STRATEGIC POSITIONING IN THE FOOD AND AGRIBUSINESS INDUSTRIES

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Abstract

The North American food and agribusiness market environment will likely become more volatile over the next 10 years. There is also likely to be more emphasis on product quality, more consolidation in these industries and the farm sector, and the emergence of new supply chains. Agribusiness firms can manage these changes by adopting innovator, cost minimizer, coordinator, or customizer strategies. Ongoing consolidation, the demand for differentiated products, and further segmentation of the farm sector will create opportunities in particular for coordinators and customizers.

Keywords: Agribusiness, strategic positioning, innovation, coordination, cost minimization, customization

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Introduction

The North American food production, processing and distribution industries are in the midst of major structural changes. The most fundamental driver of these changes is globalization of the food and fiber markets. Food production and consumption is no longer local or regional - it is global in both sourcing and selling. Consumer demands for safety, convenience, variety, and quality are important drivers of change in the industry. Food industry demands for differentiated products, risk management, and efficient supply management solutions combined with a supply chain mentality are also changing agriculture. The government's role in trade policy, environmental regulations, food safety, land use, and intellectual property rights will continue to shape the food and agricultural markets. Biotechnology will offer new solutions to agricultural production problems, as well as open new markets for crops and livestock with specific output traits. At the same time, information technology will play a key role in facilitating more coordinated food and agribusiness supply chain systems.

These key drivers of structural change will reshape North American food and agribusiness market environments over the next 10-15 years. The aim of this paper is to consider how the future market environment will change, and then to identify appropriate business strategies that can enhance the likelihood of successfully managing and surviving in this changing environment. It also considers what actions or activities are most essential to implement each strategic orientation. The unique contribution of the paper is that it extends the range of strategic orientations (innovator, cost minimizer, and customizer - developed in past work by, amongst others, Treacy and Wiersema, Porter, Mitzberg, and Hamel and Prahalad), to include the role of the coordinator, and also casts this analysis within the specific context of food and agribusiness firms. Thoughts presented here are based heavily on four sources: first, an extensive research project undertaken by faculty and staff at the Department of Agricultural Economics, Purdue University, USA, entitled "Food System 21: Gearing up for the New Millennium"; second, interviews held with 33 executives in 11 different, representative food and agribusiness industries during 1997 and 1998, to discuss their perspectives on a changing market environment; third, a comprehensive literature review of innovative business strategies reported in the North American food and agribusiness trade press; and fourth, the 1998 Commercial Producer Project, a national survey of large commercial producers conducted by the Center for Agricultural Business, Purdue University, USA.

The Future Market Environment

Forecasting the nature of the future North American food and agribusiness market environment is a formidable challenge, but five main features are likely to emerge. First, these markets are likely to be even more volatile over the next decade, making forecasting the future even more difficult. Globalization, changing government policy, rapid technological change, and input

firms in transition will all combine to increase uncertainty in these business environments. A second key feature is rising standards on the part of customers and firms in food and agribusiness supply chain systems. These players will demand higher quality and lower prices, better service, more information, greater flexibility, and quicker response to their changing demands.

A third feature is continued consolidation, as the advantages of economies of scale and scope continue to offer cost savings at the manufacturing and distribution levels. The sheer cost of developing, obtaining approval for, and introducing new products will also drive more manufacturing firms to seek global market opportunities. In distribution, the economics of procurement and information management will lead to fewer, larger organizations through more aggressive moves toward multiple location facilities, spreading the cost of accounting, inventory, regulatory compliance, equipment, administration, etc. across a number of sites. The fourth key feature is the continual drive for efficiency as suppliers work to add value and differentiate offerings. In the current and expected future market environment, this is going to be a major challenge as innovations are quickly copied and "commoditized". The resulting pressure on margins will result in even more emphasis on internal operating efficiencies and the search for linkages and more coordinated supply chain systems (cost economies through system optimization).

Finally, the fundamental issue of 1) who will, and 2) how to, control supply chain systems will result in significant new linkages between food firms, processors, farmer/producers, and input suppliers. The full range of acquisitions, joint ventures, and contractual and partnering arrangements is likely to be used, with a premium placed on alliance and partnering skills as organizations work to obtain the advantages of size without ownership, or seek access to resources and competencies/capabilities they do not have. The push for efficiency will drive more linkages as input bundles which cut across traditional input industry boundaries are assembled to maximize productivity, and lead to stronger linkages across the food production/distribution stages to form vertically linked food chains. The ability to cultivate and manage alliance and partnering relationships will be fundamental to a successful strategic position.

Implications for Strategy

Given the nature of the expected market environment, what are the implications for decision-makers in food and agribusiness firms? What set of strategies will enhance the likelihood of success in this global, highly coordinated, technologically intense, information-driven future market environment? The discussion that follows offers some answers to these questions by building on and expanding past analyses of strategic orientation developed by, amongst others, Treacy and Wiersema, and Porter. The range of strategic orientations - innovator, cost minimizer, customizer - developed in past work is extended to include the role of the coordinator, and then applied specifically to food and agribusiness firms. The implications for strategy in food and agribusiness firms are explored at two levels. First, the issue of strategic orientation will be considered in terms of what alternative orientation(s) offer the greatest potential in the expected new market environment? Second, what building blocks or activities are most essential to implement each strategic orientation?

Strategic Orientation

The scope and complexity of the future food and agribusiness markets suggest that a number of alternative strategic orientations are possible. These alternatives have commonalities which allow them to be categorized along two dimensions: core competence and market scope.

Core competence is the primary skill of the firm and is the foundation of the firm's competitive advantage. Combining principles from the work of Treacy and Wiersema and others with the authors' experience in food and agribusiness markets suggests three fundamental competencies that will enhance the likelihood of successfully managing in the future:

1. Innovation
2. Cost Minimization
3. Coordination

Firms that are superior innovators are better at producing a steady stream of innovative products and services than their competitors. They often have the strongest research and development capabilities in the industry. Likewise, firms that are superior cost minimizers produce bundles of products and services that are less expensive than equivalent offerings of competitors. They do not necessarily engage in original research but may have the capability of quickly copying innovators or buying successful innovations from others. They are ruthless cost cutters but are willing to make substantial investments in areas such as information technology if these investments drive down costs. Firms that focus on coordination facilitate or build unique value-adding chains that link together their suppliers and customers. The type of coordination can range from simply acting as a coordinator, facilitator, or deal maker to full ownership of some stages in the chain. This coordination role provides market power and economies in procurement and marketing.

While each competence is important and firms would like to have all three, typically a firm can only emphasize one. The reason is that emphasis on a particular competence comes at the expense of the other competencies. For example, emphasis on innovation is best supported by heavier spending on research and development and non-standard processes for handling each new offering, while cost minimization is best supported by producing standard products using standard processes. This means that the choice of strategic orientation affects the way the firm does things. When management understands the basis of the firm's competitive advantage, it is able to make decisions supporting that particular advantage.

Market scope is the second dimension of strategic orientation. Firms can decide either to focus on a broadly defined market, or on a narrowly defined niche market(s). The term "customization" is used to describe an intense focus on the needs of a tightly defined segment of the market. A firm building an advantage around customization can combine this focus with any of the three core competencies described earlier, depending on customer needs and the competitive environment in the chosen market segment. The two dimensions (core competency and market scope) lead to the description of four fundamental strategic orientations:

1. Innovation
2. Cost Minimization
3. Coordination
4. Customization

Figure 1 shows that the first three orientations fit with a broad market scope, while the fourth is defined by a narrow (niche) market scope. These four basic strategic orientations are described below.

Innovation

Innovator firms offer a steady stream of new products and services to broadly defined markets that are national, multinational or global. Their offerings are priced above average market prices because of the extra value delivered by the innovations. By pursuing a broad market, the firms are able to spread the costs of innovation and benefits of learning/experience over larger volume, helping keep down costs per unit of sales. Innovator companies tend to be manufacturers; however, some distribution organizations with strong dealer networks have also pursued this strategy by offering innovative, superior service.

