Customer relationships strategy: an Australian cattle producers' case study

F Jie

F Jie, School of BIT and Logistics, RMIT University

Abstract. An analysis of beef supply chains revealed that a strategic focus on beef quality was critical to that part of the chain involving producers. Moreover, beef quality was directly related to customer relationship management. Across the industry, there are a diverse set of customers each with different needs. This means that it is difficult for individual producers to develop a successful approach to customer relationship management without developing a product focus on one or two of these customer segments.

Keywords: Supply chains, beef, Australia, customer relationship management.

Introduction

The beef sector in Australia is undergoing rapid change, due to factors such as globalisation, a highly competitive beef market (domestic and export), increased production efficiency, a quicker production cycle and delivery times and consequently reduced inventories, a trend toward more outsourcing of activities and the rapid development of IT (MLA 2004a). In this type of business environment, advanced supply chain systems have been observed to have a dramatic impact by increasing the amount of product meeting specifications (Donlon 1996; Min and Mentzer 2004; Finch 2006). Hence such systems have the potential to provide significant contributions to the performance of the Australian beef industry.

Smith (2001, p.3) describes the beef supply chain as follows: "A system by which the 'sectors' involved in beef production (seedstock generators, cow/calf producers, stockers/backgrounders, feedlot operators, packers, processors, supermarket operators and food-service providers) become 'segments' because they are no longer isolated from but mutually dependent upon, those in other sectors therefore they become 'links' or 'segments' within the supply chain."

Using data gathered from a survey of beef industry participants, we used a linear regression (SPSS) approach at the exploratory stage of the study to assess which aspects of supply chain management were statistically significant from cattle producers' responses. The results from our analysis indicated customer relationship management was more important than other supply chain activities. This led to an in-depth examination of customer relationship management for beef producers.

Beef production and supply chains

The Australian beef supply chain can be partitioned into four levels: cattle production, beef processing, beef retailing/wholesaling and final consumers. There are a few fully integrated supply chains linked to the major supermarkets. These have cattle moving from farms/feedlots to processors who transform them into beef products and organise delivery to customers. For the most part, however, beef supply chains are partially integrated involving activities only from slaughter to end customers or from producers to slaughter. Small and medium beef enterprises mainly contribute to these partially integrated supply chains.

Beef supply chains can also be classified as aligned or non-aligned. A comparison between them reveals that aligned beef supply chain management in Australia is associated with highly integrated chains, for example, cattle producers and feedlots, and other chain partners (processors, retailers and wholesalers) that meet and sustain chain goals such as efficiency and effectiveness. To achieve these goals, the operations of aligned beef supply chains must have several features. First, all levels of beef supply chains get involved in strategic and operational planning processes. Non-aligned beef enterprises do not consider this. Second, aligned beef enterprises need to have trust, awareness (focused on customers' needs), strong partnerships among the partners and transparency (information sharing). Non-aligned beef enterprises do not consider information sharing and tend to have secrecy as a general principle of operation. Among such non-aligned farms, there are many complex groupings of unrelated participants, thus level of trust will be inconsistent. Moreover, non-aligned beef enterprises do not have chain integration, a customer focus or clear market signals.

Cattle production is the first stage of the Australian beef supply chain. It covers a range of breeding, growing and backgrounding beef enterprises and includes fattening and lot feeding. In 2005, there were 76,662 beef enterprises in Australia that produced about 25 million head of cattle with a gross value of production of about $5.7 billion. Additionally, about 65 percent of production is exported. Feedlots contribute

about 27 percent of total beef production (ABS 2005; ABARE 2007).

Cattle are sold in Australia as stud, store or finished stock. There are several methods of selling beef cattle (depending on the type of stock and market outlet for the stock) (DPI&F 2003; ABARE 2004; ABARE 2005; Sneath, Taylor and Jackson 2006). These include paddock sale, over the hook, saleyard auction, AuctionPlus (formerly CALM Auction), direct consignment, forward contract (contract based make to order) and alliance.

