Iowa agriculture is changing rapidly. The farming portion of the food supply chain is changing from a system of producing broadly defined commodities to a system of producing products with specific attributes. The links of the commodity chain were connected by a series of open markets. The links of the emerging chain will be linked by contracts, joint ventures, or through direct ownership. These changes are driven by many factors. Two of the major factors are biotechnology and an increasingly discriminating consumer.

Below are ways that we have traditionally thought about farming. Also listed are ways that we will think about farming in the future. Those who adapt their perceptions from those of yesterday’s agriculture to those of tomorrow’s agriculture will have a competitive advantage.

Structure and organization

- **Past—Produce commodities.** In the past, we produced corn, soybeans, hogs, and cattle for broad commodity markets where every unit of production (i.e. bushels of corn) was assumed to be the same.

- **Future—Produce products to specification.** In the future, we will produce agricultural products that have specific attributes. Products that do not meet specification may not have a market.

- **Past—How to produce.** Because we traditionally produced main-line commodities, the decision of what to produce was easy. Therefore, we focused our attention on how to produce.

- **Future—What to produce.** As the broad commodity markets divide into many segmented (specific attribute) markets, the decision of what to produce will become as important as how to produce.

- **Past—Maximize gross production.** Because every bushel of corn was considered to be the same (commodity), the maximum income could be achieved by focusing on maximizing production (yield per acre).

- **Future—Maximize specific attribute.** As the broad commodity markets break up into specific attribute markets, we will generate the most income by maximizing the amount of the specific attribute of the crop (i.e. protein per acre).

- **Past—One-person operation.** In the past we expanded our business until our labor and management were fully employed in the business. At this point we stopped expanding.

- **Future—Team of employees, consultants, and specialists.** In the future, we will continue to expand our business by hiring others to help us with labor and management. Therefore, developing the human relations skills of working with others will become more important.

- **Past—Independent producer.** Traditionally, we considered ourselves to be independent of others because we did all of the farm operations ourselves.

- **Future—CEO of a business.** The farm business of the future will be much more complex. Much of our time will be focused on working with specialists and managing labor. So, we will need to look on ourselves as being the CEO of our business.

- **Past—Manage assets.** Because commodity production involved large amounts of capital, it was important to spend a substantial amount of our time managing these capital assets.

- **Future—Manage information.** As we move toward producing specific attribute products, the management of information will replace the management of assets as the most important resource to manage.
• **Past—Leverage money.** Because capital was so important in commodity production, we found ways of leveraging our money by borrowing money or leasing assets.

• **Future—Leverage information.** Leveraging money will continue to be important in the future. However, due to the importance of information, leveraging information also will be important.

**Markets and alliances**

• **Past—Sell what we produce.** In the past, we produced a commodity and then tried to figure out how to sell it.

• **Future—Produce what we can sell.** In the future, we will determine what we can sell and then we will focus on producing the product for the market.

• **Past—Price taker.** In the past, we took whatever price the market gave us for our commodities.

• **Future—Price maker.** In the future, we will begin to have an influence over the price we receive for our products.

• **Past—Independent producer.** In the past, we worked by ourselves to produce commodities for the open market.

• **Future—Interdependent producer.** In the future, we will work with other producers to produce specific attribute products for an integrated supply system.

• **Past—Buy retail and sell wholesale.** Traditionally we purchased production inputs from local input suppliers where we also received substantial services (buy retail) and sold our commodities on the open market where we provided no services to the buyer (sell wholesale).

• **Future—Buy wholesale and sell retail.** In the future, we will buy inputs directly from input producers (buy wholesale) and sell our specific attribute products to end-users where we will provide a range of services (sell retail).

• **Past—Compete with suppliers and buyers.** In the past, we competed, mostly over price, with our input suppliers and the buyers of our commodities.

• **Future—Suppliers and buyers as potential partners.** In the future, we will look upon our input suppliers and the buyers of our products as being potential partners in the development of a supply chain.

• **Past—Horizontal growth strategies (capacity expansion).** In the past, we expanded our business by farming more acres or raising more livestock.

• **Future—Vertical growth strategies (vertical integration).** In the future, we will also be able to expand our business vertically by owning or controlling a portion of the food supply chain.

We will need to change the way we look at managing our farm business in these ways. I believe these changes will be critical to our future success.