Supply Chain Management for Industry Competitiveness:
Case Examples from the Tart Cherry Industry

Donald Ricks

Supply Chain Management for Firms
and Agricultural Commodity Industries

Supply chain management involves many aspects that are important for vertical linkages, overall performance, and competitiveness of related firms and industries. Considerable attention has been given to supply chain management by some business-oriented agricultural economists and by business management executives, with emphasis on aspects related to a firm and its vertical supply chain linkages. A common example is the supply chain management of a retail grocery firm and its supplier firms.

Supply chain management, with primarily a firm orientation, is quite relevant and useful. It is also relevant and useful to analyze a number of supply chain management aspects and vertical linkages with the perspective of a broader agricultural industry. Such an industry perspective is especially needed with the increasing globalization of markets and the greater need for high performance of vertically linked supply chains in order for a national or regional industry to be competitive in the very dynamic markets of the modern world.

Emphasis in this paper is given to an industry perspective for certain aspects of supply chain management that influence the industry’s performance and competitiveness. Some case examples are drawn from the U.S. tart cherry industry. These examples involve a number of specific supply chain management aspects.

There are many commonalities of supply chain management for the perspective of a firm and for the perspective of a broader agricultural industry’s marketing system. In either case, effective supply chain management involves:

- efficient linking and coordination of several vertical levels;
- partnering between industry suppliers and customers;
- an important need to plan strategically in order to develop successful supply chain management aspects; and
- important goals of improved customer satisfaction, improved performance, and improved competitiveness of the vertically linked system.

Industry Strategic Directions for Improved Competitiveness—A Case Example

The above supply chain management aspects, with a commodity industry perspective, can be illustrated by some recent well-planned strategies that are being pursued by the U.S. tart cherry industry. Leaders of this industry are engaged in an ongoing process of analysis and strategic planning in order to (1) aid the industry in making needed adjustments and (2) progress inappropriate and priority strategic directions in order to achieve improved competitiveness for their changing markets and an economically viable future. Some of us at Michigan State University are closely involved in working with these industry leaders in a partnership fashion as a part of this analysis and strategic planning effort. Most of the needed strategic directions for future competitiveness of this industry that have been developed to date involve a number of important aspects of supply chain management and vertical linkages within this industry and with its various customers in both domestic and export markets.

As a result of the strategic planning process, industry leaders have identified a number of important elements needed by the tart cherry industry for strategic directions. These elements include the following:

- adaptation of cherry products and customer services to effectively meet changing customer needs;
- expansion of demand for the cherry industry;
- improved quality;
- provision of dependable, stable supplies;

Donald Ricks is professor, Department of Agricultural Economics, Michigan State University.
- balance of productive capacity of industry with its overall demand;
- provision of improved market information; and
- improved pricing arrangements.

In this paper, emphasis will be placed on some examples of industry strategies, including a number of supply chain management aspects developed to effectively meet changing customer needs and, hence, to aid the industry in expanding its overall demand. It is also important to recognize that these aspects and their related strategies are a subcomponent of a broader set of needed strategic directions (as outlined above) for improving the competitive position and the economic viability of this industry.

Market Analysis

As a part of the strategic planning process for the tart cherry industry, industry leaders have been working on analysis and strategy development regarding various ways in which the industry—including at least the three vertical levels of the supply chain of growers, processors, and marketing cooperatives—can most effectively operate to serve the needs of their customers. Major categories of these customers include food manufacturers, grocery retailer-wholesalers, food service firms, and the final consumers. A major component of this overall strategic planning process has been an analysis of major market segments for the tart cherry industry. This analysis has covered recent trends, the current situation, and future prospects for each of the major market segments—including each of the established market segments and a number of relatively new or potentially developing market segments for the future. This analysis of major markets provides an important component of the industry’s situational analysis, which has been used as a part of the analytical base for the development of strategic directions to aid the industry.

Results of the market analysis indicate that some of the existing large-volume market segments, such as frozen cherries and pie filling, can be expected to have either stable demand, no growth demand trends, or some decline in demand during the next few years. By contrast, the analysis results show that certain other market segments—which involve cherry products that fit modern consumer and customer needs relatively well—have prospects for substantial positive growth in future years. These market segments with substantial growth prospects include dried cherries, certain export markets, cherries in single-serve containers, and cherry juice.

As a part of the industry strategic planning process, a set of strategies has been, and is continuing to be, developed by industry leaders. These strategies are designed to help improve the industry’s competitive position by attaining effective performance in supply chain management aspects and aiding the industry in more effectively serving their customer needs. For the market segments that are large in volume but mature with relatively little prospect for future growth, industry strategies are directed toward maintaining these markets near recent levels. Strategies for the markets segments that have substantial prospects for future growth, such as those for dried cherries and exports, are designed to facilitate and stimulate these market growth potentials. All of these strategies involve a number of vertical linkages and partnership approaches by participants at various vertical levels of the supply-marketing chain. To illustrate this, case examples of industry strategies related to export markets are discussed in this paper. These strategies involve a number of supply chain management aspects, including concerted efforts to (1) analyze various and changing customer needs for this industry and (2) develop adjustment strategies to effectively serve these customer needs by the cherry industry’s vertical supply chain in a coordinated manner.

