

Value Chain Financial Management

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Prepared by: Abdel Felfel, Martin Gooch, Vincent Gallant
Value Chain Management Centre
George Morris Centre
225-150 Research Lane
Guelph, Ontario
N1G 4T2

Contact: Abdel Felfel
Telephone: 519-822-3929
Fax: 519-837-8721
Email: abdel@georgemorris.org
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Contents

- 1.0 Introduction 3
 - 1.1 *Chosen Chains* 3
- 2.0 Primary Research 4
 - 2.1 *The Canadian Beef Example*..... 4
 - 2.2 *The Canadian Lamb Example* 5
 - 2.3 *The UK Beef Example* 6
- 3.0 Research Findings 7
 - 3.1 *Comparative Analysis*..... 7
 - 3.2 *Canadian Beef Chain* 7
 - 3.2.1 Legal and Ownership Structure..... 7
 - 3.2.2 Decision Making..... 7
 - 3.2.3 Contracting..... 8
 - 3.2.4 Prices vs. Margins..... 8
 - 3.2.5 Financial Risk Management 8
 - 3.3 *Canadian Lamb Chain* 8
 - 3.3.1 Legal and Ownership Structure..... 8
 - 3.3.2 Decision Making..... 8
 - 3.3.3 Contracting..... 9
 - 3.3.4 Prices vs. Margins..... 9
 - 3.3.5 Financial Risk Management 9
 - 3.4 *UK Meat Chain* 9
 - 3.4.1 Legal and Ownership Structure..... 9
 - 3.4.2 Decision Making..... 9
 - 3.4.3 Contracting..... 10
 - 3.4.4 Prices vs. Margins..... 10
 - 3.4.5 Financial Risk Management 10
 - 3.6 *Factors Determining Extent of Strategic Alignment* 11
 - 3.7 *Resulting Ability to Financially Manage Risk* 11
 - 3.8 *Summary of Comparative Analysis* 12
- 4.0 Conclusion..... 12
- Appendix A: Comparative Analysis of Each Chain’s Characteristics 14

Appendix B: Checklist For Establishing Value Chain Initiative	18
Appendix C: Suggested Reporting Template	19
Appendix D: Presentation of Research Results.....	20
Appendix E: Blade Farming	22

1.0 Introduction

Excellent strategic, operational and financial management practices are crucial to the success of any agri-food value chain. The purpose of this study was to provide examples of how red meat value chains address the four main elements of financial management issues: 1) Liability; 2) Equity requirements; 3) Profit and transfer pricing arrangements; and 4) Governance. Three red meat value chains were chosen for the study.

While value chains have been recognized as the best business model for creating sustainable competitive advantages, their success relies on the involved businesses sharing a common vision and goals, and possessing similar expectations. This can lead to the development of a well-defined internal relationship and the potential for all the involved businesses to benefit from the opportunities presented. This project was undertaken to provide parties interested in forming closely-aligned value chains with specific information regarding management arrangements that would alleviate the financial risk associated with value chain formation and implementation. Research results were provided in the form of this report, along with an interactive workshop to industry. Comparisons of each chain across multiple factors form Appendix A; factors to consider when establishing a closely-aligned value chain form Appendix B; reporting structures that would aid the establishment and operation of a closely-aligned chain form Appendix C; copies of presentations made to industry form Appendices D and E.

1.1 Chosen Chains

Many attempts have been made to describe what differentiates a supply chain from a value chain. In taking a dualistic (black and white) approach to arguing that supply chains and value chains are two different entities and cannot exist simultaneously, commentators miss two very simple though obvious facts. The first is that what lies at the heart of a successful strategy is the way in which the involved businesses are managed. The second is that, as with any managerial practice, the ability to manage a chain has to be learned and is, therefore, an ongoing process. It is therefore impossible for a 'supply chain' to simply morph into a closely-aligned 'value chain'. For these reasons, the study focuses on detailing the managerial styles of three chains that are at different stages of forming themselves into closely-aligned value chains, in particular, the arrangements used to create, capture, then share financial value among the participants.

The chains that form the basis of this study were chosen for five main reasons. The first was because they are at different stages of development. Secondly, they were established for different reasons – often in reaction to external forces. Thirdly, they are characterized by different structures and operations. Fourthly, their structure and method of operation, along with their market opportunities and the nature of the challenges that they face, have been impacted by a combination of internal and external factors. Fifthly, all of the participants joined and remain part of the chain because they believe their involvement enables them to mitigate risk and capture value in ways which could not be achieved if operating in the same way as the wider 'commodity' sector. The hope is that, in taking this approach, the research results will provide practical insights and guidance to any meat chain, regardless of their stage of development and the environment within which they operate. It is also hoped that taking this approach will enable the findings to inform wider discussions among industry stakeholders, including the impact of government policy on the businesses which together comprise the wider industry.

The chains' structure and method of operation was researched through interviews conducted with senior managers located strategically along each of the chains. For reasons of commercial confidentiality, all the chains are reported anonymously. Each of the chains reflects one of the three structures that

previous research has identified as commonly existing in terms of how chains are developed and managed. Termed 'cooperative', 'coordinated' and 'collaborative', the three options present their participants with a different set of rewards, opportunities and risks. Factors characterizing each of the three structures are described in concise terms below:

Cooperative: Companies possess a mutual understanding that they will *cooperate* with each other, ahead of choosing to work with undertaking specific short-term, one-off business deals. Therefore, there is little strategic planning or behaviour, which leads them to operate on a largely transactional basis. Whether a chain's structure can develop further, to reflect a more strategically aligned approach to business, may be determined by the environment in which it operates and competes against other businesses.

Coordinated: Companies possessing complementary cultures and leadership styles choose to *coordinate* their business arrangements over a short to medium timeframe. A more strategically-aligned structure than the above example results in at least part of the chain thinking and acting from a strategic and not just transactional perspective. Given the required resources and a suitable environment in which to operate, as the participants come to steadily acknowledge the benefits of conducting medium-term business deals with chosen suppliers and buyers, some develop into the third type of structure.

Collaborative: Companies engage in longer-term strategic business arrangements that involve *collaboratively* investing and sharing resources to achieve mutually-beneficial outcomes. Successfully adopting this type of model requires the businesses to possess compatible cultures, vision and leadership. It also requires an external environment which is suited to supporting and enabling such an approach. While the model can undoubtedly produce greater rewards than the two alternative models, it also brings increased risks, particularly for chains that are still developing or who possess insufficient chain management skills.

2.0 Primary Research

The research team identified three meat value chains that had been established with the purpose of enabling the participants to better manage financial risks and differentiate themselves through means that they believe could not be achieved if they continued to operate the same way as the wider commodity industry. Insights into how each of the chains operate, and why, were gathered through interviews conducted with farm owners (producers) processors, marketers and retailers. To enrich the findings and increase their applicability to the wider Albertan red meat industry, the research team selected two Canadian value chains and a UK value chain. The first Canadian chain supplies beef to retailers in Canada and internationally, as well as foodservice operators in Canada. The second Canadian chain supplies lamb to the Canadian retail sector. The third chain studied, a UK beef value chain, supplies UK retailers and foodservice operators. The primary reason for including a UK chain was because few large and truly collaborative red meat chains exist in North America.

2.1 The Canadian Beef Example

The Canadian beef example is a developing value chain that was initiated by a primary processor in response to the BSE crises in Canada. The processor initiated the chain by attracting cow-calf producers and feedlot operators to become participants and shareholders. The processing company in which the producers invested owns a small distributing company that specializes in supplying the foodservice sector. The processor also supplies domestic and international retailers.

Believing that vertical integration was the correct way to establish a red meat value chain, the partnership began with the objective of establishing strategic relationships with other members of the value chain: value added processors; food service fabricators; distributors; and domestic and international customers. It sought to base management decisions on three core values: focus on customers and consumers; enable and motivate collaboration among the participants through the sharing of information; and establish production protocols (that included cattle selection, age and source verification, and HACCP based systems) to facilitate continual improvements in processes and performance.

Unfortunately, however, while the expectation behind the chain's establishment and the decision to jointly invest in infrastructure was to enable the participants to take a strategic approach to business, the majority of processes and decisions remain transactional and prices are based on the commodity market. Producers are disorganized and no penalties exist for those who decide to sell live cattle to the US (rather than the Canadian processor) when spot market prices are higher in one market than another. As well, while the chain has protocols for animals' drug and medication feed withdrawal, no emphasis has been placed on improving the desired eating qualities of the beef produced. In addition, key performance indicators are not well communicated throughout the chain.

This leads to the majority of producers' business decisions continuing to be triggered by a need to market animals when they meet certain ages and weight. Cow/calf producers raise their animals to a specified time, then sell these calves (at commodity prices) to feeder operations by an additional time frame. Finished animals have to be sold prior to 30 months of age. These animals then head to auctions or are purchased directly by the processor. Whether purchased through auctions or directly from producers, the processor buys finished cattle at market prices - with a poorly-defined premium, based on the quality specification and weight. Then, the processor sells beef to the distributor who sells it to food services or retailers through sales representatives. The distributor has tried to develop quality programs with foodservice customers, though have had little success. Primarily because the chain has not developed a strategic approach to countering customers' transactional-focused attitudes and behaviour, the chain's retailer customers continue to have greatest influence over its decisions.