Cost Minimization

Cost-minimizing firms offer standard products and services to broad markets at the lowest possible prices. Indeed, price is the main theme in their marketing efforts, though some couple this price focus with exceptional basic services as well. The broad market these firms pursue allows them to spread the cost of their investments over large volumes, thus reducing the investment per unit. This low-cost position supports their aggressive pricing policy. They acquire technology from a wide variety of sources and in general do not invest in basic research and development. Cost-minimizing firms are quick to emulate the successful offerings of innovator firms. These firms are involved in the manufacture of private label or generic products in many cases. This strategic orientation is taken by some manufacturers in food and agribusiness supply chains and also many successful distributors.

Coordination

Coordinator firms work to develop unique marketing channels linking suppliers and customers. They pursue efficiencies or differentiated products that can be obtained only through a systems approach that spans several levels of the food system. The competitive advantage of coordinating firms can stem from the special relationships they cultivate with their suppliers and customers. These close, collaborative relationships can be based on high levels of coordination, shared assets, participation in joint programs, and close communication links. Or, their competitive advantage may be due to the control they exert over the supply chain through ownership of key assets or information. This strategic orientation has become common in the animal agriculture sector and is likely to become more common in the crop sector in the future.

Customization

Customizing firms focus on developing highly tailored solutions for a specific set of customers. The focus on a specific set of customers limits the appeal of the offering to a relatively small market but has the advantage that the solutions are so well tailored to this customer group that competitors find it very difficult to enter the niche. The customer here could be a farmer/producer or end-user. High levels of service and considerable effort at building relationships characterize this

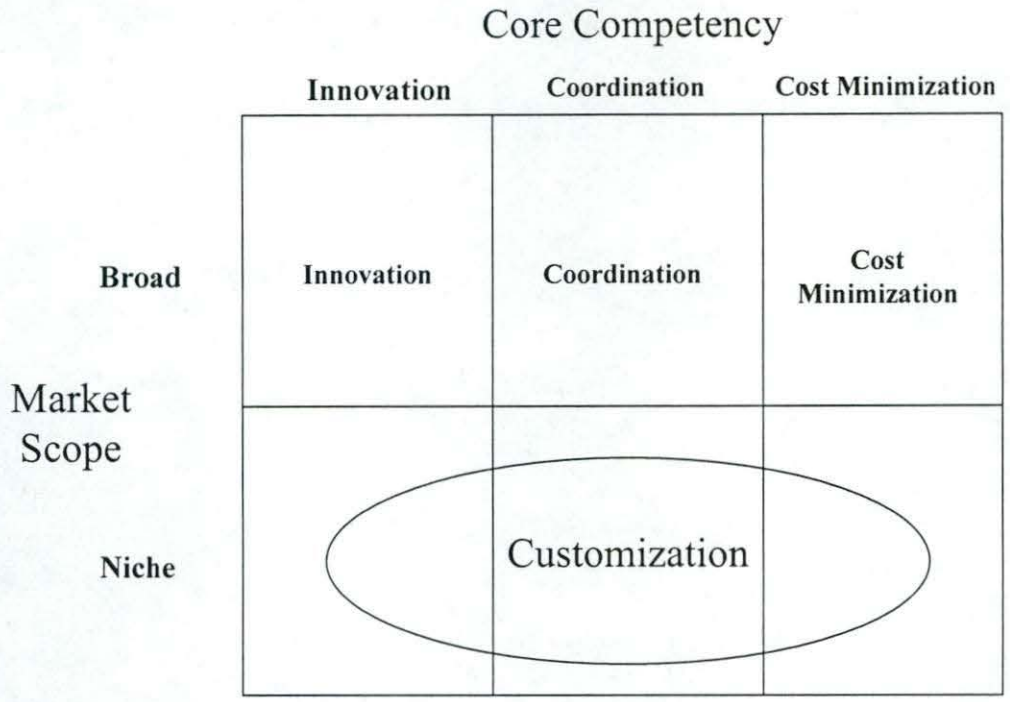

Figure 1. ***Overall Strategic Orientation***

orientation. Solutions to customer problems are sourced widely, making supplier relationships a key to successful implementation of customization. This orientation is primarily the domain of smaller organizations. In some cases, larger firms will position themselves to pursue niche markets. Firms at any level of the supply chain — manufacturer, distributor, or dealer — can become customizers. But customization is primarily a dealer and small manufacturer orientation. The firm pursuing this strategic orientation could build on core competencies in innovation, coordination, or cost minimization. However, cost minimization is the least likely of the three. It is difficult to be a low cost provider and compete primarily on price in low volume niche markets against larger volume providers that can serve the niche as well as broader markets, and can capture the cost benefits of scale economies.

Building Blocks of Strategy

Underpinning each of the overall strategic orientations is a set of building blocks or actions to implement a successful orientation. While all strategic orientations use most of these building blocks to some extent, the degree of emphasis varies greatly with the strategic orientation. For example, while product and process innovation is important to any strategic orientation, it is the source of competitive advantage for innovator firms. We identify here 10 key building blocks that can be used to implement the four strategic orientations: market control; alliance and partnering skills; local responsiveness; business-to-business marketing; product and process innovation; information management; organizational structure; development of human resources; logistics management; and the sourcing and managing of finances. Specific actions or activities unique to each orientation that can be taken to implement each specific orientation are summarized in Table 1.

Note that while many food and agribusiness firms might desire world class performance with respect to each of these actions or activities, resource limitations and the uniquenesses of specific markets will probably prevent this. More realistic is careful selection of actions which support the desired strategic orientation, followed by the investment of resources to build competitive advantage around these prioritized actions.

Market Control

Market control is an important component of strategic position. Note that what is controlled may vary widely. A small agribusiness firm may control access to their local market. A large research-driven organization may control access to proprietary technology. A cooperative may control ownership of livestock and access to market opportunities. A distributor may exert control through access to information. In general, control may be obtained by: 1) controlling the most unique or least substitutable resource in the supply chain, or 2) having more points of contact or control in the chain. The former type of control might arise from the research-driven organization's access to proprietary technology. The latter might be the cooperative operating at several levels of the chain. Either form may provide the control needed to underpin a successful strategic position. Illustrations of different approaches to market control as a component of strategic positioning are provided in Illustration Capsule A.

Illustration Capsule A: Market Control

In late July 1997, DeKalb announced it would be the only seed company to offer Roundup Ready corn for 1998. The company at that time planned to sell six new varieties. DeKalb owned the genetics for the Roundup Ready hybrids, but Monsanto was the licensing agent for Roundup Ready corn. (*Dealer Progress,* September/October, 1997, pg.18)

Focusing its investments on genetic material, Monsanto purchased Holden's Foundation Seed, Corn States Hybrid Services Inc., and Corn States International. At the time, more than 35% of the U.S. corn acres were planted with hybrids using genetics developed by Holden's. Corn States Hybrid Services Inc. and Corn States International marketed Holden's germplasm worldwide through operations in Europe and South America. (*Dealer Progress*, February, 1997, pg. 46)

The acquisition of Hudson Foods by Tyson Foods increased Tyson's dominance in the chicken industry. After the acquisition Tyson, controlled 27% of the chicken production and also a large portion of the turkey industry. (*Feedstuffs,* September, 8, 1997, pg. 19)

In supply chains where commodities dominate, the resources that have the most value and are the least substitutable are generally those that will support the very lowest cost position. Typically, these resources are traditional capital and labor resources. Physical assets and people resources that are properly positioned in terms of scale, location, and skills are a source of competitive advantage and provide firms that own the assets with significant power in the chain. This is one explanation for the dominant role larger scale processing companies have held in supply chains in the past. They have controlled the most scarce or least substitutable resources required to generate the lowest cost in the production and distribution of commodities.

