

Blade Farming's Revolutionary Beef and Veal Production System



“If there are any grey areas in a value chain it will fail, because it allows the potential waste and unnecessary costs created by less capable or committed producers to undermine the entire program.” *Richard Phelps, Managing Director of Blade Farming Ltd.*



The term “value chain management” (VCM) describes a process where businesses situated along the value chain purposely work together to attain sustainable competitive advantage. In developing closer strategic relationships, businesses acquire the ability to profit by continually improving the efficiency and effectiveness of their operations in ways that would not otherwise be possible.



UK

Part of ABP Food Group

Traditional beef production sees farmers produce an animal that meets their definitions of quality, then sell that animal to whoever is offering the best price at the desired time of sale. Even if they are loosely aligned with a processor, this approach equates to farmers producing cattle according to a largely personal perception of value, then speculating that the animal will find a market at a price that sufficiently exceeds the cost of production to support a viable farming operation.

Blade Farming reflects the more strategically aligned and sustainable model of beef production that is gaining momentum in the UK and elsewhere. Production begins by defining the attributes that target consumers value, particularly those for which they are willing to pay. The involved businesses (input suppliers, farmers, processor, distributor, retailer/restaurant) then partner to establish the standards and business arrangements that enable them to produce, process, and market beef more profitably than otherwise possible. This approach also enables them to mitigate risks associated with traditional methods of production and selling on the open market.



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Richard Phelps, Blade's Managing Director

Resulting consistency — higher returns, lower costs, and therefore greater profitability.

Factors that have been critical to the success of Blade Farming include everyone's abiding by established verifiable processes that are based on scientific research, and using traceability to gain unprecedented insights into performance and the determinants of success. This thereby ensures that calves and the finished animals are "fit for purpose," enabling all parts of the chain to be managed more effectively, resulting in greater efficiencies than would otherwise be achieved.

Overview

In 2001 Blade Farming (Blade), now owned by one of Europe's largest processors ABP Food Group, developed a revolutionary beef and veal production system. The system is coordinated by a dedicated team who constantly monitors logistics, animal and producer performance, herd health, and feed inventories — resulting in the production of beef that is so consistent in quality that the cattle are effectively sold before they are conceived. Richard Phelps, Blade's Managing Director, established the scheme after having worked for producer cooperatives and realizing that rising production costs, combined with historical inefficiencies, along with declining subsidies, were making beef production unviable for even the best UK producers.

Blade has succeeded where others have failed. It has established standard operating procedures and a risk management program that transcend each step of the beef animal's production. This in turn ensures that everyone in the value chain benefits from being focused on producing an animal (and therefore beef) that meets customers' expectations and is correctly positioned (in terms of maturation, packaging, presentation, promotion) to the specific segment to which it is marketed. The resulting consistency leads to higher returns, lower costs, and therefore greater margins and profitability than could otherwise be realized, with producers being equitably rewarded in relation to their individual performance.



The continual improvement system implemented by Blade began by developing production protocols based on scientific research conducted into producing beef that provides consumers with a consistent high quality eating experience. Many of the scientific studies on which the system was devised were conducted by the Meat Science Centre, based at the University of Bristol. This included identifying the genetic markers associated with an animal's disposition to produce tender meat.

As occurs in other industries, Blade then established a traceability system that enables the effectiveness of these processes to be accurately measured. This is done by gathering data from individual animals throughout their lifetime and at processing, then analyzing the resulting information in conjunction with their strategic partners to identify opportunities and implement changes. This has resulted in continual improvements in performance and Blade Farming's possessing the ability to acquire then retain a sustainable competitive advantage.

Traceability

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Blade uses an integrated traceability system to continually monitor, coordinate, and improve operations from "gate to plate." This enables best practices to be identified, refined, and shared by objectively and simultaneously comparing the performance of individual producers and batches of animals as they move along the value chain. Metrics used to monitor animal and producer performance include feed conversion ratios, input costs, number and severity of health incidences, genetics, daily growth rates, carcass composition, and eating quality.

Calf mortality rates reduced to less than 2% and veterinary / pharmaceutical costs reduced by over 75%.

This creates unprecedented insights. Participating producers and their strategic partners (incl. feed manufacturers, pharmaceutical companies, distributors, and retailers) have the ability to reduce costs and increase revenue by making informed decisions then monitoring the effectiveness of any changes made. Examples of the way in which this enables them to reduce costs include reducing calf mortality rates to less than 2 percent and reducing veterinary/

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pharmaceutical costs by over 75 percent throughout the lifetime of the animal. It has also provided the ability to produce beef suited to the demands of specific end markets, as opposed to forcing markets to accept what has already been produced for a generic customer and consumer. This has enabled customers to expand their market share, particularly among discerning and affluent clients who are willing to pay premiums for consistently high quality products.

