



Outside the Box

► by Tom Field, University of Nebraska–Lincoln

The winds of change

Change. In the midst of all the forces that alter the rules of the game, shift market momentum, redirect resource allocation and wreak havoc on our carefully made plans, it can be difficult to manage one's attitude, much less the business enterprise. Offering sage advice in such times, William Arthur Ward said, "The pessimist complains about the wind. The optimist expects it to change. The realist adjusts the sails."

Embracing change

Successful managers understand that the heart of success lies in the ability to discern when to shift the sails, when to drop anchor, and when to get out the oars. They base decisions not only on the internal metrics, but also by developing knowledge about the macro forces at play and developing a game plan to deal with them.

There are six forces that will challenge the beef industry. They make up the A-list, those with the potential to have the greatest impact on both individual enterprises and the beef industry in its totality (see Fig. 1).

Automation is being developed for application at every stage of the beef supply chain. Be it smart technology to measure health status of cattle in real time, the application of global positioning systems (GPS) to planting and harvesting processes, the use of robotics in packing plants to improve consistency of fabrication and increased levels of food safety, or the use of kiosks to handle customer orders and interaction at both supermarket and restaurant outlets, the impact of automation will be significant.

Not all activities can be or should be automated. However, imagine pulling up a dashboard on your phone or computer each morning that details which water tanks are functioning correctly, provides a list of feedstuffs or other inputs that need to be reordered, outlines which pharmaceuticals and biologics are out of date, and provides a list of which cows are prime for artificial insemination (AI).

Asset, authority transfer

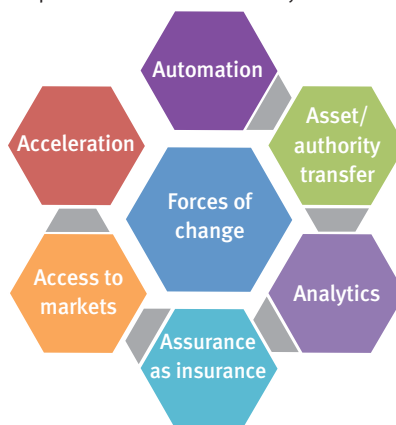
A wave of asset and authority transfer looms on the horizon for family farms and ranches. There are twice as many principal operators in agriculture today who are older than 65 years as compared to those younger than 45. By 2030, between one-third and

one-half of today's principal operators will transfer their assets and authority either through sale or intentional transition to the next generation of the family.

At today's real-estate prices, the shift in wealth in the next decade and a half will approach \$1 trillion in value. Equally, if not more importantly, decision-making authority will be handed to the next generation. These changes are certain and yet very few enterprises have fully invested themselves in the development of meaningful estate and succession processes.

Fig. 1: Challenges for the beef industry.

Six forces will challenge the beef industry in the future. These six forces have the potential to have the greatest impact on both individual enterprises and the beef industry in its totality.



Analytics

The power of analytics will be brought to bear on production agriculture. In the future, we will have the capability of real-time measurement of metrics such as pounds weaned compared by age of dam, pasture and sire without ever entering a single bit of data by hand. Service and repair costs per piece of equipment and summarized by manufacturer and supplier will be automatically calculated and communicated.

The forage production of specific pastures, the percentage of desired and undesired plant species within a fixed area, and the projected production of a forage stand in the next season will be readily available. Precision decision-making will be possible at levels our predecessors could not have imagined.

Assurance, markets and acceleration

Assurance as insurance is a concept that will be necessary to gain consumer trust and to engage as a supplier to specific processing and distribution systems. In the age of technology, trust becomes even more important in the marketplace. The need for authentic and visceral connections between consumers and their food may even become more important than it is today as people seek to find meaning, relationship and community through the intimacy of food. The ability to connect the story of both product and process is critical to the future of the industry, and we ignore it at our own peril.

Accessing new markets both in terms of international customers and those domestic market segments that are low users of beef is mission critical. Competitive market access is a requirement to assure a healthy beef industry in the future. Time and attention devoted to increasing market access is a critical investment.

Change is accelerating, and so we must learn to deal with a game that moves quickly, turns on a dime, and is often more chaotic than not. In the face of this reality, let us be reminded of the words of JFK who, in the face of competition and technological change in his time, proclaimed that "we choose to go to the Moon in this decade ... not because it will be easy, but because it will be hard; because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one we intend to win."

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