But as food and agribusiness firms experience demands for more differentiated products, physical and financial resources become less important relative to information in terms of their value in generating what the end-users of differentiated products want. Information about what the consumer wants is unique and gives firms that have such information a position of power in the chain. And information about how to produce the desired attributes, either through processing or through new gene discoveries, is also unique and provides firms similar access power. Thus, the source of power changes in differentiated product markets from those resources that will lower cost to those resources that add value in the supply chain. The resources that add value tend to be information, research and development, knowledge, new technology, etc. (soft assets), rather than the hard assets of plant, equipment, and employees that are the source of control in the commodity markets.

Alliance and Partnering Skills

Significant new linkages between food firms, farmer/producers, and input suppliers are likely to occur as market participants seek more control over supply chains. The full range of acquisitions/mergers, joint ventures, and alliances (contractual and partnering arrangements) will be used to tie the various stages of the system together. Alliance and partnering skills are going to be crucial as organizations work to obtain the advantages of size without ownership, or seek access to resources which they lack.

Many of the new business alliances that emerge will probably cross traditional market boundaries, such as seed and chemical companies joint venturing on a particular technology, and agronomic equipment and chemical companies jointly introducing a chemical product and an application system into the market. Not limited to input firms and producers, these alliances are likely to extend across the food chain from input supplier through producer to processor and distributor. For example, one such partnership might focus on developing a soybean variety with a unique oil content. This would require knowledge of biological compounds, genetics, chemistry, and production and manufacturing processes. Bringing such a new product to market might involve a joint venture among different input manufacturers and an alliance across the distributor/dealer network, the soybean producer, and the soybean processor. Optimum Quality Grains approach to introducing high oleic acid soybeans into the market as described in Illustration Capsule B is just one example. Joint ventures currently in place or being discussed among feed companies, genetics companies, packing plants, and food distributors in the United States illustrate this element.

Outsourcing is another form of alliance and partnering. As agribusiness firms focus on their core competencies, they will increasingly look to outside vendors to cost effectively perform non-core tasks. Such outsourcing may involve accounting and bookkeeping functions for a customizer, distribution for an innovator, trucking for a cost minimizer, or research for a coordinator. In essence, the agribusiness firm of the future will own more soft assets and fewer hard assets for two fundamental reasons: the return on investment for soft assets will increase and be greater than that for hard assets, and the services of hard assets will be able to be obtained in ways (i.e., leasing, contracting, etc.) other than ownership.

The ability to cultivate and manage alliance and partnering relationships, and the ability to identify areas for successful outsourcing will be fundamental to a successful strategic position. This is especially true for coordinators and customizers. Skills here include the ability to identify viable partners and vendors, the ability to lead and manage without ownership, and the ability to dissolve an alliance when the value of the relationship has expired. Success in this element of strategy also places a real premium on trust in building alliances and partnerships. It is impossible to contract, specify, or measure well enough to control everything through contractual arrangements. The upside is that a successful alliance can provide a major competitive barrier because of the close relationships among partners and customers. The downside for firms outside the alliance is that they may be quite literally denied access to the market. Illustration Capsule B describes some recent alliance and partnering arrangements that are illustrative of this element for specific agribusiness firms.

Illustration Capsule B: Alliances and Partnering

Terra and Farmland joined forces to create Omnium LLC, a joint venture for crop protection. The new venture was formed to minimize cost, allow a broader product line than either company could offer as stand alone companies, and to become a major player in the formulation business. (*Farm Chemicals*, November, 1997, p. 34)

DuPont Co., and Pioneer Hi-Bred International, Inc., formed a research alliance and a separate joint venture company to discover, develop, and deliver new trait specific crops. The equally owned joint venture company, Optimum Quality Grains, included DuPont Agricultural Products' Quality Grain business and Pioneer's Nutrition Industry Markets Business. At the time, the alliance created one of the world's largest private agricultural research and development collaborations. (*Dealer Progress*, September/October, 1997, pg.18)

Tyson Foods and Purina Mills developed a joint venture in the Philippines. The joint venture was formed to create a commercial feed and swine operation in the Philippines. The operation was capable of supporting 5,000 sows, with the potential to produce 100,000 pigs per year. The feed mill had an initial capacity of 120,000 MT, annually. With pork being the most popular meat in the area, the companies saw huge growth opportunities in the future. (*Food Chain News*, Tyson, pg. 57)

Farmland Industries formed a joint venture with Bay State Milling Company and Southwest Grain Marketers to construct and operate a new flour mill. The venture assured Bay State access to wheat, while providing market access to area producers. Southwest Grain Marketers supplied wheat to the flour mill, increasing their annual throughput and adding value to their business. With this joint venture Farmland entered the flour milling business and took a further step in the cooperative's farm-to-table effort. (*Food Chain News*, Grainnet, pg. 71)

In an innovative strategy, Purity Dairies began using sleeve labels on its plastic milk bottles. The four-panel label increased brand recognition and allowed for advertisements from other companies to be carried on the bottles. The company had a contract with General Mills Cheerios that allowed for cross marketing. A Cheerios ad was placed on the side of each milk container. (*Food Processing*, January 1998, pg. 56)

Local Responsiveness

Local responsiveness will be a fundamental element of strategy for customizers and be important to larger organizations because of growing competition and fragmenting customer demands. Smaller firms—those most likely to customize their offering to the unique needs of more specialized markets—often find it far easier to coordinate their actions relative to larger organizations. Shorter communication channels, fewer levels of management, and a narrower span of control can become a significant strategic advantage for firms intent on customizing their offering and approach. Some customers will find it attractive to have relationships with executives of smaller companies who use a more personalized, tailored approach in support of their customized strategy.

Highly focused seed companies may be a good example. While they often do not have the resources to support an extensive research program or offer as broad a product line as much larger competitors do, they may be able to design programs and approaches highly tailored to customers in a well defined marketplace. Here, they position themselves as experts who understand important nuances of localized markets and who offer products that are selected especially for local conditions.

These firms offer quick response time compared to larger organizations that have several layers of management for proposals to move through.

Alternatively, some larger firms will aggressively try to tailor their strategies to match local situations. The challenge is to create an organizational structure that supports localized decision making and a control structure that can preserve integrity under such conditions. This could be achieved through empowered local sales representatives and sophisticated communication systems. These larger organizations can be expected to harness technology that enhances communications, quick response, and flexibility. However, such technologies and organizational structure can be costly, difficult to implement, and even more difficult to manage in large, multi-layered organizations.

Larger innovator firms could also turn this strategic element over to locally-based partners who are better able to customize the market approach, allowing the innovators to focus on their core skills of developing technically superior products. Large firms that are able to balance local responsiveness with their scale advantages could secure an important source of competitive advantage. Illustration Capsule C describes this component of the strategy used by one company to support local dealers.

Illustration Capsule C: Local Responsiveness

Morral Companies is a full service fertilizer/chemical retailer and a wholesale provider to 250 independent retailers in five states. The company saw a need for intensive soil sampling and variable rate technology, but did not need the overhead associated with precision farming equipment and staff. Rather than investing in the overhead, Morral provided a decision support system called HighQ by AgVenture LLC to all of their independents and growers. The computer program includes software, decision-making aides, and technical support. This system allows growers a larger database of local information. (*Dealer Progress*, February 1998, pg. 20)

Business-to-Business Marketing

As production units become larger and their management approaches more sophisticated, an increasingly complex, relationship-based, business-to-business marketing approach is called for. In the past, many farmers and some agribusinesses approached the input purchasing process partly from a "consumer" perspective, with many emotional and qualitative preferences influencing the decision. But as these farm businesses have become larger and more sophisticated, there is a strong tendency to approach the purchase decision more like an industrial purchasing agent than as a retail consumer. This shift changes the nature of the buyer seller relationship and strongly suggests a business-to-business marketing approach.