While the chain has significant opportunities to improve beyond its current performance, its current structure and business model prevents it from achieving its full objectives. In particular, so far the participants have not been able to significantly reduce their exposure to financial risk and consistently maximize their profitability. A key reason for this is an absence of trust and information exchange between the individual links and along the overall chain. None of the players along the chain have an assurance of being profitable and the ultimate consumer may or may not receive a high quality eating product.

2.2 The Canadian Lamb Example

The Canadian lamb chain was established in an effort to secure an increased supply of Canadian lamb following increased demand for lamb among a diverse Canadian population. The processor, who slaughters, processes and packages meat at the same plant, played a primary role in developing the current business model. The processor took on the role of trying to source a greater supply of local lamb through encouraging farmers to diversify operations and increase lamb production. This has led to somewhat more coordination occurring between producers and the processor than in the above beef chain, though the extent of coordination remains limited.

To secure year-round supply in an environment typified by harsh winters, production arrangements differ between lambs produced in the winter versus the summer. Winter-bred lambs are raised on grain and sold at four months of age, due to growth rates being higher when grain fed. However, this is a more expensive method of production. Summer bred lambs are sold at five to six months of age and are grass fed, which makes it a less expensive endeavour. Lamb producers have complete responsibility for and ownership of their lambs to the point of sales to the processor. With no previously agreed pricing arrangements or room for negotiation, farmers sell their animals to the processor at prices based on the commodity market. Farmers are paid by either live weight or rail weight (after slaughter). As rail payments are determined by precise specifications relating to grade, yield and weight, producers can secure higher prices by taking this route versus selling by live weight. Penalties and rewards are also based on producers' ability to consistently meet the processors desire for 125 lbs live weight lamb. The processor sells lambs by the carcass directly to retailers. It also sells primal and sub-primal cuts to restaurants, food service and wholesalers – who supply both retail and foodservice. The final customer (in this case a retailer) seems to be the most influential player in the chain.

Greater information sharing throughout the entire chain would enable the entire chain to improve their individual and overall profitability and capture greater value through increasing overall customer satisfaction. Key performance indicators are not well communicated though the chain, including between the processor and producer. While more communication occurs between producer and processor versus processor and retailer, the involved lamb producers are mainly price takers with no arrangements set in place that would enable them to more clearly predict profit margins. The current arrangements also discourage the participants from experimenting with different genetics or production protocols, or sharing information in a manner which would enable them to learn and adapt in direct relation to market demands.

2.3 *The UK Beef Example*

The UK beef chain is a well-developed value chain that focuses on guaranteeing profits for all the participants through motivating every link in the chain to coordinate their operations, resulting in the ability to produce consistently high quality beef. This chain's protocols are based on scientifically tested processes that lead to the production of beef with desired eating qualities. The chain works on a batch system. One company acts as the chain champion. It coordinates the entire chain, thereby ensuring that the processes and procedures occurring along the chain lead to the production of the correct animals, at the correct place, at the correct time. The company that coordinates production also coordinates the ordering and supply of feed (milk powder, concentrates, etc.) to each of the involved producers. This benefits the producers through providing better feed prices than if purchasing individually. It benefits the producers and the overall chain by providing insights into which producer and genetic mix are achieving the best feed conversion rates.

The operations begin with the processor specifying to a dairy producer the semen they must know from experience has the greatest chance of producing a calf that meets the processor's specific requirements. Depending on producers' history in working with the chain, the processor will subsidize the price of semen – further ensuring that the finished cattle meet its requirements for quality and yield. If the resulting calf meets certain quality and health criteria, the farmer receives a guaranteed price for the calf at 14 days of age. The majority of the calves that pass through the chain are Holstein/Angus crosses.

At 14 days of age, the calves are purchased by the processor. The calf is then transferred to a weaner, a farmer who has been contracted to produce calves according to pre-determined protocols for a 12-week period. A weaner can reject a calf if it does not appear to be healthy or meet required quality standards. Weaners are assessed for the numbers of calves that they can put through their system, on a four times

per annum (quarterly) rotation. This provides a one-week gap, during which time the pens are sterilized. This process leads to healthier calves, which in turn reduces mortality rates and increases growth rates. At the age of 14 weeks, the calves are sold to a finisher with a contract that stipulates the prices that they will receive for the finished cattle, subject to meeting pre-determined criteria. The target carcass weight of 260-270 kg is reached by all the cattle within 12-15 months of age.

The expectation is that the contract weaners will make ~\$70 per calf. If performance matches expectations, they also receive premiums that can total ~\$15 per calf. Finishers can make a margin of \$136-\$160 per animal. The arrangements ensure that weaners and finishers receive a group of highly consistent animals, their ages ranging by no more than 2-3 weeks and their health is guaranteed. Simultaneously, it limits the processor's exposure to financial risk.

Key performance indicators are well communicated throughout the chain. Calves and producers are also constantly assessed according to specific performance indicators, the results of which are shared at set times during the production period and the year. When the finished animal is slaughtered, the front half goes to a major fast food chain, the rear half goes to a major national retailer, and preferred primals go to foodservice. From conception to processing, all business decisions are based on research into factors impacting eating quality. The precise marketing stream for animals to the retailer's chain depends on the quality of the meat. Prime quality is aged for 21 days before being retailed as premium quality beef. This same company is currently making financial arrangements with banks that will allow producers to easily access capital, thereby mortgaging the cattle they are producing, on contract, for the program.

3.0 Research Findings

3.1 Comparative Analysis

Following is a description of the characteristics, along with the pros and cons associated with each of the chains studied. The descriptions reflect the chains' differing legal and ownership structures, decision making processes, relative focus on prices versus margins and their overall approach to risk management. The section begins by setting out each of the chain's characteristics individually. It ends with a brief comparison of the factors found to characterize each of the value chains' structure and financial models. A direct comparison of factors found to characterize each of the chains' strengths, weaknesses, operating styles and governance structures also forms Appendix A.

3.2 Canadian Beef Chain

3.2.1 Legal and Ownership Structure

There are 10 links within the Canadian beef chain: cow calf; feeders; auction (at times) slaughter; processor; packaging; distributing/shipping; wholesale; retail; and food services. While certain cattle producers are shareholders in the processing and meat packing company, which also owns the distribution company, the cross investment and partial vertical integration has not translated into a shared vision or common strategy. Each participant in the chain retains complete ownership and responsibility of animals (or meat) at their specific link in the chain.

3.2.2 Decision Making

In the Canadian beef value chain, there was no evidence of a joint decision-making process, regardless of the cross investment and partial vertical integration. The producers who supply the processor remain disorganized and no single company plays an effective leadership role. Having no standard measures or

metrics in place to monitor performance means that costs of production are more of a 'guesstimate' than a 'known' factor. This means that the basic tenant of value chain innovation, the ability to compare performance across the chain to identify causes and effects of differences in production effectiveness (leading to greater efficiency), is beyond the chain's current capabilities. Only the drug and medicated feed withdrawal programs were requirements to which animal producers must comply. The final customer's weekly orders are the driver of the whole chain. A few pieces of information that are produced, though not shared throughout the chain, are bi-weekly cattle inventory reports, monthly financials and suppliers cost updates. The demand and forecast process is almost entirely subjective.

3.2.3 Contracting

In the Canadian beef value chain, there are no long-term contracts except contract pricing on steaks for annual contracts to allow menu price setting. The prices paid from customers are based on the commodity price. Live animals could be on a 'Market Plus Agreement' but there is no contract and if the product does not meet specification, the customer will pay a lower price. At the retail level, rebate programs are based on hitting sales goals, quarterly rebates.

3.2.4 Prices vs. Margins

Due to a lack of long-term arrangements or contracts, commodity market prices are used to price inputs and outputs in the Canadian beef value chain. Occasionally, the customer will offer suppliers an incentive related to quality/yield, though these are also based on the commodity market price. At the retail level, shrinkage levels were found to be one of the most important factors in determining prices. On occasions and for specific markets, the marketing arm of the chain will consider other partners' margins when making their business decisions.

3.2.5 Financial Risk Management

Cattle producers identified three main factors as financial risks: disease outbreaks; market access; and tariffs. The beef processor considered quality of supply, loss of supply and market access as highest risks. In terms of financial risk management, all chain participants were reactive in dealing with the financial risks. Having no agreements or contracts between any two links along the chain means, however, that every participant is left to manage their business risks on an individual basis. This leads to commodity market prices determining whether each link is profitable or not.

