



Outside the Box

► by **Tom Field**, University of Nebraska–Lincoln

Proof of concept

The engine of innovation and entrepreneurship is fueled by novel concepts, solutions and capturing value from undervalued assets. Proof-of-concept strategies are created to get a cost-effective and speedy determination about whether or not the new idea has a fighting chance to be valuable, as well as to uncover bugs, defects and technical problems.

In essence, proof of concept is an approach used to establish the viability, feasibility and potential value of a new design, idea or protocol. While frequently associated with engineering or high-tech industries, proof of concept is hardly constrained to these environments.

Turn culls into opportunity

What in the world could proof of concept offer the seedstock industry? As a buyer of seedstock bulls as the carriers of improved genetics, let me answer that question as follows — everything! In the past five years, our company has purchased three to four bulls annually at an average price of \$4,000 per head, comprising a total expenditure of \$68,000. Our ranch serves as a reasonable proxy for the average bull customer — the bread and butter of the seedstock business. Buyers like us probably won't buy the highest-priced bull in a sale, but collectively we have a significant impact on cash flow.

In our business we work hard to make our purchasing decisions based on variables such as likelihood of success, functionality, return on investment and the quality of the business relationship. Our decisions must be based on evidence because there is limited room for error on our most expensive inputs. Thus, we have to do business with genetic providers who have invested in the process of proving the capability of their products to create value.

So what does it take to service commercial buyers in our general demographic category?

- Study the beef industry and apply knowledge of the full supply chain to provide direction to the breeding program.
- Understand the critical control points (CCP) that affect customer profitability and develop products that positively impact these CCP.
- Execute a breeding program designed to create problem-free seedstock.
- Treat cattle that don't qualify as breeding stock as an opportunity, not as castoffs.
- Partner with customers and others in the

industry to capture and utilize systems-level information to better quantify the value of breeding stock.

Proving the breeding program will become increasingly important as the U.S. cow herd rebuilds; as consolidation continues to increase the average herd size; and as supply chain, branded beef and value-added programs more clearly define specifications. It would be illogical to assume breeding stock sales will be able to sustain current prices for the long term without price corrections. However, in light of the extraordinary bull-sale prices of the last several years, seedstock enterprises should be in a position to allocate resources to the aforementioned guideposts.

The first step is to develop a macro view of the beef industry complete with an evaluation of the downstream industry sectors, as well as the influencers of beef demand — both domestically and globally. This knowledge helps to define the playing field and to better prepare for the emerging industry, as opposed to the rules of the past. While the seedstock provider is far removed from feeders, packers, retailers, foodservice operators and consumers, ultimately genetics must pass muster with these sectors, particularly as they relate to eating satisfaction, carcass composition and meeting emerging specifications relative to animal well-being and sustainability.

Secondly, the seedstock provider who wants to serve commercial cow-calf customers will need to understand the profit drivers for their clients and the role

of genetics in affecting those critical control points. Genetics and breeding systems must be effectively matched to feed resources, weather constraints, labor capability and availability, as well as a host of other factors.

The process of identifying and understanding the customer's CCP provides the information needed to design and execute a breeding program that provides value and avoids creating unintentional problems. An engineering prototype must be tested to determine design flaws and structural defects. Why should seedstock be any different?

No culls

Proof of concept can be pursued through several avenues. The simplest approach is for the seedstock producer to treat cattle that don't make the bull sale or qualify as a replacement female as an opportunity instead of as a cull.

These cattle, managed as a commercial enterprise, offer the chance to live the customer experience. Owning these cattle further into the production process offers detailed insight as to how genetics perform in the supply chain. More complicated approaches include developing buy-back programs or creating partnerships with customers to joint venture on feeder cattle as a means to further test genetic merit.

Certainly genomics and other technologies such as ultrasound provide proof-of-concept opportunities.

The successful seedstock provider of the future will expand his or her credibility by becoming an engaged commercial cattle producer driven to provide proof of concept.

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