

Value Chains as a Long Term Profit Strategy

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▪ Introduction

In late 1995, the province of Alberta commissioned a strategic analysis (Toma & Bouma, 1996) to address the 'value-added' challenge put before the agri-food sector by the Minister of Agriculture. Alberta, a major producer of agricultural raw products - most notably cereal grains, oilseeds, beef cattle and hogs, was seen to be lagging in terms of the development of food and further value-added processing. 'Value-added' enterprises have the opportunity to be a major economic driver and wealth creator, because they increase levels of employment and business activity.

This study, completed in April of 1996, undertook to review 'Value Added' development strategies and experiences throughout Canada and around the world including the following key findings:

- The province of Alberta is the largest producer of agri-food products at the farm gate within Canada. The food processing industry has also grown but remains undeveloped in comparison to Ontario.
- The Alberta food and fibre sector operates at the lower end of the value chain. Furthermore, for the period of 1984 to 1994, there is no evidence to indicate that change is occurring in the level of value being added relative to the raw material base.
- Alberta must focus on the development of differentiated, quality based products. This conclusion is based on a review of several development models from around the world. Furthermore, these strategies must be market driven; be based on a strong research and development capability; and allow for the formation of strategic value (supply) chains to develop

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market opportunities. Finally, it is observed that in many cases, successful strategies are implemented through the leadership of an independent organisation with a source of core funding that diminishes over time.

- Strategic alliances, value chain alliances, the formation of business groups and long term business relationships are critical for the survival and growth of the Alberta agri-food sector. These may be local, regional or international. In Europe, this phenomenon is termed **supply (or value) chain based competition** because food processors do not compete individually for market position (Hughes, 1994). Rather, they compete as part of a supply chain system that is targeted to meet the specifications of a particular market segment and retail/distribution channel.

These findings resulted in the recommendation of two fundamental strategies for the Alberta agri-food sector to compete in a global market. These are:

- Compete on a lowest cost basis; commodities and undifferentiated products compete on this manner, which are typically low margin (e.g. beef or pork).
- Focus on becoming a niche player with distinctly defined benefits and value chain relationships to the buyer. In this regard, value is defined by a combination of factors including price, quality, health and/or safety standards and organisational structures.

The study concluded by recommending the adoption and implementation of a Value Chain Initiative to lead the process of value chain formation in Alberta. The Agri Chain Competence Foundation established in the Netherlands in 1993 inspired this recommendation. This public-private partnership enabled the restructuring of the Dutch agri-food sector and sets a precedent for Alberta as a model for value chain formation.

▪ **Developing The Value Chain Initiative- Methods**

Further to the 1996 Value Chain recommendation, the Agriculture and Food Council of Alberta² committed to a process to develop the Value Chain Initiative (Toma & Bouma, 1998). The process comprised three steps:

- Developing an international body of knowledge specific to Value Chain development around the world.

² The Agriculture and Food Council of Alberta is an industry based organization founded in 1992 to provide leadership as well as facilitate new initiatives to stimulate the development of a competitive agri-food sector.

- Learning from Relevant Case Studies – to learn methods and management processes.
- Designing a Value Chain Initiative for Alberta.

The Emergence of Value Chains as an Organizational Structure

The emergence of Value Chains as an organisational structure reflects a continued evolution of the market economy. Value Chains are intuitively simple. In essence, Value Chains respond to the demands of the customer more effectively and more efficiently. They do so by building collaborative management structures as well as information systems that enable each "link" in the chain to work closely together, thereby creating a system that in its entirety is better able to respond to customer demands and market changes (Underhill, 1996).

Value Chains are defined by the authors (Toma & Bouma, 1998) as follows:

A strategic collaboration of organisations for the purpose of meeting specific market objectives over the long term and for the mutual benefit of all 'links' of the chain.

Though conceptually simple, Value Chains represent a marked change in management behaviour and organisational strategies. Traditionally, agri-food markets operate by selling non-differentiated commodities using arms length transactions such as auctions or pooled pricing mechanisms. Within this context, the further removed a chain link is from the final customer, the less knowledge it has of customer preferences. Further, traditional relationships are often characterised by a measure of mistrust. Consequently, this system is not well positioned to respond to market change. Necessary change is either slow or perhaps missed altogether. This phenomenon is referred to in some sectors as a "series of disconnects" - the fractured or inefficient flow of information from the customer back to each link of the chain.