Regression modelling of Australian beef producers' supply chains

A review of previous studies (Jie 2008) revealed that five aspects of the supply chain were likely to be of major importance to the Australian beef industry: strategic supplier partnerships, customer relationships, information sharing, information quality and lean thinking. These would be expected to give various advantages to beef enterprises including improved responsiveness and flexibility, increased production efficiency, and improved beef quality, and overall enable the industry to better satisfy customers. Improving these aspects of the supply chain would be expected to lead to higher profitability both by increasing revenues and reducing costs of firms in the supply chain. Also, given that cooperative actions form the basis of supply chain relationships, trust and commitment are considered necessary antecedents. Hence, seven explanatory variables were included in the exploratory regression analysis: strategic supplier partnerships, customer relationships, information sharing, information quality, lean thinking, trust and commitment. The dependent variables were responsiveness, flexibility, increased production efficiency, and improved beef quality.

The results are based on an analysis of the views expressed in the survey by beef producers. They revealed that for producers, beef quality (FOODQUAL) was an important determinant of competitive advantage. Further examination of this quality variable showed that customer relationship management (CRM), information sharing (IS), information quality (IQ), and trust have a significant influence on producers' supply chain performance in relation to food quality. The estimated regression model equation is (t- statistics are given in parentheses):

$$FOODQUAL = \beta_1 + \beta_2 * CRM + \beta_3 * IS + \beta_4 * IQ + \beta_6 * Trust + e_i$$

$$FOODQUAL = 5.043 + 0.963 * CRM + 0.516 * IS$$
$$\qquad\qquad\quad (9.414) \qquad (2.088)$$
$$0.259 * IQ + 0.348 * Trust + e_i$$
$$(3.040) \quad (4.178) \qquad\qquad\qquad (1)$$
$$R^2 = 0.83$$

Further analysis

The variable, customer relationships, had strongly positive impact on food quality supply chain performance (by looking at the standardised β coefficient). Given this finding, it was considered that cattle producers should focus on customer relationships in order to achieve better food quality in their supply chain performance and thereby enhance competitive advantage.

The first step in discussing cattle producers' customer relationships is the need to consider who generally are cattle producers' customers. Beef producers have several different kinds of customers beyond the farm gate (Sneath et al. 2006), for instance:

- Processors who purchase cattle.
- Wholesalers who purchase on behalf of several retail outlets. They arrange slaughter and distribution to outlets such as butchers and food services.
- Other producers who buy store livestock to fatten before re-selling.
- Producers who are contracted by feedlots to obtain 'background' cattle.
- Feedlots that purchase cattle from producers and feed them for varying lengths of time for different markets.
- Commercial producers who buy stud stock to improve their herds.
- Exporters of live cattle. Shipments of feeder steers are sent overseas, and other countries purchase commercial and stud cattle as feeder cattle or to improve their herds.

So, in order to keep this diverse group of customers satisfied and returning their custom, cattle producers must show their capabilities and create value for them. In the long term, as in other supply chain contexts, value will be demonstrated to the customers by fulfilling their expectations through reliable, quick response or on-time delivery, high quality products and services, attention to customers' needs, and the flexibility to respond to those needs adequately. In many cases in order to enhance their customer relationships, producers will need to be aware of the particular focused product needs of their customers, and grow a given quality of beef.

According to Andrew and Littler (2007), there are two different levels of beef cattle classification (major and minor market specifications). Major market specifications are weight (live), sex, age and fat (P8 fat depth or score). Additionally, the minor market specifications are breed, hormonal growth promotant status (HGPs), lifetime traceability, meat colour, accreditation or other eligibility requirements (fat colour, fat distribution, meat / carcase pH, muscle score and butt shape) (see Tables 1 and 2) (Andrew and Littler 2007).

To provide customers with what they want in terms of pricing, consistency in supply and market specifications, there are a number of strategies for cattle producers.