3.3 Canadian Lamb Chain

3.3.1 Legal and Ownership Structure

The Canadian lamb value chain has eight links: producer; slaughter; processor; packaging; distributing; wholesale; retail; and food service. It differs from the Canadian beef value chain, in that more coordination exists between producers and the processor and there is less cross investment. The lamb producers have full responsibility and ownership over their animal. The lamb processor owns and operates the slaughter, processor, packaging and distributing facilities. Partial vertical integration is common in the Canadian meat value chains. In this lamb chain, there is strong evidence that the vertically integrated lamb processor focuses on maximizing his profits and not offering incentives to other partners in the chain.

3.3.2 Decision Making

In the Canadian lamb value chain, there was no evidence of a joint decision-making process. Customers' weekly orders drive the chain's operation and management decisions, which reflects a transactional

rather than strategic approach to business. The only protocols to which producers must comply are withdrawal periods for drug and medicated feed prior to slaughter. Therefore, beyond signing an affidavit indicating that the lamb was free from drugs for a specified number of days prior slaughter, most producers do not provide any information to the processor. Little information (only weight, grade and price) flows from the processor to producers, and then only if the lamb is purchased directly from the producer and sold on the rail. Similar to the beef example, this prevents the chain from having objective accurate insights into costs of production, or being able to identify then act upon causes and effects; both of which are required to continually improve performance.

3.3.3 Contracting

In the Canadian lamb value chain, there are no long or short-term contracts. Lack of pre-agreed arrangements can mean that the processor lacks processing capacity at high points in the season, which forces farmers to take their shipments elsewhere. This incurs additional costs and lessens farmers' commitment to the chain. No contracts exist between the processor and the vast majority of its customers.

3.3.4 Prices vs. Margins

The commodity market price is the only factor in pricing inputs and outputs in the Canadian lamb value chain because of the lack of long-term arrangements or contracts. However, while the processor calculates farmers' payments on commodity prices, it charges end-customers a premium for consistency. A lamb producer stated that "farmers are price-takers and must accept the price paid by their customers, leaving no room for negotiation." At the retail level, shrinkage was found to be one of the most important factors in determining prices.

3.3.5 Financial Risk Management

Lamb producers identified three main factors as financial risks: disease outbreaks; market access; and tariffs. Lamb processors considered loss of supply and market access as the highest risk. In terms of financial risk management, all chain participants were reactive in dealing with the financial risks.

3.4 UK Meat Chain

3.4.1 Legal and Ownership Structure

The legal and ownership structure of the UK value chain reflects the strategic approach that it takes to producing, processing and marketing beef. There are six contractual links in the chain: dairy; calf rearer; finisher; slaughter; processor; and retailer/foodservice. The processor purchases the calf from the dairy producer, engages the rearer on contract, then sells the 14 week animal to the finisher with a contractual arrangement. The meat processor buys the animal back on a pre-agreed pricing arrangement subject to it meeting specific criteria: age of slaughter; yield; fat cover; and weight. This arrangement enables the processor to have greater control over the calves entering the system. It also provides the processor with greater insights into the genetics and production methods that result in an animal that best meets its requirements; and enables the processor to plan supply and marketing arrangements many months in advance. It also motivates all the members to performance to the best of their ability, and remain committed to the chain.

3.4.2 Decision Making

The chain works in harmony, the chain champion knowing 18 months in advance what animals they have in the system. There is a forecasting system in place at the meat processor. They rely on customers

to give them forecasts based on sales data and number of stores/restaurants coming on stream. They also provide seasonal profiles, such as expected changes in desired cuts. This assists the processor to better balance carcasses.

The resulting information is translated into production programs by the chain champion. Food service buyers are more accurate and proactive in providing forecasts than retail. This helps the processor achieve carcass balance – e.g. sell a lot of steaks in summer, and a lot of other products in the winter. The production programs ensure that the chain has enough cattle coming off grass to match the customer requirements profile (i.e. steaks versus other cuts). Every player in the chain knows what he/she will be doing and receiving in a coming year.

3.4.3 Contracting

Long-term arrangements and contracts are the key to the UK beef chain's success. The chain champion contracts its preferred dairy calf suppliers and Aberdeen Angus suppliers, as well as rearers, finishers, feed and calf suppliers. They also have contracts with customers supplying branded products. To guarantee greater consistency to consumers, the chain is also the sole supplier for a branded line of beef products sold by one of its foodservice customers.

Weaners receive a payment that is calculated on a projected profit margin for their operation. This price is paid subject to the animals meeting required health and performance criteria. The program includes a risk-sharing agreement where, should the calf die, the chain champion will help offset the costs incurred by the producer. The feed is purchased in bulk by the chain champion, which in turn reduces producers' costs compared to the costs they would incur if they were purchasing feed as an individual producer. The chain champion also provides a preventative veterinary service, which visits each "weaner" operation at least once per month.

The finisher raises the calf according to one of two types of contract. The first is a guaranteed price, subject to the finished animal's conformation and health. The second is "share the pain or gain". Here, a benchmark price is agreed, then the processor and producer share (50/50) any differences between the agreed price if market prices fall below or rise above that benchmark.

3.4.4 Prices vs. Margins

In the UK beef chain, the goal is minimizing waste and maximizing profits through producing highly consistent, high quality products. Negotiations primarily revolve around margins and the performance required for each member of the chain to achieve those margins, not prices received. A key role of the chain champion is to provide every participant with an opportunity to increase their margins by producing a more consistent, higher quality product more effectively - for which the chain can charge higher prices.

As with all systems, some farmers are highly consistent and do things extremely well, others do not. A key difference between this and the other two chains is that the chain champion actively prevents free riders from being accepted into the chain. This is achieved through constantly measuring each individual's performance and establishing a cost model that does not take lesser performing farmers into account. This means that the system does not underwrite people that are not lowest cost (most effective) producers.

3.4.5 Financial Risk Management

Unlike the two Canadian chains, the UK beef chain views auctions as a source of unnecessary financial risk. They work to produce high quality products that are not highly impacted by the commodity market price or trade restriction. The greatest risk they face is producing lower quality products. As selling into

the commodity market is what hurts their businesses the most, everyone in the chain manages financial risks through focusing their efforts on guaranteeing a high quality product. Statements made by two of the chain's participants reflect their approach to business:

"We reduce waste and death by limiting the likelihood of profits being impacted by out-of-spec calves, not meeting age or weight."

"If animals are not sold to finishers because they do not meet specs, they must be sold through auctions which hurt us financially. Similarly, buying through auctions creates added costs through increasing inconsistency."

3.6 Factors Determining Extent of Strategic Alignment

The *cooperative* chain was found to be entirely a 'push' system. Its operations are driven by a need to sell animals at a certain point in time. While a chain champion is trying to form a more strategically-aligned chain, the present system is perpetuated by an inertia that stems from a general attitude that government will bail producers and industry out if they lose money. This leads to a general perception among many of the players that the risks faced by the chain will only ever reach a certain magnitude – so there is no real need (driver) to change.

The *coordinated* chain's development was primarily driven by the processor's need to remain financially viable, through having greater access to consistent volumes and quality, and to remain competitive in an industry typified by limited capabilities at the producer level with a significant imbalance between supply and demands. Thus, they were remaining competitive against lower cost imports, something which is being aided by those same competitors being impacted by environmental factors (such as a drought in Australia).

The *collaborative* chain was primarily driven from the recognition that, only by thinking and acting strategically could UK producers successfully compete against lower cost importers. The chain champion recognized that the ability to achieve this depended on developing a different business model to that followed by the wider beef industry. The model that looked most likely to succeed only existed in innovative elements of the automobile and manufacturing sector. This model focuses on reducing costs and capturing value through identifying how to continually improve the effectiveness of the chain by redesigning processes, not by seeking to make processes that already existed more efficient.

3.7 Resulting Ability to Financially Manage Risk

The two Canadian meat value chains lack the establishment of a well-defined, shared vision and processes that determine and force participants to abide by pre-agreed responsibilities, and according to which, they are rewarded. This is a direct result of them not possessing clear key performance indicators and an effective communication strategy that extends along the entire chain. Continuing to base management decisions on commodity market prices also limits the extent to which participants from along the Canadian chains are motivated to work together to develop sustainable competitive advantages.

Each participant in the Canadian meat value chains is individually responsible for facing external and internal risks. Producers are supposed to focus on the quality of their production, not on the commodity market fluctuations. However, the business models adopted by the two Canadian meat chains do not guarantee profits of margins for any participant, which severely limits producers' willingness to commit to supplying the chains – particularly when spot market prices are higher elsewhere. As a result, no one in the chain is immune to losing money/business. Moreover, businesses that are driven by commodity

market prices tend to focus on efficiency (doing things right) factors, however, these businesses are less likely to focus on being effective (doing the right things). Therefore, the Canadian chains' ability to reduce waste and maximize margins is minimal compared to the more strategically aligned UK chain. In addition, the loose governance structures and a lack of commitment within the Canadian meat chains allows chain participants to take advantages of higher prices or better deals that could be offered by their partners' competitors. This opportunism does not exist in the UK beef value chain.