In contrast, Value Chains provide a process and a structure to respond to specific markets and customer purchasing patterns. A Value Chain is defined by collaboration across the links and is rooted in the development of 'trust' relationships and the sharing of information, costs and benefits. The chain structure is linked by means of interactive information systems and data sharing that are vital to each chain link in responding to customer preferences in the immediate term and more importantly, market change over the long term (van Dalen, 1997).

Factors Driving Value Chain Formation

Value Chain formation within agri-food systems is developing in response to several key market drivers. These include:

- **Food safety issues** - a foremost public concern as a result of such 'breaks' as *E. coli* in ground beef, Mad Cow Disease in bovines and swine fever in hogs.
- **Product quality** - retailers are demanding increasingly higher standards in the areas of product specifications - size, colour, texture, and composition.
- **New product innovation and differentiation** - the competitive marketplace places a premium on new product development. Experience illustrates that long term "supplier" relationships can effectively enhance innovation and new product development.
- **Lowering 'system' costs** - the drive to reduce logistic costs such as shipping, warehousing, transfer and non-conforming product is a powerful motivator to organising more effective systems.

Value Chains develop according to different industry drivers which varies by region. In other words, localising the Value Chain strategy is important. To summarise:

Region	Major Organisational Driver
Netherlands	Public-Private Strategic Approach involving industry, government and research institutions
United Kingdom	Major retailers with some government support
Japan	Retailers and Trading Companies
Australia	Japanese market requirements; industry associations
USA	Niche Players: some movement at the large company level
Canada	Fragmented, but beginning to emerge in several sectors

Perhaps the most illustrative example of strategic Value Chain formation can be found in the Netherlands. With the formation of the Agri Chain Competence

Foundation in 1995 and an overall budget of 90 million guilders (approximately \$ USD 75 million), over 60 value chain pilot projects have been initiated.

Value Chains Management and Operations - An Emerging Management Science

Value Chain knowledge is a newly developing management and organisational process. A detailed review of the Agri Chain Competence Foundation in the Netherlands, provide the following insights:

- ▶ The strategic development of a Value Chain strategy requires a “*Tops Down Bottom Up*” approach. More specifically “*Tops Down*” commitment and leadership is required from industry - senior executives; government – senior politicians and bureaucrats; and research – senior directors from research institutions; “*Bottoms Up*” from industry in terms of the actual ideas to be tested and implemented as potential value chain projects.
- ▶ The success of Value Chains is highly dependent on the ability of potential chain partners to co-operate with each other to identify and commit to “*Win - Win*” situations.
- ▶ Experience to date illustrates that experienced third party management – or professional project managers are often necessary to guide the partners through the development process.
- ▶ Furthermore, experience demonstrates that the identification and execution of a pilot project is an essential first step to build trust and to affirm the benefits of working together.
- ▶ Chain formation may be motivated by a number of different drivers (Folkerts, H. 1998), each with differing dynamics and potentially different 'types' of chain players. The three most common chain drivers include:
 - **Market Differentiation** - typically involves the development of niche markets and is most appropriate for smaller organisations working to develop speciality markets.
 - **Quality Assurance** - the development of detailed quality assurance systems from primary production to retail.
 - **Chain Optimisation** - a focus on reducing logistics costs, which can include a range of transaction, delivery, warehousing and delivery, costs.

■ Learning From Relevant Case Studies

Our Value Chain study undertook five detailed case studies for the purpose of observing first hand how the chains originated as well as how they are managed and operated (Toma & Bouma, 1998). Each case was visited

personally, during which an extensive series of interviews were conducted with the various chain members. For further information contact the author.

Value Chain Development within the Hog Sector

The traditional organization of the hog sector is undergoing massive transformation in North American and around the world. Technologies that offer cost savings such as Segregated Early Weaning (SEW), split sex feeding, all in all out batch production, and sophisticated genetic management programs coupled with processor-feed company strategic interests are changing the structure of the industry. Examples in the U.S include:

- **The Michigan Livestock Exchange/Thorn Apple Valley, Inc.** - in 1994, the Michigan Livestock Exchange signed a 10-year supply agreement with Thorn Apple Valley (TAV), a processor located in Detroit. The arrangement established a long-term procurement and pricing arrangement from three states (Michigan, Indiana and Kentucky) and the provision of capital from TAV to assist producers to build state of the art facilities.
- **ValAdCo** - a new generation co-op located in Renville, Minnesota. Founded in 1991, the swine production co-operative has over 40 members - each member carries the right and the obligation to deliver a fixed amount of corn (5,000 bushels per share) to the account of the co-operative. The organization owns one third share of a feed company (United Mills), a hog multiplier unit (1,250 sows) and two commercial units (each 2,500 sows) with separate weaner and finisher units. Finished hogs are being marketed to three packers - mostly on contract.