Key characteristics of this approach include multiple decision makers involved in the purchase decision; more complex negotiations involving a variety of business and technical specifications; and the need for highly tailored solutions to serve the unique business needs of each commercial agricultural enterprise. Business-to-business marketers must have a fundamental understanding of how their product/service adds value in each specific enterprise's production system. They must have the resources and the flexibility to develop the required product/service

bundle and the ability to communicate effectively with all decision makers in the farm business. Finally, they must have the ability to source other services such as financing, risk management, and marketing contracts, and/or to organize a relationship between various entities in a production system, as required to complete the deal. Relationships will still play an important role in the marketing/selling process, but the relationships will be based more on business-related criteria than personality factors. Illustration Capsule D provides an example of this component of strategy.

Illustration Capsule D: Business-to-Business Marketing

Consolidated Grain and Barge, Inc has focused on becoming a one stop-shopping center for farmers. The company began offering a wide range of services to farmers. Consolidated Grain focused on becoming more than just a grain elevator. The company offered banking, accounting, market advising, and crop insurance. The total program was to cost farmers between $5-$6 per acre. (*Farm Futures*, February 1998, pg. 16)

For example, hog feed salespeople may find their focus emphasizing not the feed they sell, but on their ability to locate farmers with expertise in farrowing pigs and farmers with expertise in finishing hogs for slaughter. The feed salesperson thus "engineers" a business relationship between these producers that creates a more competitive production chain that can deliver consistent quality pork to a specific processor in a systematic manner. This salesperson will negotiate—or at least facilitate—complex business-to-business relationships among the feed manufacturing plant, highly specialized farmers, and a meat processor.

Increasing coordination of the food production system adds to the business-to-business orientation. Here, the customer may be the processor or other user of agricultural products as opposed to the traditional producer. A life sciences company may want to convince a major user of corn that their package of genetics with enhanced output characteristics and a specific insect and weed control plan offers better value than conventional packages. To market the deal, it will be necessary to not only clearly demonstrate the economic and technical feasibility of the new enhanced crop, but also to demonstrate a reliable source of supply. The latter may involve negotiating and selling production contracts for the enhanced crop to local producers, and arranging for the "identity preservation" (segregation) of the resulting crop until it reaches the processor.

Business-to-business marketers will require broad general business management skills; solid technical skills and resources; superb product knowledge; and the ability to recognize value-added opportunities not only within the industry, but also across industries.

Product and Process Innovation

Firms choosing innovation as their strategic orientation will focus their resources on developing new products and processes to capture the value that comes from technological leadership. Because technology is advancing so rapidly, maintaining such a leadership position is costly. Market premiums quickly dissipate as competitors copy, modify, or develop similar technologies. While the stakes are high, the potential rewards from maintaining technological leadership are substantial, encouraging some firms to continue to make huge investments in product and process development. Illustrations of this component of strategic positioning are provided in Illustration Capsule E.

Illustration Capsule E: Product and Process Innovation

A.E. Staley Manufacturing developed a new product called Sta-Lite III Polydextrose. This product replaced sweetener solids on a one-to-one basis in most products. This new product was a premium, low calorie bulking agent that provided body and texture in reduced calorie and low calorie foods. (*Food Processing*, December 1997, pg.50)

Cotton, Inc. has developed a new process to encapsulate cottonseed in a light coat of cornstarch. This new process pasted down the lint and improved the seed's handling characteristics. This innovation offered new opportunities for feed suppliers that had previously been unable to handle cottonseed. (*Feed and Grain*, October/November 1997, pg.30)

With a mature market in the food industry, food processors are looking for innovative ways to use existing products. Ocean Spray Ingredients introduced with the idea of flavored fruit pieces. Flavored fruit pieces in blueberry, strawberry, cherry, and raspberry flavors use cranberries as their base. They are made by infusing a sucrose syrup into sliced cranberries and then drying them. (*Food Processing,* January 1998, pg. 34)

Frito-Lay discovered a major market segment when the company came up with a guilt free potato chip-Baked Lay's. The company uses dehydrated potato flakes formed into dough. The dough is then sliced and baked. The product sold over $226.6 million in 52 weeks in 1997. The product is actually not that much healthier than normal potato chips, but it does fall into the low fat category for food labeling. (*Food Processing*, October 1997, pg. 52)

Agco has a unique process for competing in the farm equipment business. To keep manufacturing costs low, Agco employs unusual strategy: it makes barely 50% of its own products and gets the rest from suppliers, which ship to Agco assembly plants entire transmissions, engines and axles like pieces of giant jigsaw puzzles. At its tractor plant in Independence, Mo., for example, workers bolt the components together and send the machine through a paint booth. The time needed to make a tractor: three days. Rivals such as Deere make almost everything, down to building engines and mixing paint. Agco differs in other ways, too. Case and Deere routinely spend 3% to 4% of sales -- hundreds of millions of dollars -- on research and development to improve engines or electronic controls. Agco spent barely $65 million in 1997. Agco also sells a variety of brands unlike most competitors. (*Wall Street Journal*, August 19, 1997, pg.1)

The farm equipment industry provides an excellent example. The investment in research and development of innovative new designs is high—essentially limiting the market to a few very large firms, especially in the large field equipment industry. Yet market leadership and profitability are closely tied to engineering more efficient and productive equipment that will attract key market segments and enable the innovator to command a premium price. While this is the domain of large multinational organizations in general, even smaller, short-line and specialty equipment manufactures can pursue innovation in their chosen market niches.

However, there must be a fundamental understanding that all technical advantages are transitory. If the innovation is truly unique and creates a significant competitive advantage, competitors will quickly create an alternative that is similar or perhaps superior in some ways. The sophistication of today's marketplace makes it nearly impossible to completely protect an innovation, even though the idea might be technically protected by patent law. If the technical advantage cannot be emulated, competitors are likely to cut the price of their now technically inferior products, making them more attractive compared to the new technology. The true source of innovation advantage is response time or the ability to consistently follow market winner with market winner at a pace that is always one step ahead of aggressive competitors.

For firms selecting other strategic positions, there will still be continual pressure to be innovative with respect to other core competencies as competitors carefully examine each new idea and copy relevant pieces for their own businesses. Coordinators will feel pressure to develop innovative linkages with partners, customizers will need to continuously refine their tailored solutions to customers' problems, and cost minimizes must regularly re-engineer their processes to retain overall cost leadership.

Information Management

The ability to effectively manage information will be increasingly important in the future market environment. Information collection and flow inside the organization, with customers, and across alliance partners will require substantial investments in technology and people. Innovators will need more and better information about market requirements and rapid information flow across functional areas of the company to maintain a pipeline of technically superior products and services. Cost minimizers must aim to develop information systems that support efficient logistics and process control as they continually search to drive out cost. Coordinators may rely most heavily on information as they play their facilitator role in linking stages of the supply chain. For customizers, capturing and using relevant information about targeted customers is fundamental to developing tailored solutions. Illustration Capsule F provides illustrations of this component of strategy.