The UK beef value chain is a role model for any food value chain. In this chain, the chain champion and participants have established a strategic alliance with shared vision, communication channels, well-defined responsibilities and rewards. From the outset they ascertained that their sustainable competitive advantage rested on the ability to produce premium quality products more efficiently and consistently than would otherwise be possible. Each partner in the chain is guaranteed certain profits margins, depending on their performance. Their motivation for adhering to set protocols is further strengthened through mechanisms that reward and penalize individual producers according to their own performance – not the performance of others. Financial risks, including loans and animal mortality, are managed by the chain champion. The best risk management strategy for the chain partners is focusing on producing the highest possible quality. The chain seeks profits through being effective by producing differentiated products and being efficient by minimizing waste.

3.8 Summary of Comparative Analysis

A key finding of the comparative analysis is that the attitude of the chain champion and the involved participants together, determine the model adopted by each of the chains and their ability to continually improve their overall performance. This focus on achieving desired outcomes through designing and implementing processes that had been developed through scientific evaluation, versus seeking to make existing processes more efficient, is a critical factor that differentiates the Canadian and UK chains. This means that effective financial management is a direct result of the attitudes and culture which exist within a chain. These are themselves an outcome of the value chains' structure and governance model. Therefore the ability of a value chain employ effective financial risk management processes is therefore more closely related to these factors than whether they possess superior financial management and accounting skills. This may be contrary to traditional perspectives.

It should also be noted that the structure of the UK beef industry may facilitate chain development more than occurs in Canada. In part because it has not been impacted by the legislation that exists in Canada, for example, how Federal vs. Provincial inspection has led to the existence of a few large processors. The UK industry has a larger number of smaller processors, each of which are able to serve any customer – regardless of their location in the domestic market. This enables smaller innovative processors and suppliers to gain a foothold in mainstream retail markets more easily than can be the case in Canada.

4.0 Conclusion

The research found that how a chain portrays publicly is not always an accurate representation of how it operates in practice. The pre-requisites for establishing a closely-aligned, red meat value chain relies on having the correct processes in place (which flows from the chain primarily focusing on effectiveness, not efficiency) and only working with likeminded partners. It also relies on possessing the ability to define the correct markets for the chains' products and differentiate those products in the eyes of customers and consumers.

The research findings also show that a well-established value chain should not rely on the commodity market (including auctions) as its primary means of determining prices and incentivizing the participants

to remain committed to the initiative. Adopting a more market-orientated approach relies on the chain champion, the individual(s) who lead the chain's formation and execution, possessing a strategic vision and adopting a manufacturing/marketing approach to business. In the case of the UK chain, this led to the chain determining precisely what it wanted to achieve strategically, then establishing appropriate processes and governance (management) structures. This is significantly different to the approach taken by the two Canadian chains. The Canadian beef chain sought to improve the marketing element of the chain without making anything other than minimal changes to other processes occurring along the chain; the lamb chain sought to modify currently existing processes for sourcing lamb. What each of the three chains has been able to achieve financially and in terms of the ability to manage risk, along with how each of the participants has benefitted accordingly, stems directly from these differences and the resulting structures. It must be noted, however, that factors found to be impacting the extent to which Canadian chains are able to follow the UK example include current legislation surrounding provincial versus federal inspection, followed by risk management programs enacted at the provincial and federal level.

From a strictly financial perspective, possessing accurate information on costs of production and margins, which can be used in negotiations with the rest of the chain, was found to be the primary requirements to creating and capturing value. This ability hinges on each and every member of the chain possessing detailed insights on production costs and performance, and having access to accomplished operational and accounting skills. It also rests on them possessing the motivation to develop or seek out, then apply those skills. Another key factor differentiating the UK and Canadian chains, which motivates their members to continually improve their management skills (including accounting), is that the UK chain actively seeks out, then expels, free-loaders, that is, those participants who are not committed to working collaboratively and being accountable for their performance.

In any situation, the existence of free-loaders negatively impacts the chain's performance and the benefits it could provide to the remaining participants. Neither of the Canadian chains has adopted a meaningful approach to dealing with free-loaders: the beef chain largely because the overall system and attitudes that exist among the participants limits their ability to manage free-loaders; the lamb chain largely because an imbalance between supply and demand limits their choice of supplier. The ability to manage free-loaders, leading to greater consistency in quality and overall performance, also stems from how equity, ownership, financial arrangements and resulting liability differs in the UK chain versus the Canadian chains. In the UK chain, no calves are purchased through sales yards (auctions); they are all purchased directly from producers. Another difference is that the processor takes ownership of the calves at ~14 days of age, before selling them (complete with a purchasing contract for the finished animal) to finishers at 14 weeks of age. Supported by a small team of dedicated staff, this enables the processor to have considerably more control over the health, breed and source of calves entering the system. It also enables it to have greater assurance of supply and end quality, which reduces costs. In addition, it provides the ability to forecast precisely what meat and quality will be available at a specific point in time. This enables it to work closely with preferred customers, those supplying consumers for whom premium quality is equal or more important than lowest price. These arrangements limit all the participants' exposure to financial risk. They also provide the chain with unique opportunities, which neither of the Canadian chains is able to capture at this point in time.

Appendix A: Comparative Analysis of Each Chain's Characteristics

Factor/chain	Canadian beef chain	Canadian lamb chain	UK beef chain
Location	Canada	Canada	United Kingdom
Current activities	Calf production, cattle finishing, slaughtering, processing/packing, and distributing to domestic or international retailer and/or food service.	Lamb production, slaughtering, processing and distributing to domestic retailers.	Genetics selection; producing calves that meet the finisher requirements; producing cattle that meet processor's the requirements; producing beef meeting customer requirements.
Driver of the chain's development	Need to sell animals at a certain age/weight, then sell the resulting beef.	Lack of supply.	Minimizing waste, using objective science to redesign and improve processes, maximizing profit.
Instigator	Marketer	Processor	Foodservice customer
Orientation of decision process	Push	Conceptual pull	Predominantly pull
Balance of operations vs. strategy	<ol style="list-style-type: none"> 1. Operations largely reflect traditional approaches and attitudes. 2. The marketer attempts to achieve its desired strategy by coordinating current processes more effectively. 	<ol style="list-style-type: none"> 1. The processor is taking an increasingly strategic approach to sourcing lambs. 2. Extent to which strategy can be acted upon is a function of lack of supply and many producers' attitudes. 	<ol style="list-style-type: none"> 1. Strategic vision, with operations developed to reflect that vision. 2. Operations monitored and managed through using KPIs that reflect that vision. 3. Careful in selecting customers and suppliers.
Source of primary resistance	<ol style="list-style-type: none"> 1. Inertia stemming from attitudes that reflect a perception that risk is finite and short-term. 2. Lack of accountability. 	<ol style="list-style-type: none"> 1. Lack of capable progressive producers. 2. Retailers' price-orientated and transactional attitude. 3. Limited accountability. 	<ol style="list-style-type: none"> 1. Competing suppliers of finished beef. 2. Wider industry attitudes.
Source of greatest strength	<ol style="list-style-type: none"> 1. Belief that there is a better way. 2. Knowledge of foodservice sector. 3. Existence of strong 	<ol style="list-style-type: none"> 1. Processor believes in strategic alliances. 2. Experience and knowledge about entire chain. 	<ol style="list-style-type: none"> 1. Strategically aligned with likeminded individuals. 2. Objective data basis of individual accountability. 3. Ability of the individuals and

	transactional relationships between key members.		chain as a whole to learn and adapt to market demands.
Greatest weakness	<ol style="list-style-type: none"> 1. Investors are traditionalists with a trading mindset. 2. Lack of infrastructure. 3. Often marketing what is already been produced by people outside of the system. 4. Not strategically aligned with like-minded people. 5. Much of the chain focused on selling, not marketing. 	<ol style="list-style-type: none"> 1. Limited capability to implement desired changes. 2. Limited ability to use objective data as basis for establishing individual accountability. 3. Extent of commitment ranges widely among producers. 4. Much of the chain focused on selling, not marketing. 	<ol style="list-style-type: none"> 1. That the UK beef chain supplies a smaller overall volume of beef compared larger commodity focused competitors, limits the chain's ability to influence the purchasing decisions of large customers.
Differentiated meat products	Commodity	Commodity	Differentiated meat products
Relationship type	Cooperative	Coordinated	Collaborative
Commitments of the chain partners	Partners are not committed, largely involved because the current business relation is convenient.	Most of the partners are not committed, but see the current business relation as convenient.	Partners are committed to their roles in the chain.
Chain champion	No one in the chain has adopted a true champion type role.	Processor is a quasi-champion.	A dedicated company with strategic links to a progressive processor.
Shared vision	There is no shared vision.	There is little shared vision.	The chain partners have a shared vision.
Legal and ownership structure	Partial vertical integration - four independent economic entities own the eight links of the chain.	Partial vertical integration - three independent economic entities own the seven links of the chain.	Independent economic entities working collaboratively with chain champion.
Mechanisms for liability, equity requirements, and transfer pricing	There is no mechanism for liability, equity requirements, and transfer pricing. Commodity market prices are the basis for any transaction.	There is no mechanism for liability, equity requirements, and transfer pricing. The commodity market price is base for any transaction.	The chain champion arranges financing arrangements for growers. Margins are guaranteed based on performance.
Decision making	There is no evidence of a joint decision making process.	There is no evidence of a joint decision making process.	All decisions made in the chain are based on 18 month accurate