In providing everyone involved with greater ability to reduce costs and risks while simultaneously increasing revenues, the traceability system has played a key role in fostering the enthusiasm and commitment that is critical to sustaining value chain initiatives and enabling sophisticated market-focused innovation.

Dedicated Team



The team at Blade coordinates the year-round production of beef by sourcing predominantly Holstein Angus cross calves directly from dairy farms and only sourcing calves from sales barns as a last resort. The latter arrangement can present health risks, variability in performance, vaccination costs associated with mixing calves from different farms, and a negative impact on Blade's ability to identify, measure, and manage the determinants of performance from birth.

The processes that Blade has implemented to achieve these outcomes – including measuring performance against key performance indicators, providing extensive forward contracts, implementing a conception to consumption continual improvement program, and establishing a Keiretsu (the Japanese word for interlocking strategically aligned businesses possessing complementary skills and capabilities) – are more akin to the automotive industry than to the red meat industry. This results in everyone benefiting from the production of highly uniformed animals, whose carcass attributes reflect market demands. The involved producers know their expected profit margin before an animal steps onto their farm. It also ensures that producers are equitably rewarded for their performance in relation to root causes and objective measures.

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To ensure as much consistency as possible, dairy producers are incentivized to use semen known to produce animals (and subsequently beef) of the desired quality and consistency from cows that will not be used to breed replacement heifers. The incentive for farmers to use the desired semen comes from Blade offering to reimburse the cost of the semen and buy the resulting calf at 14 days of age for a guaranteed price, subject to the animal being healthy and the producer having followed predetermined processes. These processes include the feeding of colostrum for a predetermined period of time and indoor housing. Holstein male calves are typically not castrated, but are instead raised as bulls to increase their rate of growth.

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From the dairy farm, calves are supplied in batches to producers who raise them on contract. For reasons of efficiency, and to minimize the potential for health issues to arise that will affect performance and profitability, calves and finishing animals are kept in batches from the point that they enter the Blade Farming system. The exact size of a batch differs by farm and stage along the supply chain, though usually ranges between 20 and 100 head. Producing animals in batches enables the people coordinating the system to ensure that everyone has the correct animals in the correct place at the correct time. Keeping animals in batches also enables Blade to continually improve performance by having the ability to more effectively identify and then address the root causes of production related issues, such as animal health and feed conversion rate. Delivering the calves in entire lots (full truck loads) versus arriving as individual animals over a period of time also reduces mortality by allowing a one-week window in which the barns are completely disinfected before being restocked.

Contractual Arrangements

Blade purchases the calves from dairy farmers for a pre-agreed price at 14 days old.

So long as male dairy calves meet required health specifications, Blade purchases the calves from dairy farmers for a pre-agreed price at 14 days old. The calves are then raised by “weaners” — farmers who are contracted by Blade to grow the calves though to 12 weeks of age. The contracts are calculated on a fee per head per calf unit,



not the price at which the calves are purchased or sold, with bonuses paid to producers whose performance exceeds predetermined targets. All feed and medicines are paid for by Blade. The contracted farmers are responsible for ensuring that processes are abided by and that they maintain a clean, healthy living environment for the calves. The financial arrangements enable farmers to budget on making a minimum income per calf, and to ensure that the majority of barns are fully stocked 90 percent of the time.

At 14 weeks of age, Blade sells the calves to a finisher. It also provides a contractual agreement for ABP (the owners of Blade Farming) to purchase the finished cattle at approximately 15 months of age. Blade offers finishers two forms of contract: a pre-agreed price per pound, or a fixed fee per head arrangement. Both are subject to the finished animals being healthy, with final prices calculated on the rail according to carcass condition and yield.

The slaughter, cutting, and marketing of the beef is conducted by ABP. The contracts enable finishers to budget on the margin they will make per head. In the fixed fee per head contract, Blade guarantees a price on dead weight, along with a formula that takes into account the cost involved of finishing the animal at the time of delivery of the weaned calf on to the finishing farm. If the market fluctuates then the producer is protected and so is Blade, as the contracts are backed up with a food service customer. This is seen as an equitable solution, as the processor guarantees producers a profitable margin for all their animals — regardless of these market fluctuations.

In the “share the pain/share the gain” contract, Blade guarantees a floor price on dead weight, along with a formula that calculates prices paid in relation to the open market.

