension Service.


17 “Getting A Food Product to Retail,” Kent Wolfe, The University of Tennessee Agricultural Development Center, ADC Info. #40, July 1999.
Adapted from Food Product Development, P.T. Tybor and A. Estes Reynolds, Former Extension Food Specialist and Extension Food Specialist, respectively, The University of Georgia College of Agricultural and Environmental Sciences-Cooperative Extension Service, Bulletin 1024, December 1989.