			forecast. The chain champion communicates the forecasts and each player in the chain makes their plans accordingly.
Communication flow	The communications are limited to individual transactions. The majority of information is retained by the individual business and not shared. The demand forecast process is subjective.	The communications are limited to individual transactions. The majority of information is retained by the individual business and not shared. The demand forecast process is subjective.	Considerable objective and verifiable information is communicated throughout the chain on a regular basis. Information shared electronically, face-to-face, and through printed reports.
Monitoring performance	Each link keeps its own records. Management decisions are often subjective and based on assumptions. The KPIs are not well defined or communicated. Incentives are not clear.	Each links keeps its own records. Management business decisions are often subjective and at times are based on assumptions. The KPIs are not well defined or communicated. Incentives are not clear.	Each downstream link reports on the performance of its upstream partner. KPIs are clearly communicated: average arrival weight at each unit, average departure weight from each unit, time on farm, # of calves in batch, amount of feed consumed, # of calves sold off as non-performers, daily live weight gain, and health issues. Incentives are clear, well-established and communicated.
Financial risks	For farmer: disease outbreaks, market access and tariffs. Processors considered quality of supply, loss of supply and market access as highest risk.	For farmers: disease outbreaks, market access and tariffs. Processors considered quality of supply, loss of supply and market access as highest risk.	Inconsistency through having to dispose of commodity quality products through auctions or discounting prices to end customer.
Financial risk management	Reactive	Reactive	Proactively ensuring high quality products and lack of wasted effort
Profitability	No guaranteed profits/margins.	No guaranteed profits/margins.	Guaranteed (target) profits /margins.
Sustainability	Subject to the commodity market	Subject to the commodity market	Sustainable, despite fluctuations

	price. Negatively impacted by no member of the chain is penalized for selling/buying outside of the chain if react opportunistically to changes in commodity market prices; and continuation of distrustful relationships.	price. Negatively impacted by members of the chain rarely being penalized for selling/buying outside of the chain if they react opportunistically to changes in commodity market prices, and still developing relationships.	in the commodity market. Each member is accountable for their individual performance, and able to benefit from seeking to innovate within pre-determined parameters –and learn by comparing performance with other participants.
Pros	Has potential to differentiate itself from wider commodity based industry, and reward committed partners accordingly.	Has a firm foundation from which it can grow and gain partners' commitment through greater sharing of rewards and learning.	Lower financial risk. Able to learn, then use knowledge to adapt: resulting in sustainable and profitable business.
Cons	Higher financial risk. Lack of sustainability. Lack of guaranteed margins.	Higher financial risk. Lack of sustainability. Lack of guaranteed margins.	Focused on quality, not volume, at times limits market opportunities
Lessons Learned	The quality incentives need to be well-defined and communicated throughout the chain. Processor should adopt mind-set and structural changes in order to achieve their goals. Key to value chains' success is shared vision, effective strategies, and committed partners; not common ownership throughout the chain.	Priced paid to farmers should be based on the average cost of production. The quality rewards should be shared throughout the chain. Lamb growers should receive their share of the consistency premium that the processor gets. Processor should commit to sharing demand forecasts with lamb growers to help them plan their operations.	Choose partners carefully. Establish strategy, then create the processes required to achieve the strategy. The chain champion is key factor in the success of any chain. Ability to manage financial risk primarily an outcome of having correct processes and committed partners. Producing differentiated products that can be verified by 3 rd party can also limit financial risks. Need for clearly defined roles, responsibilities & accountabilities; with performance evaluation through the existence of objective verifiable data.

Appendix B: Checklist For Establishing Value Chain Initiative

Step	Activity
1	Define vision.
2	Define relative importance of product and service attributes that are critical to satisfying target customers/consumers?
3	Define what current suppliers are not providing in terms of products and performance. <i>Or if improving current chain, gaps in present vs. desired performance.</i>
4	Define true causes of present problems/challenges.
5	Determine structure of chain required to enable participants to manage financial risk by minimizing exposure to liabilities and fluctuations in the commodity market. <i>Including: number of participants, nature of each operation, ownership arrangements, contractual arrangements.</i>
6	Identify champions who will oversee operations at each link of the chain, and coordinate operations through closely communicating with other links and their own stakeholders.
7	Define expertise required to address challenges. <i>E.g. meat scientists, animal nutritionists, process improvement specialists, financial specialists, accountants.</i>
8	Develop processes required to address current issues/challenges/opportunities.
9	Define KPIs and systems required to monitor performance, and regularity of reporting.
10	Develop system for gathering and analysing information.
11	Determine inputs (ie. genetics, feed, infrastructure) required to achieve desired outputs.
12	Develop governance system required to manage system, including roles and responsibilities.
13	Determine who will be accountable for the performance of each link in the chain.
14	Set performance targets for each primary participant, and the chain overall.
15	Develop incentive systems that reward/penalize each participant according to individual performance.
16	Determine point at which to involve each participant.
17	Establish communication arrangements.
18	Implement reporting arrangements.
19	Monitor performance according to benchmarks and targets.
20	Analyse gaps in performance to identify opportunities to improve.
21	Regularly communicate performance to each individual, relative to overall chain and other individuals operating at each link in the chain.
22	Reward / penalize individuals according to their performance.
23	Enable the chain to continue adapt through making appropriate changes to processes and governance arrangements, based on insights gained through objectively monitoring performance.



Appendix C: Suggested Reporting Template

Presented below is a reporting template that would enable customers, processors and producers to effectively share information in a manner that would enable them to continually improve financial performance and reduce exposure to financial risk, by statistically tracking and comparing performance at multiple points along the chain. As proven in the UK chain, possessing this type of insight provides participants from along the entire chain with the opportunity to consistently increase their margins and profitability.

Retailer Report to Processor	
Attribute	Measure
Past Performance	
Total volume	Kg trend
Shrinkage	Kg trend
Sales	\$ trend
Placement in category	rank or %
On time deliveries	%
Consumer complaints	#
Store complaints	#
DC complaints	#
Objective 1	KPI and trend
Objective 2	KPI and trend
Objective 3	KPI and trend
Future performance	
Forecast for next 3 months	Kg
Quality requirements for next 12 months	Specify
Innovation needs for next 12 months	Specify
Recommendations	Specify

Processor Report to Producer	
Attribute	Measure
Past Performance	
Volume	Kg trend
Variation	St dev of Kg
Value	\$ trend
Yield	% and trend
Premium product	% and trend
Downgraded product	% and trend
Position as a supplier	rank
On time deliveries	%
Objective 1	KPI and trend
Objective 2	KPI and trend
Objective 3	KPI and trend
Future performance	
Forecast for next 3 months	Animals
Quality requirements for next 12 months	Specify
Innovation needs for next 12 months	Specify
Recommendations	Specify


Appendix D: Presentation of Research Results

**Comparative Analysis of Financial Models
Used by Red Meat Value Chains**


Abdel Fefiel
Vincent Gallant
Martin Gooch

Red Deer
February 23, 2011




Purpose

- Compare activities and structure of 3 meat value chains;
- Identify the financial mechanisms that the 3 selected value chains use to manage risk;
- Compare drivers and process of formation;
- Determine and compare decision processes;
- Compare pros and cons of the 3 models;
- Recommend how interested Albertan meat industry stakeholders could act upon findings.