An important element in the system's financial success is how Blade stabilizes costs of production through purchasing feed (milk and dry pellets) for the entire program from long-term strategic partners, and working with those partners to maximize the value that each is able to acquire from each other's operations. Mole Valley Farmers (MVF) are one of these partners. Examples of this include how its coordination activities enable Blade to ensure that animal feed is only delivered midweek, not on a Friday or Monday, which is when their input supplier, MVF, are at their busiest. Delivering midweek

enables MVF to profit from utilizing their infrastructure and resources more effectively. MVF also worked with Blade and Zoetis (formerly a subsidiary of Pfizer), another of Blade's strategic partners, along with meat scientists and nutritionists to produce feed formulas that are ideal for the Blade Farming system.

Another example of how partners profit from Blade's business model is how Blade secured volumes of milk powder in partnership with MVF. This allowed both Blade and MVF to benefit from protecting themselves from an uplift in global commodity values of fat used in the product for long periods of time. Blade subsequently extends the price benefit to MVF in return for MVF shipping the milk powder to Blade's producers. MVF benefit from being able to supply other customers with the same value milk powder at the regular price. This earns them a greater margin than otherwise possible.

Partnering to Profit

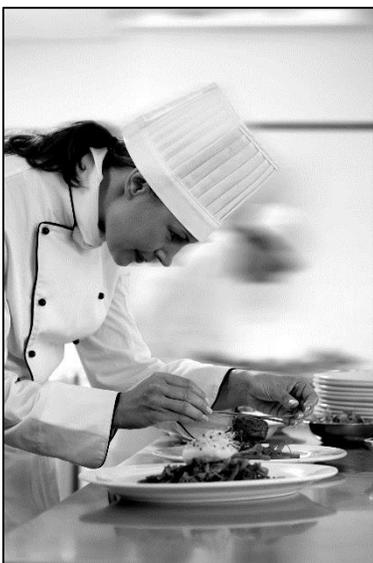
Whether a producer buys into the concept of partnering for profit or not is determined by his/her concept towards managing risk by learning from others. In the words of Paul Westaway, a finisher and breeder: *"A Blade farmer purposely identifies what the buyer wants and produces accordingly, following a coordinated market-orientated approach. A run of the mill farmer produces an animal, looks for a buyer, and is entirely at the whim of the market."*

Blade motivates each producer to produce the best possible cattle by offering them guaranteed prices.

In traditional commodity arrangements there exists the possibility of freeloaders impacting businesses' performance and profitability. Freeloaders are producers who consistently do not produce cattle to required standards, yet benefit financially from the pooling of prices. Instead of prices being pooled, Blade motivates each producer to produce the best possible cattle by offering them guaranteed prices. This enables producers to budget for the long term. It also encourages them to focus their efforts on continually improving upon best management practices, resulting in the ability to simultaneously reduce costs and increase revenues.

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What this says from a producer perspective is: *"If you follow these practices: these are the costs that you will expect to incur to produce a finished animal, this is the price that you can expect to receive, and this is the profit margin and associated benefits that you can expect to receive from being a capable and committed partner."* Whether a producer buys into the concept of partnering for profit or not is determined by his/her concept towards managing risk by learning from others.

From a processor's perspective, the system enables the abattoir to supply consistent quality meat to customers every week, compared to the abattoir sourcing animals from the commodity market, where quality, size, and yield can be highly inconsistent. As the price of cattle bought on the open market fluctuates greatly, as does the availability of animals, the Blade model means that the processor is assured a constant volume of supply of consistent quality cattle. Not having to speculate about prices and availability of animals whose meat matches customer requirements enables the processor to maximize carcass balance and optimize both capacity and labour efficiently. It also prevents them from having to push out of specification meat onto the market by discounting prices, which undermines margins.

Retailers and restaurants benefit from having an assured supply of guaranteed quality beef. As stated by Rob Shears from foodservice distributor Fairfax Meadows: *"We are not hampered by having to sell what has already been produced or dealing with issues created by inconsistent eating quality and products not meeting specifications. Instead, we are able to work with farmers to consistently produce what the market wants and focus our efforts on growing the business."*

Conclusion

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Applying practices associated with other industries (for example, automotive) versus the traditional beef industry has enabled Blade Farming to succeed in ways that would otherwise not be possible. Proactively managing the determinants of beef quality and value has enabled Blade to continually improve the entire value chain's performance. In turn this has provided suppliers, producers, and processors with the ability to strip unnecessary costs out of the system, thereby improving their bottom line.

Excerpts of a video case study on Blade Farming, developed in conjunction with the Beef Farmers of Ontario (BFO), can be viewed [HERE](#).

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