1. Breeding system, animal growth and nutritional management

Cattle producers could vary their breeding system to focus on a particular customer group. In other words, they might select from a number of different breeds. For example, one producer (Peter Rose) at Blackville, NSW runs a cross-breeding operation to meet the European Union (EU) market (MLA 2004b). This producer moved to cross-breeding from a pure Hereford herd. It has improved returns by $160/head through higher carcase yield (MLA 2004b).

Cattle producers could attempt to reach the right combination of weight and fat cover (as indicated by P8 and rib fat depths) while also complying with age restrictions. In addition, they may need to adjust breed composition and manipulate genetics and animal nutrition to better meet market specifications (Andrew and Littler 2007).

2. Farm management

Producers could apply on-farm management strategies to ensure that the highest proportion of cattle meets the specifications, for example adequate levels of fat (around 4-8 mm P8 fat). MLA provides eight modules in their manual that identify areas for on-farm improvement. Overall, the modules with the highest readership were pasture utilisation (77 percent), pasture growth (69 percent), and herd health and welfare (50 percent) (MLA 2005).

3. Accreditation

Cattle producers could be accredited to supply their market – either the domestic or international market. Quality assurance programs (on-farm, feedlot, transport and saleyard quality assurance) have been developed by the Australian industry, government and other relevant bodies (MLA 2004c). According to MLA (2004d, p.3), all of the top 25 lotfeeders are accredited under the National Feedlot Accreditation Scheme (NFAS).

4. Skills in live animal appraisal/ assessment

Cattle producers need to have good skills to evaluate the level of fatness so that the condition of the livestock can be examined and manipulated before the anticipated selling dates to better meet fat and weight specifications. Moreover, they need to enhance their skills in live animal appraisal (for example in muscle, dressing percentage and fat scoring). Live animal assessment courses are delivered by local rural Department of Primary Industries' beef cattle officers. For some producers these types of changes may represent a paradigm shift. Nevertheless, the fact that some producers have adopted them indicates that the paradigm shift is starting to occur.

5 Training and development

Training courses are required for producers to learn how to improve the way they market the cattle they produce. MLA's EDGE-network program provides a series of structured learning workshops tailored to producers' needs. These workshops cover markets and customer needs, market intelligence, marketing performance, marketing strategy, negotiating the sale, selling alternatives, understanding marketing and effective pricing.

6. Group marketing

Establishing beef/cattle marketing groups can allow producers to take greater control of the marketing and processing of their cattle through closer relationships with the processors or retailers. For example:

- Bluegum Beef marketing group, formed in 1995, consists of about 15 members stretching from the Brisbane valley through central and western Queensland. The group is focused on achieving the optimal product for the end consumer.

- Border Beef is a group of producers on the NSW-QLD border who market cattle through a number of different outlets including the Pacific Pride Alliance, direct to meatworks and via online marketing (CALM).

- Double Beef marketing group comprises about 70 cattle producers from the Bingara and Barraba areas of northern NSW. The objectives of the group are to increase market share, to have greater leverage over market prices and security of markets by utilising information on current product specification compliance and customer requirements. The essential

assumption underlying the group's objectives is that better feedback of information will lead to better future performance.

7. High value attributes and benchmarking

Producers need to create high value attributes for their customers in order to maintain customer relationships. The value attributes in this context are quality (producers meet customers' specifications), delivery dependability (cattle producers meet delivery promises), flexibility (producers can adapt to special needs) and response time (how quickly they can get it to customers).

One best practice measure of ascertaining the significance of customer satisfaction is to benchmark competitors. Best practice is now widely implemented within manufacturing companies in Australia. However, there has been little adoption in the red meat industry in Australia (Cox and Cunial 2006). Learning by borrowing from the best and by adapting their approaches to fit a firm's own needs is the essence of benchmarking.

Conclusions

The analysis reported in this paper shows that a strategic focus on beef quality is critical for improved performance of the component of beef supply chains involving producers. In turn, beef quality was observed to be directly related to customer relationship management. To achieve a high level of performance in customer relationship management it is necessary for each producer to be aware of their customers and their customers' specific needs. Across the industry, there are a diverse set of customers each with different needs. This means that a successful approach to customer relationship management for most beef producers will probably require the development of a product focus on one or two of these customer segments. A series of seven types of activities by farmers to achieve these objectives was outlined.