Supply-Marketing Chain Effectiveness
Facilitated by Industry Trade Organizations

Accomplishing effective supply chain management to serve modern customer needs is especially difficult for an industry of many small firms, most of which produce similar commodities. As is the case with a number of other agricultural commodity industries, the tart cherry industry is an example of a structural situation of many small firms producing essentially the same commodities. These firms also have a limited ability to undertake certain aspects, such as market research on changing customer needs or research and development to adapt products to meet the changing customer needs and preferences. Therefore, some aspects of such an industry’s supply chain management can be facilitated by certain types of broad-based industry organizations. Such industry organizations—including generic promotional commissions, industry trade
associations, and export councils—can supplement the activities of the industry’s small firms in regard to such needed aspects as customer market research, analysis of export market potentials, quality and grades standards, nutritional research, market information, etc.

In the tart cherry industry, broad-based industry organizations that facilitate effective supply chain management and industry progress in needed strategic directions for overall competitiveness include (1) the Cherry Marketing Institute (CMI), the national industry’s generic promotional organization; (2) a newly formed U.S. Tart Cherry Export Council, which involves processors, growers, and the CMI working together for effective supply chain management and export market development strategies; (3) the Cherry Industry Administrative Board, which is the industry board that administers the industry’s marketing order program; and (4) the U.S. Tart Cherry Industry Strategy Planning Alliance, an industry think-tank that includes representatives of all industry segments and major industry organizations. The U.S. Tart Cherry Industry works on analysis and development of needed strategic directions for the industry to be effective in supply chain management—adapting to changing consumer needs and, hence, improving the industry’s competitiveness.

An Export Market Development Example

One area to which the above industry organizations have been devoting concerted efforts to improve the industry’s performance of the supply-marketing chain is that of export expansion. The industry’s generic promotional organization (the CMI) has had an especially key leadership role in developing and implementing supply chain management strategies for export expansion. Its role involves supplementing and building onto the ongoing basic activities for export sales and customer services in which processors and marketing cooperatives are engaged. The CMI, in cooperation with the industry’s exporting processors, has recently undertaken trade missions to European and Asian countries to develop market information and a more thorough understanding of customers’ needs in these countries and to help broaden the base of potential customers.

In order to build onto the information obtained in their trade missions to key export market countries, the CMI and exporting processors—along with the newly formed Tart Cherry Industry Export Council—recently developed and initiated a series of more in-depth market research studies on European markets. These studies are being conducted to strengthen and update the base of information on specific customer needs and preferences in different market segments, including both current customers and potential new customers. The CMI and the U.S. Tart Cherry Export Council are jointly conducting the studies in order to provide this more complete market research information to all of the U.S. industry’s exporting processors and marketing cooperatives. The market research also provides information on how the U.S. supply-marketing chain—including processors, growers, marketing cooperatives, export agents and the broad-based industry organizations—can improve their coordinated efforts to better serve their customers’ needs through supply-marketing chain management for these market segments.

Another component of the U.S. tart cherry industry’s export expansion program involves some recently developed trade promotions for European bakery customers. These promotions were jointly developed by the U.S. industry’s CMI in close cooperation and partnership with certain German bakery-supply wholesalers. The activities were intended to acquaint a broader base of European retail bakers with U.S. tart cherries and their high quality in order to demonstrate that the U.S. industry can effectively fill the needs of this market segment. The trade promotions involve cooperation between participants at several levels of the vertical supply-marketing chain—including processors, CMI, export agents, and German bakery wholesalers.

The U.S. tart cherry industry has also been in the process of revamping and re-targeting its Market Access Program (MAP) for European and Japanese markets. This component of the industry’s export expansion program involves the use of supplemental U.S. Department of Agriculture-Foreign Agricultural Service funds for expanding export markets. Like the newly developed trade promotions, the MAP program also involves several levels of vertical system participants working together to evaluate various export customer needs and to adapt the U.S. cherry industry’s products and services to meet those needs in each country.

Other aspects of the U.S. cherry industry’s overall export expansion program that are either planned or are currently being implemented include:
export incentives that are provided by the industry's marketing order program;

- use of a storage reserve feature of the marketing order to help provide dependable export supplies, especially in years when the United States has a short crop;

- joint efforts for European trade shows by the CMI, U.S. processors, export agents, and key European wholesalers;

- studies of competing cherry industries in Eastern European countries for purposes of analyzing the nature of the competitive position of these industries relative to the U.S. industry for the present and future; and

- various strategies to inform potential new European customers of the high performance of the U.S. cherry industry in regard to quality.

The U.S. cherry industry is also studying the possibility of planting different varieties than those that are currently being widely grown to give more emphasis to dark-fleshed tart cherries. These new plantings would meet customer needs for certain major market segments in Europe that until now have not been served by the U.S. industry. The possibility is being analyzed closely to determine whether the United States can effectively compete in these major market segments that have previously been entirely filled by European suppliers.

Summary

In order for U.S. agricultural industries to be competitive in the modern economic setting, which includes increasingly globalized markets, the entire vertical supply-marketing chain must achieve high performance in effectively serving the needs of its customers. Effective vertical linkages of the firms within the supply-marketing chain, including vertical partnership and alliance relationships, are becoming increasingly important in achieving the needed modern competitiveness. In addition to these aspects from the perspective of the relevant firms, an industry perspective on supply chain management and related strategies can also be important for the competitiveness of agricultural industries.

For those aspects that can be facilitated from the perspective of a commodity industry—such as industry export expansion programs, generic market research, commodity nutritional research, generic market development, etc.—certain kinds of broad-based industry organizations, such as trade associations and generic promotional boards, can be important facilitating organizations for effective supply-marketing chain management. Some illustrative examples of these aspects, based upon recent experiences in the tart cherry industry, have been discussed in this paper. Many other interesting and useful examples from additional commodity industries could be used to illustrate these kinds of supply marketing chain management aspects from the perspective of an agricultural commodity industry.