Illustration Capsule F: Information Management

Kraft General Foods and major supermarket chains are beginning to transfer data electronically between businesses. Manufactures and retailers exchange purchase orders and invoices, track inventory, and exchange funds over computer networks. With the use of Electronic Data Interchange, efficient consumer response is occurring. This system allows continuous improvement in logistics management and helps keep costs down. (*Food Processing*, January 1998, pg. 19)

Frito-Lay has developed a web site which allows farmers who sell their grain to the company a source of instant information. The page was made simple so people with little training or time could use the site. The web pages consist of plain black text on a bland background, but are packed with information. Farmers can type in their names and passwords to summon a complete accounting of how much corn they have delivered to Frito-Lay and how much money they will receive for it. (*Wall Street Journal*, May 28, 1996, pg. 21)

OSCAR(Optimum Sales Connection & Resource) is a software system designed to help grain elevator managers and seed companies track contracted acreage and delivery positions using the Internet. The system was developed by E-Markets for Optimum Quality Grains, LLC and its partners that contract Optimum brand high-oil corn and soybeans for export. The system enables grain elevators and seed companies, as well as DuPont chemical representatives, to set up and manage production contracts for Optimum products on their computers. With these tools, the user can view contracts on a real-time basis. (*Feedstuffs,* March 9, 1998, pg. 20)

This component presents both opportunities and challenges for food and agribusiness firms. For example, precision or site-specific farming methods are being embraced by some agronomic firms as a way of building competitive advantage through the provision of highly customized solutions to agronomic problems. Some forms of site-specific farming combine satellite global positioning systems; extensive grid soil testing; variable rate application of fertilizer, pesticides, and seed; yield monitors on harvesting equipment; and computer-generated maps to locally optimize both input use and production. All of this technology generates considerable amounts of data that must

be collected, stored, analyzed, and transformed into useful information—recommendations on highly precise agronomic practices for the individual customer.

In this case, there are opportunities to add value and generate service revenue, to deepen customer relationships, and to enhance a technological leadership position. Major challenges include finding ways of financing the investment in equipment, training people to sell and deliver this kind of information, and creating a system for managing the large data bases.

Building the type of information system required to support any strategic position is often costly, both in terms of the technology needed, and training people to use it effectively. Deciding what information is needed to support appropriate solutions, creating a system for analyzing information, bringing new technology to the individual decision-maker in a timely way, and helping the decision-maker interpret the information is crucial. Keeping the organization technologically competitive while adjusting to continual updates of software and systems will challenge every organization, regardless of size.

Supportive Organizational Structures

Appropriate organizational structures that support the desired strategic orientation will be a key focus in the new market environment. Creating structures that foster creativity in innovator organizations will be critical. Likewise, customizers must design structures that support relationships and customer service. Coordinators will need structures that allow for control without ownership and structures which facilitate the deal-maker role they play. Cost minimizers are likely to seek structures that are labor saving and flexible, avoiding major commitments to fixed labor costs.

As future food and agribusiness markets evolve, firms will increasingly find that existing structures do not support their strategic orientation. As flatter, decentralized organization structures and cross-functional teams become the norm, corresponding challenges emerge as to how people are motivated, how performance is measured, how compensation is determined, how the career track is defined, etc.

Addressing these issues will require considerable creativity in developing reporting relationships and support structures that will provide the necessary balance between flexibility and control. Heavy demands will be placed on information technology to facilitate localized decision-making. Compensation programs will be increasingly tied both to organizational performance and to specific performance targets within the individual or team's immediate control.

Structures which facilitate the quick formation of cross-functional teams are going to be increasingly common as groups of individuals with widely varying backgrounds are called on to address a specific customer issue or research design problem. Likewise, agribusiness firms with structures that support organizational learning—the ability of the organization to internalize lessons learned in any part of the organization—will have a competitive advantage serving customers who place a premium on both the speed and the effectiveness of the response. Matching organization structure to the four strategic orientations will be a key challenge for food and agribusiness managers.

Human Resources

While human resources have always been important to successful business strategies, flatter organizations, new enabling technologies, more demanding customers, and highly competitive markets will place still greater pressure on agribusiness managers, salespeople, service people, and support staff. Leaner firms continue to push responsibility further down into the organization, broadening the managerial span of control. Sales personnel will be expected to have not only superb selling skills, but also possess intimate knowledge of technology and a fundamental understanding of the general management problems of their producer customers. Service personnel must be able to maintain increasingly complex equipment that may be as much electronic as it is mechanical. Technical support staff are going to need to develop skills in assimilating and using the large production data bases that large dairy farms or a crop farms using site-specific production practices will generate. Examples of this component of strategic positioning are provided in Illustration Capsule G.

Illustration Capsule G: Human Resources

Star of the West Milling Company has been recognized for their outstanding training programs. Their system includes quality training, strategic planning, employee development, safety and environment, and measuring and monitoring of outcomes. The program has increased efficiency and lowered cost. The company also puts together real world training on applications and technology. (*Farm Chemicals*, November 1997, pg. 17)

Zeneca Ag Products has launched an employee-recruiting program to address the human resource needs of precision agriculture. The company offered scholarships to any employee who wanted to improve their skills. In 1997, there were 20 colleges throughout the Midwest working with Zeneca on the program. (*Farm Chemicals*, November 1997, pg. 40)

Ag-Chem Equipment Company is helping dealerships increase their knowledge base with its new Technology and Education Center. The center was created to help bring dealerships up to speed on precision agriculture. The dealership is a key link in the distribution chain and Ag–Chem believes they will play an important role in bringing site-specific information to the grower. (*Farm Chemicals*, October 1997, pg. 74)

Such changes mean much greater pressure on human resource units in the selection and training of food and agribusiness personnel. This means hiring individuals with both more initial skills and the ability to grow into very different jobs throughout their careers. Flexibility will be required as a result of the pace of change in the new market environments. General business skills, negotiation skills, problem solving skills, technical skills, information management skills, and communication skills will remain in very high demand.

The ability to fill these needs from traditional sources, i.e., young people with a farm background, will be increasingly difficult, forcing agribusinesses to look outside agriculture for new people. In many cases, more experienced people will be brought into agriculture who have little agricultural experience. While a farm background will continue to be a plus, farm experience is likely to gradually become a less important selection criterion for agribusiness employers, especially for those who are not in frequent contact with agricultural producers. Another important challenge will be finding and retaining technically proficient people who are willing to live in isolated rural

areas and to perform some of the less glamorous tasks required in serving production agriculture. The complexity of dual career families adds even greater challenges here.

A global perspective will rapidly become important to future career success. With increasing globalization of new market environments, the sensitivity of North American food and agribusiness managers to global events will be important in developing local strategies. Next-generation agribusiness leaders must be increasingly sensitized to international markets and cultural differences, so that they understand the impact of global events wherever their assigned duties take them. Continued investment in human resources through on-going training and education efforts will take increasingly innovative forms as firms use distance education techniques based on the Internet and video conferencing, and tools such as interactive multi-media courses to try and maximize the effectiveness of the training effort while minimizing the time away from the job.

Logistics Management

Variability in agricultural production, new information technologies and biotechnology, growing product differentiation, moves toward more coordinated supply chains, and pressures to be both more efficient and more responsive to consumers and end-users will make logistics (inventory) management another key support element. More demanding consumers, and pressures to lower costs in the supply chain will drive the implementation of efficient consumer response (ECR) principles not just in end-user markets, but throughout firm and industry supply chain. With more limited opportunities to develop a competitive advantage solely around product performance, or price, or increasingly even around the provision of services, an increasingly important technique for establishing competitive advantage is responsiveness and cycle time. Just-in-time (JIT) inventory systems, faster product development cycle times, and supply chain integration are all techniques to increase the timeliness of response. Increasingly, time competition will replace product, price, and service competition in the food and agribusiness supply and distribution markets.

Logistics management in food and agricultural supply chains will become increasingly focused on building such a time-based advantage. Time-based competition means quicker response to customer needs, faster delivery times, shorter product development times, and more rapid recovery after service problems. Delivering a time-based advantage via effective logistics is a complex undertaking with a number of key processes, most of which are based on the components already discussed above.

One set of these processes encompasses marketing-related activities: assessing the product and service requirements or attributes desired by specific customer segments, and developing a distribution system that minimizes cost, provides competitive levels of service, and is customer responsive. Another set involves system coordination: developing the appropriate supply chain linkages of integration to efficiently and effectively supply exactly what customers want.