References

ABARE (2004), *Australian Beef Industry 2004*, ABARE, Canberra.

ABARE (2005), *Australian Beef Industry 2005*, ABARE, Canberra.

ABARE (2007), Financial Performance: Australian Beef Industry, accessed at www.abare.gov.au on 24 June 2009.

ABS (2005), Australia's beef cattle industry, *Year Book Australia, 2005*: 74.

Andrew T and Littler B (2007), *Market specifications for beef cattle*, New South Wales Department of Primary Industries, Orange, NSW.

Cox RJ and Cunial CM (2006), 'Best practice within Australian food service, a case study: customer satisfaction with red meat products', *Australasian Agribusiness Review* 14(13), 1-14

Donlon JP (1996), 'Maximizing value in the supply chain', *Chief Executive* 117(October): 54-63.

DPI&F (2003), Better beef, better business, better profits, STORELINK Workshop Manual 1 Module 1, Queensland Department of Primary Industries and Fisheries, Brisbane.

Finch BJ (2006), *Operations Now: Profitability, Processes, Performance*, McGraw-Hill/ Irwin, Miami, United States.

Jie F (2008), Supply chain analysis of the Australian beef industry, unpublished doctoral thesis, Faculty of Rural Management, The University of Sydney.

Min S and Mentzer JT (2004), 'Developing and measuring supply chain concepts', *Journal of Business Logistics* 25(1): 63-99.

MLA (2004a), *Supply Chain Management Program.* Meat & Livestock Australia, Sydney.

MLA (2004b), *More beef from pastures: producer advocates share experience*, MLA Prograzier, Meat & Livestock Australia, Sydney.

MLA (2004c), *Australian beef : safe, health and delicious*, Meat & Livestock Australia, Sydney.

MLA (2004d), *Top 25 Australian Lotfeeders (by turnover and capacity),* Meat & Livestock Australia, Sydney.

MLA (2005), *Lamb industry outlook update*, Meat & Livestock Australia, Sydney.

Smith GC (2001), 'Increasing value in the supply chain', 81st Annual Conference of the Canadian Meat Council, Vancouver, BC, Canada.

Sneath R, Taylor K and Jackson D (2006), *Identifying the beef cattle market*, Queensland Department of Primary Industries, Brisbane.

Table 1. Specific domestic market requirements

Type of customers	What suitable for markets
Store weaners (backgrounder, feedlot or processors)	• Live weight basis (heaviest calves are the most profitable) • Fat (P8 fat depth or score) • No sex or breed restrictions • Muscle score
Local butcher	• Grass or grain finished 0 to 2 tooth steers, or heifers with carcase weights around 160-220 kg. • No breed restrictions • Animals with early to moderate maturity patterns.
Supermarkets / retailers	• Heifers and steers with 0 to 2 permanent teeth (prefer 0 teeth) and weighing 370-500 kg live weight. • Animal can be grass finished, grain assisted or grain-fed for up to 70 days • Slaughtered with carcase weights at 200-280 kg, with 5-16 m P8 fat.

Source: Andrew and Littler 2007

Table 2. Specific international market requirements

Type of customers	What suitable for markets
120-day feeder steers (Japan or Korea short fed)	• British x European or up to 50 percent Bos indicus steers are preferred.
Japan or Korea Feedlots	• Steers and heifers also purebred Bos indicus cattle weighing 400-500 kg live weight with up to 4 permanent teeth and 3-12 mm P8 fat score.
Japan or Korean supermarkets	• Grain-fed for 120-150 days and slaughtered at carcase weights of 280-400 kg.
European Union markets	• Grass or grain finished steers or heifers with carcase weights of 260 to 419 kg with no more than 4 permanent teeth and 7-17 mm P8 fat. • No hormonal growth promotants (HGPs) • Must be EU accredited • No breed restrictions • Must become a participant in the National Livestock Identification System (NLIS).

Source: Andrew and Littler 2007