Overall Findings

1. Start off small
2. Establish strategic vision, craft culture accordingly
3. Develop processes suited to achieving vision
4. Establish an effective leadership process
5. Build and maintain effective relationships
6. Clearly define roles and responsibilities
7. Base accountability on objective verifiable data
8. Use clearly defined KPIs to implement carrot and stick for motivating continual improvements
9. Have an effective communication strategy



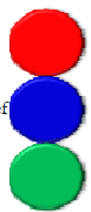
Three Meat Value Chains: Comparative Analysis

- Outline
 - » Canadian beef value chain
 - Structure, characteristics, financial/risk management processes
 - » Canadian lamb value chain
 - Structure, characteristics, financial/risk management processes
 - » The UK beef value chain
 - Structure, characteristics, financial/risk management processes
 - » Comparative Analysis
 - » Overall pros and cons
 - » Recommendations




Structure of Canadian beef chain

- Drivers of development
 - Efficiency in the commodity market
- Purpose of development
 - » Need to sell animals at a certain age/weight, then sell the resulting beef
- Number of players
 - » 8 links owned by 4 players
- Markets supplied
 - » Domestic and international
 - » Retail and foodservice



Cooperative



Characteristics of Canadian beef chain

- Current activities
- Legal and ownership structure
- Shared vision
- Commitment
- Relationship type
- Chain champion
- Decision making
- Communication flows
- Monitoring performance


Financial / Risk Management Processes

- Financial risks
 - » Inconsistency through having to dispose of commodity quality products through auctions or discounting prices to end customer
- Financial risk management
- Margins and profitability
- Sustainability




Comparative Analysis Key structural differences

Factor/chain	Canadian beef chain	Canadian lamb chain	British beef chain
Driver	Efficiency	Efficiency	Effectiveness
Purpose	Transactions	Supply security	Minimize waste & maximize profit
Final product	Commodity	Commodity	Differentiated
Relationship	Cooperative	Coordinated	Collaborative
Vision	No shared vision	No shared vision	Shared vision
Leadership	No leadership	Little leadership	Strong leadership
Commitment	Familiarity	Convenience	Commitment
Information flow	For self-interest or transactions	For self-interest or transactions	For chain-wide
Decision making	Not joint	Not joint	Based on forecasting & pull




Comparative Analysis Key differences in approach to managing risk

Factor/chain	Canadian beef chain	Canadian lamb chain	British beef chain
Internal risks	Many factors	Many factors	Quality related
Managing internal risks	Self-responsibility Free-riders	Self-responsibility Free-riders exist	Chain-responsibility No free-riders
External risks	Commodity market	Commodity market	Minimums
Managing external risks	Self-responsibility	Self-responsibility	Chain-responsibility
Management type	Reactive	Reactive	Proactive and preventive
Outcomes	Insignificant	Insignificant	Significant




Overall Pros-Cons

Factor/chain	Canadian beef chain	Canadian lamb chain	British beef chain
Location	Canada	Canada	United Kingdom
Pros	Opportunistic	Opportunistic	Lower financial risk Sustainable and profitable business Ability to continually learn and adapt
Cons	Higher financial risk Lack sustainability Lack guaranteed margins	Higher financial risk Lack sustainability Lack guaranteed margins	Relative lack of opportunism



Recommendations


- Opportunities are NOT in the commodity market
 - » Unless seeking to increase effectiveness of operations
- Look for complementary/compatible partners
 - » Attitude is key, skills can be learnt/taught
- Identify the destiny of your final product
 - » Not all markets created equal
- Deploy your vision
 - » Make sure others share and empathize
- Leadership by pioneering
 - » Innovation in product and process
- Establish a clear and fair governance system
 - » Free loaders will relegate initiative to mediocrity
- Review your and your partners performance



Strategic Choice

If you are not part of a closely-aligned value chain, you need to develop a strategy to compete against those who are

Dunn, 2003



Appendix E: Blade Farming



The Journey

Richard Phelps
Managing Director



Agenda

- What we did
- Why we did it
- The issues we faced
- Small changes
- Where we are going
- Summary

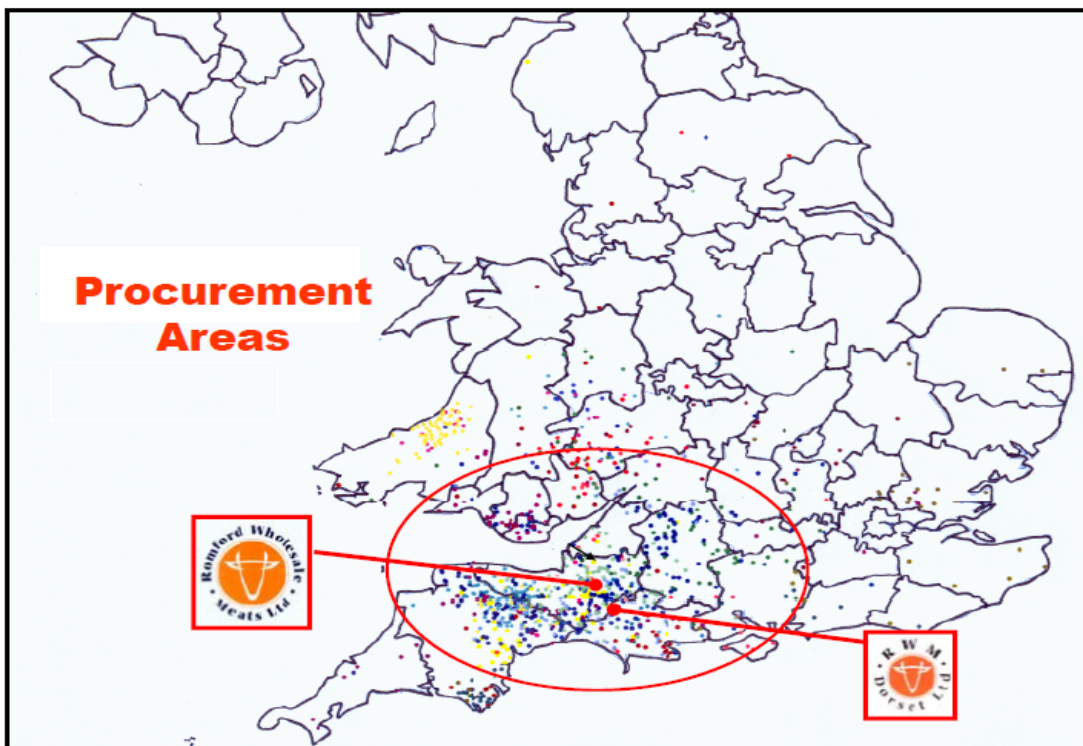


The original Blade team 1999



Setting The Scene

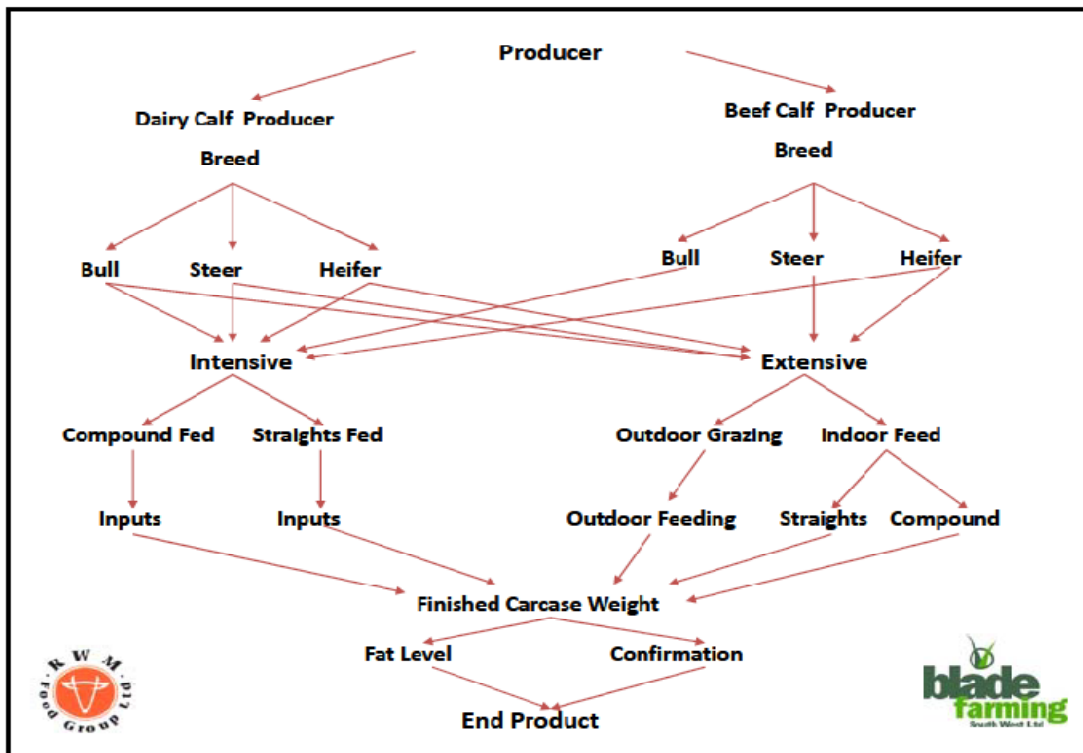
- RWM business re-launched in 1996
- BSE scare and concerns over food safety
- Customers reluctant to buy UK beef
- Tesco (Fresh & Easy) demonstrated commitment by setting up producer clubs
- Cattle needed to be procured direct from farms
- Farmers needed commitment to offer business security
- Cattle were slaughtered at various ages with no focus on meat quality
- Subsidies were still in place on a per head basis
- Plenty of competition from the rest of the world
- Concerns over future volumes of beef in the UK



£2m Each Week on Livestock

Shopping list:

- 1,600 Cattle
- 400 Cows
- 22,000 Lambs
- 4,000 Ewes

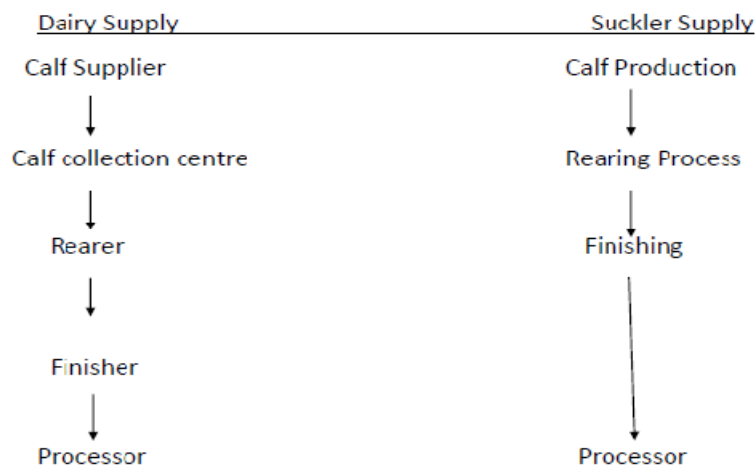


The Vision

- Offer farmers a price commitment
- Understand all costs involved in production
- Implement a protocol to improve meat quality and consistency
- Replicate the system throughout all supplying farms
- Be prescriptive and make sure everyone sticks to the rules
- Deliver large volumes of quality stock to the factory
- Help with marketing Blade products
- Be independent and supply other abattoirs through a solid business model



Vision

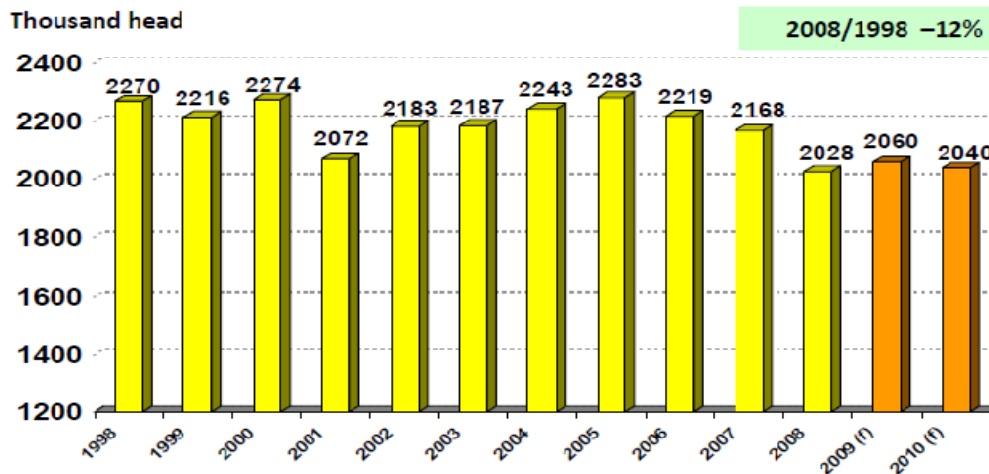


Original Concept 1999

- Development of feedlot systems
- Replication of feedlots throughout the UK
- Master franchise opportunities for retail suppliers
- Lowest cost operation
- Protocols and IT software tool

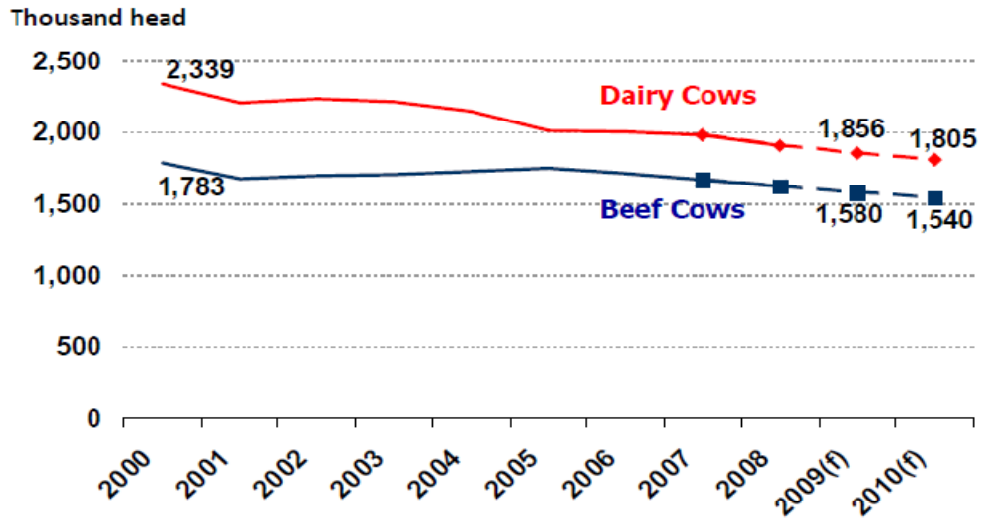


UK prime cattle slaughterings



Source: Defra

UK cattle herd trends



Source: Defra December Survey & Cattle Tracing System (from 2005)

Why start a farm business?

- Beef processing operation was to increase in volume
- RWM needed to find a more strategic way to buy cattle – weekly trading creates market share issues
- Our customer base was right for an integrated beef supply chain
- The long term goal would result in a more efficient procurement team
- To sit back and wait for the beef supply base to change was not an option



The Beginning 2001

- Agreement with FAI farms in Oxfordshire to operate a beef finishing unit with 300 head
- Bring in batches of 40 weaned calves at a time
- Manage the unit on a pen management system
- Use the lowest cost feed measured on a dry matter content
- Use all breeds including Holstein bulls
- Ensure the cattle convert feed efficiently and deliver consistent DLWG (ADG)



The first group of cattle



Issues and Challenges

- Availability of good quality weaned calves
- Understanding from farm suppliers as to exactly what was required and why
- Pneumonia
- Variability of stock
- Foot and mouth
- TB



Changes to the Business Model

- Rearing units needed to be developed and managed by Blade
- Feed needed to be procured more centrally and business meetings set up
- More focus on health and reducing costs
- More understanding required on calf supply
- A central operating system to manage the farmers needed development
- Further investment required



Calf Supply

- Age limit was implemented – calves must be no less than 10 days old and no older than 24
- Measurement process required to measure supplier performance
- Needed more focus on beef genetics
- Needed a better means to measure and communicate health issues
- Use slaughter data to benchmark beef quality and supplier genetics
- Purchase of calf cooperative in the SW to kick start the direct farm procurement operation

Calf collection centre



The First Calf Rearer

- Blade offered a fixed fee per calf
- Blade purchased all of the calves with a new weight specification – I argued a lot!
- Blade purchased all of the feed, milk powder, medicines and equipment
- Blade arranged for veterinary cover and agreed a basic protocol
- I agreed that the calf unit would always be full and offer the rearer an efficient operation

The first Blade calf unit



Results

Farmer		Ben Bennett				
BEN BENNETT		Average	Total	6	7	8
	KPI	Actual	Actual	Actual	Actual	Actual
PERFORMANCE						
Days on Farm	77 days	87		83	82	97
No of calves in		100	300	100	100	100
Milk Powder	22kg	18.3	54.8	20	19	18.8
Dry Feed Intake	158kg	170.7	512.0	155	178.5	178.5
Arrival Weight	50kg	58	167	58	55	54
Departure Weight	110kg	138	415	130	133	132
Daily Liveweight Gain	0.9kg	0.95		0.87	1.04	1.01
Feed conversion effic.		2.29		2.43	2.53	1.88
Medica Cost						
HEALTH						
Diarrhea and scour	5	7	23	10	10	0
Pneumonia	3	4	12	6	6	0
Diphtheria	Nil	0	0	0	0	0
Eye Infections	1	3	8	1	1	6
Coccidiosis on arrival	Nil	0	0	0	0	0
Coccidiosis on unit	Nil	0	0	0	0	0
Lameness		0	0	0	0	0
Navels		3	13	0	0	13
Bloat		0	0	0	0	0
Deaths	1.00%	1.67%		1.00%	3.00%	1.00%



The First Beef Finishers

- Farmers needed the right mind set
- The quality of the farm set up was next
- The set up of the protocols was difficult to begin with
- As the beef unit became successful then attitudes changed for the better



The New processor

- Linden Foods (Northern Ireland) had a similar view on issues around beef production
- The NI task force was set up to find solutions
- Blade was an option
- Linden Livestock was set up and used the Blade system to operate calf rearing and beef finishing systems



The process flow

Calf Supply



- Focus on genetics and health

Calf Rearing



- Best practice
- Health management
- Web based

Beef Finishing



- Batches of weaned calves
- Forward price contract
- Focus on finishing period
- IT program
- Reduce age at slaughter

Processing



- Batches of cattle
- Focus on welfare
- Follow protocol

Continual feedback and improvement

The Business Model

- Blade purchases 14 day old calf
- Calves are reared in contract rearing units
- Rearers are paid a fee based on performance
- Blade pay for:
 - Calf
 - Feed and milk powder
 - Veterinary inputs
- Rearer pays for:
 - Buildings, water and electricity
 - Labour
 - Straw bedding
 - Losses over 2%