Another set of these processes focuses on more traditional logistics management activities: choosing materials handling and storage technologies which will provide the desired level of customer service with optimum levels of investment in facilities and equipment; implementing inventory management procedures to simultaneously minimize potential stock out problems and reduce the cost of excessive inventory; and controlling and/or reducing transportation and

warehousing costs in both the short- and long-term through strategic positioning of processing warehousing facilities and better flow scheduling to reduce inventories. A final step involves implementing an information system that conveys accurate messages with respect to consumer satisfaction, product flows and system efficiencies, quality characteristics of both product and service, and overall financial performance.

Effective and efficient logistics management can contribute to the successful implementation of each of the four strategic orientations: from innovator firms working to minimize product development cycle times, to cost minimizers looking for transportation and storage efficiencies, to coordinators seeking innovative solutions for product and material flows across partners, to customizers who are looking for cost effective ways to serve low volume markets. Illustration Capsule H summarizes some of the critical logistics activities and actions used by some agribusinesses as a critical part of their basic strategy.

Illustration Capsule H: Logistics Management

Bayer Corporation, in conjunction with RAPID (Responsible Agricultural Product and Information Distribution), introduced a bar coding system that allowed chemical companies to keep precise sales records, and fine tune inventory management and problem solving efforts. The system allows competitive companies to work together to ensure uniform transmission of data. (*Farm Chemicals*, July 1997, pg. 54)

Anheuser Busch must have excellent logistics management to keep its promise of fresh beer. The company runs three shifts, 24 hours a day, with 15 consecutive shifts devoted to production. The production schedule is determined by feedback from 900 wholesale distributors. These wholesalers predict how much of each kind of beer they will need in the coming weeks. The data is evaluated at corporate headquarters by in-house software. This software determines the daily production schedule at 12 breweries. The software then determines the exact quantities of inputs need for that production run. (*Food Processing*, April 1997, pg. 75)

Circle Four Farms was the first full-scale integrated hog operation in the state of Utah. The farm had over 120,000 sows. The company moved to Utah to avoid government regulations and to serve the growing pork market in California. The company built a feed mill for the operation on the Union Pacific railroad. The entire operation is built along the interstate to provide easy access to transportation. The company used all the grain produced in Utah in two days, thus almost 100% of the companies grain needs are shipped in from Nebraska. *(Feed and Grain*, October/November 1997, pg.10)

R.D. Offutt Company grows 1.8 billion pounds of potatoes and farms 45,000 acres of rotated crops. The company sells potatoes to J.R Simplot, Lamb Weston, Ore-Ida, and Northern Star Company. The R.D. Offutt Company also runs a processing plant, an agricultural lending company, and owns 57% of RDO Equipment, the largest string of John Deere stores in the country. The company has operations spread throughout the United States to reduce risk. Logistics management is critical to long-term profitability. (*Forbes*, May 19, 1997, pg. 60)

Sourcing and Managing Finances

Rapid consolidation in many food and agribusiness supply chains, combined with rapid technological advances make sourcing funds at a competitive cost essential to be a market leader. Increasingly sophisticated financial markets will apply both their tools and their expectations to agribusiness firms. Leveraged buyouts, equity and stock initial public offerings (IPO's), venture capital, financial restructuring, licensing agreements, contracting, and strategic alliances to more

efficiently obtain resource control all are an increasingly important part of the financial restructuring of the food and agribusiness industries.

Astute financial management, including sophisticated risk analysis and diversified sourcing of debt and equity funds, may be the linchpin to successful future strategic positioning. Acquiring the right production and distribution assets in many cases will require capital outlays beyond the capacity of many food and agribusiness firms using traditional debt and equity and funding sources. North American financial markets are increasingly policing and pricing not only the financial but also the strategic risk profile of food and agribusiness firms. In essence, the capital markets are indicating that with the increasing risk in agriculture, equity capital must generate a higher risk premium. In addition, these markets are indicating that debt funds will be available only at higher interest costs or in some cases will not be available at any cost. Those businesses that match their operating and strategic risk to appropriate marketing and operational strategies can borrow more money at lower rates. Examples of recent creative actions to source and manage finances are summarized in Illustration Capsule I.

North American food and agribusiness firms are increasingly accessing larger amounts of money from national and international capital and financial markets, and to be competitive in those markets they must generate rates of return comparable to other industries. Whereas mediocre financial performance by small food and agribusiness companies in the past may have been allowed by local lenders, players in the national and international financial markets increasingly expect comparable performance in agriculture to that in other industries if they are going to fund business expansion, growth, consolidation, technological advance, and modernization.

Illustration Capsule I: Sourcing and Managing Finances

Miles Farm Supply wanted to enter the identity preserved and biotech seed industry. Management knew this venture would be expensive. Miles decided to use strategic relationships with other players to help keep start-up costs low and manage risk until the business proved itself and profits began to roll in. Miles worked with Zeneca to start up a research company focused on starch. This arrangement allowed Zeneca to continue research and would allow Miles to enter the world of identity preserved seed at a relatively low cost.(*Farm Futures*, February 1998, pg. 26)

John Deere initiated a program to supply $10.4 million in agriculture equipment to the Stavropol and Kransnodar territories under a guarantee provided by Agroinkom and the territory administration. The equipment was to be paid off within four years using funds earned by selling grain at market prices as of the date of sale. John Deere had previously provided equipment under such an agreement to the Ukraine. (*Food Chain News*, Interfax-News, pg. 44)

A new financing scheme from the merchandising group of Cargill was designed to ease farmers' cash flow problems in Europe. Cargill's new program gave farmers the flexibility to pay for inputs after, rather than before, grain is sold. Any deposit made earned interest. The Bank of Scotland administered the plan. Any crop sales to Cargill were paid electronically into the instant access deposit account, to start earning interest immediately. (*Food Chain News*, FWI, pg. 78)

In addition to firms needing markedly larger amounts of funds to finance future operations, the tools and techniques used to source those funds will change, the institutions from which they are sourced will become more national and global in nature, the expectations of the market will force

more financial discipline on agribusiness firms, and financing will become more critical to long-term success.

Conclusions

There is a role for each of the four very different types of strategic orientation in the increasingly complex future North American food and agribusiness market environment. Superior innovators will produce a steady stream of new products and services for broadly defined national or international markets. Outputs are likely to be derived from in-house research and development or through alliances with/acquisition of partners. Critical support elements will be market control and superior R&D capabilities. Cost minimizers will offer bundles of products and services that are less expensive than equivalent offerings by competitors, and focus on new processes that drive down cost — emphasizing the importance of information and logistics management.

The major new thrusts in strategy orientations in the North American food and agribusiness industry over the next 10-15 years are likely to be the rise of coordinators and customizers. As consolidation continues at all levels of industry supply chains, and players seek to shorten supply chains, there is a need to coordinate and facilitate alliances that help to manage supply risks, increase product quality, provide information to track product flow, and drive out costs. This is particularly pertinent in the development of supply chains for identity preserved specialty output trait crops. And given the expected increase in niche markets as the producer base further segments into very large, part-time and recreational farmers, smaller firms that can offer customized solutions will find new opportunities. Firms in the pork, dairy, and poultry sectors, and suppliers of precision agriculture services, are increasingly going to opt for these strategies as farm operations consolidate and farmer information needs become more complex.

Key components of these different strategies will include product and process innovation, market control, information, and alliance and partnering skills. Control may be acquired via patenting a crucial "output trait" gene, developing superior information systems, or having local market access. Developing alliances can help firms to obtain the advantages of size without the ownership of hard assets (building, plant and equipment), and/or access to capital and new technology, and reduce product lead times. This will place a premium on negotiating skills, and the capacity to create trust between players in industry supply chains. Each of the strategic orientations will require a unique set of actions or activities for these components to be an effective strategy.