Within Canada, similar systems are developing. For example:

- **Signature Pork Program** - a Maple Leaf Foods (MLF) program that offers contract agreements to independent producers meeting specified quality and production standards. The objective is to bring to market a branded pork product as part of the Maple Leaf Foods line of products. MLF offers a variety of services in exchange for supply agreements including nutrition/feed, production advice, loans for expansion, assistance to implement HACCP as well as rendering. In turn the producer qualifies for a premium-pricing grid tied to carcass performance. Note: In 1998, Maple Leaf Foods purchased Landmark Feeds including the Elite Swine Program, thereby extending its reach into Western Canada.

Implications for the Agri-Food Sector

The Value Chain study concluded that:

- ▶ Value Chain formation is occurring rapidly in other food producing regions. Furthermore, the prevailing forces driving chain development are likely to intensify further. Indeed the evidence suggests that long term competitiveness as a food supplier will depend upon the continuous improvement of such factors as market differentiation, quality assurance and reducing system costs - all of which can be addressed within a Value Chain structure.
- ▶ Value Chain formation is conceptually simple but operationally difficult. Considerable efforts are required to increase the awareness of Value Chains as a competitive response to a changing market place. In addition, it is essential to ensure that a chain formation as well as management skills development process is put in place to assist in the successful start up and operation of Value Chains.
- ▶ While Value Chains will occur 'naturally' as a pure commercial response to the changing market, they do represent a fundamental change as to how companies and traditional agri-food supply systems will operate in the future. To this end, a Value Chain Program helps facilitate and in some cases lead to the change process. This occurs in three areas:
 - **Awareness and Education** - specifically increase the awareness of and information pertaining to Value Chains within the agri-food industry.
 - **Training** - providing resources to ensure that Value Chain management and operation skills training are provided to industry and perspective chain managers.
 - **Seed funding** - to assist and support emerging industry 'chains' to establish pilot projects designed to meet specific objectives as well as build the experience base needed to work together over the long term.

■ Designing the Alberta Value Chain Initiative

The Agriculture and Food Council launched the *Alberta Value Chain Initiative* in early 1999. The program has two specific objectives:

- ▶ To increase the awareness, knowledge and associated skills specific to Value Chains.
- ▶ To accelerate and support the formation of Value Chains through the establishment of successful Pilot Projects

Structurally, the Alberta Value Chain Initiative has three components:

- **Value Chain Awareness** - a communications and awareness program.
- **The Value Chain Project Development Program - financial support** for Pilot Projects that lead to Value Chain formation. Funding is provided in three stages:
 - **Feasibility Research** - funding to support the identification of opportunities and their feasibility for Value Chains.
 - **Pilot Project Planning and Project Design** - funding to support the detailed design, management and operations plan for a Pilot Project.
 - **Pilot Project Implementation** - funding to support the implementation of the Pilot Project to test the opportunity and feasibility that may lead to the establishment of a Value Chain.
- **Strategic Initiatives** - funding for broad based initiatives or studies that contribute to the body of knowledge or relevant background pertaining to the Value Chains and their relevance to the Alberta agri-food sector.

In addition, the Agriculture and Food Council has established an internal Value Chain Committee and has hired a Value Chain Leader to provide leadership and manage the Value Chain Initiative.

■ Conclusion

The Alberta Value Chain Initiative is in its infancy but is currently receiving enthusiastic support from industry and neighbouring provinces. Several pilot projects are underway and/or in early development stage. Value Chain awareness and formation is becoming a 'top of mind' issue for many producers, processors, industry association and commodity groups across the province and in Western Canada.

Subsequent to the launch of the Value Chain program, the neighbouring province of Saskatchewan has taken steps to develop a similar program. Interestingly, the province of Ontario, Canada's most developed agri-food production and processing sector, is also expressing interest in the Value Chain Initiative as a new tool to assist in the restructuring of its agri-food sector. The province of Alberta is now recognised throughout Canada and North America as the leader in Value Chain and Value Added development.

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