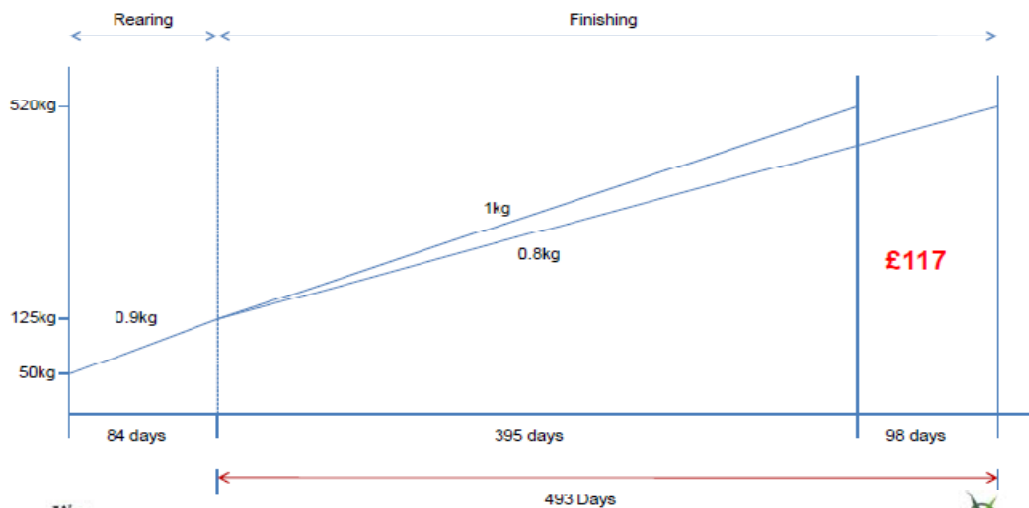


The Business Model

- Calves are sold to the beef finisher at 14 weeks old
- The finisher has a contract related to each batch and each individual animal
- A protocol is agreed and followed
- Farm visits are arranged (no more than every 30 days and no less than every 60 days)
- Cattle are slaughtered and business model reviewed



Target



What we offer - farmer

- Price contracts
- High health status weaned calves
- Feed inputs (branded milk powder)
- Feed rationing operation
- 24 hr health hotline and dedicated vet
- On line pharmacy services
- IT software program specifically designed for cattle finishing
- On farm specialist advice and help for calf rearers and beef finishers
- List of superior sires for dairy farmers to select the right genetics
- Calf collection service
- Regular farm business review meetings
- Finance packages



Blade Guarantee

- Rearing Unit →
- Finishing Unit →
- Treatments and dates →
- Cattle Information →

Blade Cattle Health Certificate Preventative Health Treatments

Rearing Unit	Finishing Unit
Treatments and dates	Cattle Information

Blade Cattle Health Certificate
Preventative Health Treatments

Rearing Unit: Louisa Tudor (Mobile Number: 051710588)
 Rearing Farm: Upper House Farm (Location, GPS coordinates: 51°21'21.11")

Finishing Unit: PD Hook (Mobile Number:)
 Finishing Farm: Darkey Park Farm (Location, GPS coordinates:)

TREATMENT PERIOD	DATE	TREATMENT	TREATMENT
27-09-10		Bevital 100/10	12/000
27-09-10		Imperial 100/10	12/000
11-10-10	14-10-11	Imperial 100/10	12/000
27-09-10	11-10-10	Imperial 100/10	12/000
11-10-10	01-11-10	Imperial 100/10	12/000

Rearing Unit: 15-10-10

UK No	UK No	Breed	Sire
UK180191	05647	Aberdeen Angus X	halter: orabar mighty prince
UK180192	01954	Aberdeen Angus X	halter: PENNING ANZORIO I
UK180193	01952	Aberdeen Angus X	halter: PENNING ANZORIO I
UK180736	01170	Aberdeen Angus X	halter: Louisa Muth Prince
UK181026	00625	Aberdeen Angus X	halter: gpho hawk
UK181171	21585	Aberdeen Angus X	halter: Furland pioneer H&E
UK181171	40180	Aberdeen Angus X	halter: Furland pioneer H&E
UK181381	40105	Aberdeen Angus X	halter: orabar mighty prince
UK181418	02258	Aberdeen Angus X	halter: andjane smith
UK181572	00038	Aberdeen Angus X	halter: orabar mighty prince
UK182041	02009	Aberdeen Angus X	halter: S T TENDER FORCE
UK182041	02009	Aberdeen Angus X	halter: S T TENDER FORCE
UK182079	01050	Aberdeen Angus X	halter: LYNDH BECK
UK182085	01509	Aberdeen Angus X	halter: JORELYN FAULTY
UK182340	00082	Aberdeen Angus X	halter: EVELINE ERC
UK182657	00231	Aberdeen Angus X	halter: LYNDH BECK
UK182672	00199	Aberdeen Angus X	halter: orabar mighty prince
UK182674	00043	Aberdeen Angus X	halter: TYDEMOOR LORD
UK182674	00060	Aberdeen Angus X	halter: LYNDH BECK
UK182674	00591	Aberdeen Angus X	halter: LYNDH BECK
UK182674	02130	Aberdeen Angus X	halter: LAHENS RICHARD

Contract Name: 01040

This is a collection of records of all cattle treated by any vet who should read the usage & management terms and the conditions above should not be printed in duplicate.

~ 34 ~

What we offer - customer

- A national beef farming business
- Efficient and shorter beef supply chains
- Open book costs
- Long term security and trust
- Ability to operate specific supply chains relevant to each customer
- Implementation of science to improve the supply chain
- A genuine partnership approach
- Engagement with NGO's
- Improved communication platform
- Promotional opportunities with the supply base



Understanding Meat Quality

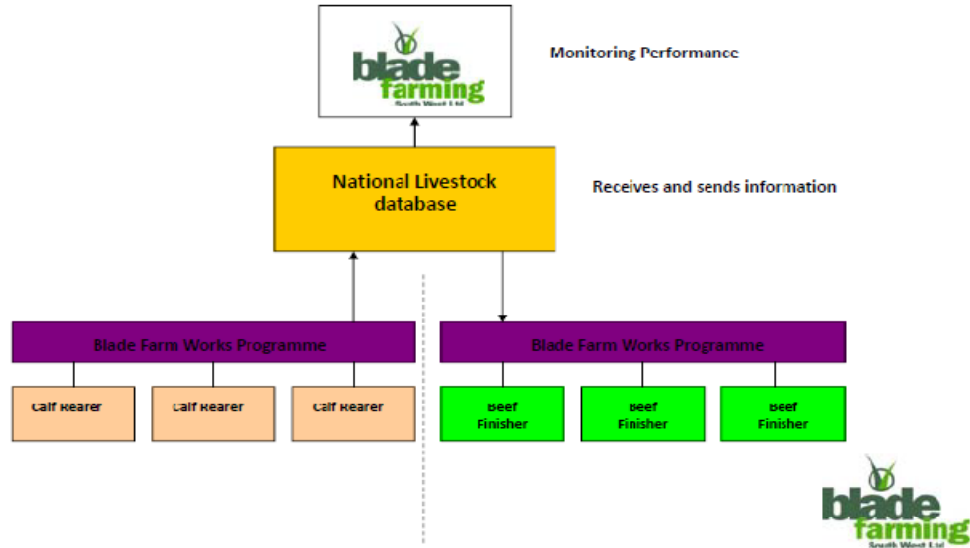
- Tenderness can be measured however taste is subjective
- Younger cattle will be more tender than older cattle
- Cattle feed will impact on the flavour
- Growth rates are important
- The key is to replicate this to get consistency
- Maturation cannot cure inconsistency at farm level

Shear Force Test Variation on Standard beef = 2.1kg – 4.7kg

Blade Farming = 2.1kg – 2.9kg



The Operation



Blade Farming Volumes

Calf Rearing	2009	2010 (f)	2011 (f)
Calf rearing capacity	16000	20000	25000
Calves reared	12000	n/a	n/a

Beef Finishing	2009	2010 (f)	2011 (f)	2015 (f)
Traditional beef	5000	6500	9000	20000
Holstein	3500	4000	7000	20000
Other breeds	1000	2000	3000	10000
TOTAL	9500	12500	19000	50000

Farms	2015 Blade Commitment
Beef finishing units (Ave 200 head)	250
Calf rearing units (Ave 1000 head)	50



Consistency Is The Key



Marketing Is Vital



6.5 million viewers on TV



Keep spreading the word



Good producers make our business



Summary

- Setting up one finishing unit is easy
- Replication is the key to large volumes and consistency
- The operation must run as a business and be independent from the abattoir operation to be successful
- Huge investment required (circa £500k) from the outset if starting from scratch – but using the Blade model is much more cost effective
- Managing calf rearers effectively is the most costly but important part of the business operation
- Working with decent supply partners is crucial in signing beef rearers and finishers to gain credibility
- IT is invaluable to our business
- The added value benefits of Blade to RWM and Linden Foods are huge