Table 1. Specific Actions for Each Building Block of Strategy to Implement Each Strategic Orientation

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Market Control	1. Essential element for innovator firms – gain control via unique products and services that appeal to customers. 2. Build advantage by having control of proprietary knowledge and technology, or purchase of technology from other firms before it is commercialized. 3. For innovative service firms, control may be over proprietary knowledge/structures/programs that support/drive their unique offerings. 4. Control may also be exerted over distribution to drive more rapid commercialization of new products and services.	1. Market control comes from being the lowest cost producer/processor – in many cases a function of economies of scale and scope. Size advantages enable significant influence on terms of trade. 2. Vertically integrated firms will focus on the total supply chain, and try to control any activity that significantly affects total cost. 3. May involve control of transportation and other distribution resources. 4. Control used to generate favorable terms for input purchases, services, terms of sale, etc.	1. Source of control is the ability to make a market and create links by securing access to raw materials, distribution channels, and/or end markets. 2. Control manifest through partnerships and linkages that provide roles that others in the chain are unable/unwilling to provide. 3. Control is driven by access to information on sources of raw materials, logistics alternatives, and end markets.	1. Control is obtained through unmatched knowledge of *profitable* niche market demands. 2. Such knowledge, combined with tailored products and superb service that add better value than competitors do, drives deep relationships with niche market customers. 3. Customers come to depend heavily on the customizer for <u>their</u> key need: innovation, cost minimization, or coordination. This dependency reinforces the customizer's market control.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Alliance and Partnering Skills	1. Alliances are formed to gain competitive advantage via the use of complementary technologies, through access to distribution data or services, and guaranteed sales of innovative products to end-users. 2. Alliances bring joint technology to market, enhance capabilities, spread risk, or enhance customer acceptance via access to allies' distribution channels and/or brand names for innovative products.	1. Alliances focus on obtaining technology without major investments in research and development, securing stages in the supply chain without capital outlay, and driving out costs/revamping the supply chain. 2. High priority is given to outsourcing and/or partnering on non-core activities if these will drive down costs. 3. Alliances that link service and supply schedules more closely with inventory levels generate cost savings.	1. Most essential activity for this strategic orientation which depends on building trust among supply chain players. 2. Competitive advantage is built on the ability and skills to play the role of general contractor. This requires that the coordinator promote and manage linkages between levels in the supply chain; establish and unwind relationships; create reward mechanisms that provide incentives for players to join the supply chain; and align the players to deliver on market demands.	1. Alliances are essential in making firms with small resource bases competitive via preferred relationships with niche customers and/or suppliers. 2. Ability to identify niche market customers' problems, determine solutions and then find suppliers with appropriate products and services to deliver solutions. 3. Will seek partners/outsource non-core activities simply to focus limited resources on developing solutions for niche market customers.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Local Responsiveness	1. Main issue is the size of local markets (broad versus narrow) to pursue. Firms who find enough global customers to buy their innovations can respond to local needs before local firms do. 2. Local service responsiveness can be delivered in two ways – either provide innovations via the innovator's own organizational structure, or outsource delivery via alliances with customizers. 3. Must have a product/service development group that is continually scanning markets for new business opportunities, and has the capability to pursue them.	1. Provide products and services based on price rather than features. 2. Offer tailored products when production techniques are sufficiently flexible to offer variety without markedly affecting costs. 3. Size of the customer account must be sufficiently large to justify local responsiveness. 4.Will competently meet competitive standards in terms of basic services – targeted customers may view these firms as highly responsive on services delivered.	1. Essential that there is flexibility in structuring business alliances to respond to customer's demands. 2. May involve crafting unique contracts to fit specific end-user/producer needs, or facilitating production of a specific product to fit end-user requirements. 3. Coordination of innovators or cost minimizers in supply chains may help them to be more responsive locally.	1. Most essential element for customizers as they are in the business of tailoring solutions to niche customer problems that competitors cannot match. 2. Intense focus on broad range of local/niche needs, and distinguishing offerings from those of organizations serving broader markets. 3. Customizers may well provide support for innovators', cost minimizers', and/or other allies' local responsiveness in both products and services, because they may understand customers needs better.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Business-to-Business Marketing	1. Building long-term relationships with more sophisticated customers will better help to identify needed new product or service opportunities. 2. Direct contracts with suppliers provides a reliable flow of the desired quality and quantity of key inputs in manufacturing. 3. Marketing of new technology may mean having to redefine the customer. The focus may change to defining the end-user as the customer, and the farmer/producer as a supplier. 4. Marketing staff must have a broad general management skills, solid technical skills/resources, a systems perspective, and the ability to recognize value-adding opportunities within and across industries.	1. Building long-term relationships with more sophisticated customers will help to identify cost reducing opportunities. 2. Direct contracts with suppliers provides a reliable flow of the desired quality and quantity of key inputs to reduce costs. 3. Marketing message is to drive down customer's total cost of use – via lower price, greater reliability/convenience, good value, etc. 4. Relationships and business arrangements are formed with businesses with which the firm can directly negotiate agreements.	1. Building long-term relationships with more sophisticated customers at all levels in the supply chain will create mutual trust. 2. Requires knowledge of changing customer needs at each level in the supply chain: producers, end-users, and logistics activities. 3. Must have ability to market services to end-users and producers alike so that deals can be agreed to. 4. Marketing staff must have broad general management skills, solid technical skills and resources, a systems perspective, and the ability to recognize value-adding opportunities within and across industries.	1. Building long-term relationships with more sophisticated customers will help to anticipate unique tailoring opportunities. 2. Relationships based on mutual trust, confidence in ability to deliver, fundamental understanding of segment needs, and problem-solving orientation 3. Consistent delivery of solutions to problems requires clear communications at all relevant levels: business, technical, operational, etc.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Product and Process Innovation	1. Most essential element for innovators to create new products/services, new markets and new customers. 2. Focus on generating new ideas, rapidly assessing their market potential, and then bringing innovative products and services to market. New processes make these offerings cheaper, of more consistent quality, etc. 3. Success hinges on response time and ease of replication by competitors. Firms must innovate continually as technological advantages are transitory. 4. Have capabilities or technologies that can be used to produce different outputs.	1. Focused on any innovation that will drive total costs lower, in particular on research, on inputs, and on processes. 2. Source innovative product and/or process technology widely. Apply it directly, or reformulate and/or repackage the technology at a lower cost than rivals to gain competitive advantage. 3. Actively seek to reduce costs through developing/adopting innovations in procurement and/or logistics.	1. Focused on developing creative types of coordination arrangements – like contracts, partnering, joint ventures, alliances, etc. – and finding innovative logistics solutions. 2. Success requires the ability to create innovative arrangements that create and provide sustainable value for both suppliers and end-users.	1. Focused on innovating in any way that better serves the needs of the chosen market niche. 2. Degree of importance and focus of innovation dependent on whether focus is innovation, cost minimization, or coordination – i.e., product and process innovation likely more central to a niche innovator than a niche coordinator. 3. Flexibility is key – customizers have to understand what innovations lead to better serving the niche, and be able to find these innovations.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Information Management	1. Access to information that gives a better understanding of customers and of the features they want in products/services, and of what rivals are doing, is a source of competitive advantage in formulating new ideas, processes and/or technologies. 2. Involves managing internal and external data flows about consumer trends, rival moves, etc. 3. Major thrust on capturing and sharing this knowledge, and developing (innovative) systems to promote cooperation and cross-functional communication to "lever" this information. 4. Focus on monitoring end user needs - superb information	1. Essential activity for cost minimizers is to monitor cost drivers, and identify ways to restructure processes and tasks. 2. Involves managing internal and external flows of information about input, inventory and activity costs. 3. Intense focus on driving costs out of logistics/supply chain activities, and process control. 4. Information technology used to drive out costs: EDI, virtual inventory management, and activity-based systems. 5. Information technology supports centralized staff functions, and rigorous operational cost control standards.	1.Essential component - an information infrastructure across the supply chain builds competitive advantage as it enables constant monitoring of, and facilitating links between, all players in the chain. 2.Coordinators' invest in information technology – other players invest in production, processing, warehousing and transportation. 3. Critical to manage information on product flow through each level of the supply chain, and changing end user needs.	1. Develop customer databases to know and serve client's needs well, and design information systems to sustain customer support. 2. Use information to identify the profitability of customers so that the most profitable can be pursued to maximize customer lifetime value. 3. Information systems and data provide end-user specific information; information used to decide on the timing and level of investments made to better serve customers.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Appropriate Organizational Structures	1. Increasingly flexible and fluid structures with cross-functional teams, to meet increasingly complex market demands, and reduce product/service lead times. 2. Must balance localized decision-making authority with the need for control. 3. Pressure to develop a work place that fosters effective identification of market opportunities and creative solutions to customer problems. 4. Introduce internal competition among product development teams and among product commercialization teams. 5. Organizational structures must have generous rewards for risk-taking and innovation.	1. Typically centralized structures with most decision-making authority at the top; focus on developing standardized processes and adopting large scale technology in pursuit of scale economies. 2. Structures that focus on getting costs down and maximizing labor productivity are critical. 3. Flexible only to capture additional cost savings, but not to meet customers needs except in larger accounts where loss of business will alter the firm's costs.	1. Increasingly flexible and fluid structures with cross-functional teams, to create markets in response to end-user needs, and build upstream and downstream linkages between different players in the supply chain. 2. Structured to play out the general contractor's role rapidly, and quickly source resources not available internally to meet customer needs. 3. Fosters resource control without ownership through agreement structures with the players in the supply chain. 4. Typically very lean organizations, enabling small teams of highly skilled individuals to make deals and facilitate negotiations, and with heavy reliance on outsourcing.	1. Increasingly flexible structures with cross-functional teams, to more effectively satisfy more complex customer demands. 2. Heavy focus on marketing and service functions (closely supported by other units like research, operations, accounting etc.) to build deep relationships with niche customers through sustained value-adding. 3. Organized around specific client or niche (if large enough) teams – groups of individuals who have, or can access, the complete package of skills needed to effectively serve the client/niche.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Human Resources	1. Quality personnel to deal with more complex information, research, and product technologies, complex products/services, and assume more responsibility and authority. 2. Major investment in developing and retaining more technically sophisticated, and creative, personnel. 3. Management must create a business culture that supports entrepreneurial effort, and organizational learning. 4. Personnel must have the flexibility to understand and adopt the new technologies, and work closely with customers and product developers.	1. Focus on individuals able to continually manage costs down in all business activities and processes. 2. Heavy emphasis on corporate system training, and team-based activity, aimed at continuous cost improvement. 3. Must develop specialists with skills in logistics, operations (managing and engineering), and in purchasing – especially for top management that will develop and drive processes. 4. Management must create a cost-conscious business culture that encourages personnel to participate in cost-control efforts and organizational learning.	1. Personnel who understand how business linkages can be used to develop new markets and supply chains in a more complex/competitive business environment. 2. Seek and develop personnel with the flexibility to provide a general contractor service – negotiation and "deal-making" skills, and information management/communication skills will be critical to align new players. General business skills, problem-solving skills, and technical skills also in demand. 3. Management must nurture linkages, and encourage organizational learning.	1. Focus on individuals who either have/can develop, or know how or where to access, specialized skills in areas that niche customers will value. 2. Must be able to adjust to changing customer needs and identify/pursue opportunities to solve niche problems that may take the firm outside of its competencies. 3. Seek and develop people with solid problem-solving, team, technical, and information management skills, and service orientation. General business, negotiation, and communication skills to deal with customers and suppliers also needed. 4. Management must foster a culture of customized service, and organizational learning.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Logistics Management	1. Focus on the challenge of managing inbound and outbound logistics when faced with increasingly short technology and product cycles, and the need to hold leaner inventories (to avoid build-up of obsolete products). 2. Time to market critical, given that competitive advantage of product and/or service innovation is transitory. 3. Producer/manufacturer flexibility and expanding product lines will increase complexity and pressure logistics skills. 4. Taking cost out of the system while enhancing the response/ product distribution time will be important, as holding inventories is costly.	1. Essential for this orientation if logistics activities are a major cost item. 2. Focus on driving costs out of the supply chain while enhancing the response time (maintain or improve ability to serve customers while doing so with reduced inventories that tie up working capital). 3. Excellence in every phase of logistics is required: market-related activities, coordination, traditional inventory, and transportation management. 4. Continuously improve logistics processes through more intense use of information technology and innovative supply chain partner relationships.	1. Essential for this orientation in order to ensure product flow from producers to end-users. 2. Excellence in every phase of logistics required: market related activities, coordination, traditional inventory, and transportation management. 3. Delivering excellence in logistics activities without ownership is vital, as the coordinator is unlikely to be vertically integrated in the new market. 4. Producer/manufacturer flexibility and expanding product lines will increase complexity and pressure logistics skills.	1. Flexibility in logistics management is necessary, as building trust in a niche may mean periodically exceeding standard practices when valued customers have an exceptional problem/need. 2. Focus on taking cost out of the custom solution, while enhancing the response time, if the customizer is oriented towards innovation and/or cost minimization.

Strategic Orientation				
Building Block of Strategy	**Innovation**	**Cost Minimization**	**Coordination**	**Customization**
Sourcing and Managing Finances	1. Funding of R & D, and/or technology acquisitions and research alliances, is crucial. Innovators may look to supply chain partners to help finance development efforts and share in the risks and benefits. May also look for innovative ways to structure financing arrangements. 2. Will have to pay market or higher rates of return on borrowed funds because of high risk. This will be particularly important for firms wanting to raise funds in competition with other industries on global markets. 3. Close scrutiny on risk profile and appropriate pricing of debt and equity by potential financiers who will demand relevant strategic and financial	1. Ability to source funds at a competitive cost is critical for cost minimizers. 2. Close scrutiny on risk profile and appropriate pricing of debt and equity by potential financiers who will demand relevant strategic and financial data; rewards for firms that better manage strategic/ financial risk. 3. Will have to pay market rates of return on borrowed funds, and compete with other industries when sourcing funds globally.	1. Funding of "soft assets" (like information systems) and deal-making activities is crucial. 2. Providing or sourcing financing may be crucial component of value added for both producers and end-users. 3. Cultivate relationships with potential financiers to help them understand the nature of the coordination role, and the specific financing needs of coordinators and new supply chain partners. 4. Close scrutiny of risk profile and appropriate pricing of debt and equity; rewards for firms that better manage strategic/financial risk	1. Sourcing funds at a competitive cost necessary if market leader is to add value for customer. 2. Close scrutiny on risk profile and likely higher prices for debt and equity because of higher risk associated with niches. 3. Careful relationships with sources of financing will need to be cultivated – niche focus may change risk profile (real or perceived) for financial sources.

References

Center for Agricultural Business. 2000. *Commercial Producers: Making Choices, Driving Change*. Purdue University, in press.

Hamel, G. and C.K. Prahalad. 1994. *Competing for the Future*. Boston: Harvard University Press.

Mintzberg, H., B. Ahlstrand and J. Lampel. 1998. *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management*. New York: The Free Press.

Porter, M. 1985. *Competitive Advantage*. New York: The Free Press.

Purdue University Cooperative Extension Service, 1997. *FoodSystem 21: Gearing Up for the New Millennium*. West Lafayette.

Treacy, M. and F. Wiersema. 1995. *The Discipline of Market Leaders*. Reading: Addison-Wesley Publishing Company.