

ADDRESSING AUSTRALIAN CEREAL PRODUCT SUPPLY CHAIN CHALLENGES USING SUPPLY CHAIN AND NETWORK THEORY

Marcia Perry

*Working Paper 7/06
April 2006*

**DEPARTMENT OF MANAGEMENT
WORKING PAPER SERIES
ISSN 1327-5216**



Abstract

Drawing from a qualitative Australian cereal product industry (ACPI) supply chain study involving interviews and site observations, the paper discusses the application of collaboration and network activity as a means of addressing current overall ACPI competitiveness challenges. The ACPI is important to Australia's economy and there is enormous potential for ACPI growth in catering to world food trends. However, supply chain streamlining, or 'cohesiveness' is a challenge for the complex ACPI supply chain and an industry in a state of turbulence.

There is a growing body of academic theory on business networking that augments and informs supply chain theory in the search for competitive business advantage. The themes of building on supply chain relationships and leveraging from the strengths of other businesses in order to win-win and increase competitiveness for the various parties are clearly evident. From the findings of the ACPI study, collaborative challenges were particularly noted at the upstream extremity of the supply chain. Some of the challenges found along the supply chain included a lack of understanding of other supply chain sectors, surviving in the face of competition from major players, meeting local retail demands, uncertainty concerning industry consolidation and coordinating the industry to effectively and competitively participate in meeting worldwide consumer demands. Joint strategic planning at industry and government level in conjunction with the food industry and appropriate follow-up action are essential for the ACPI to meet global demand challenges in the future.

This paper is a work in progress. Material in the paper cannot be used without permission of the author.

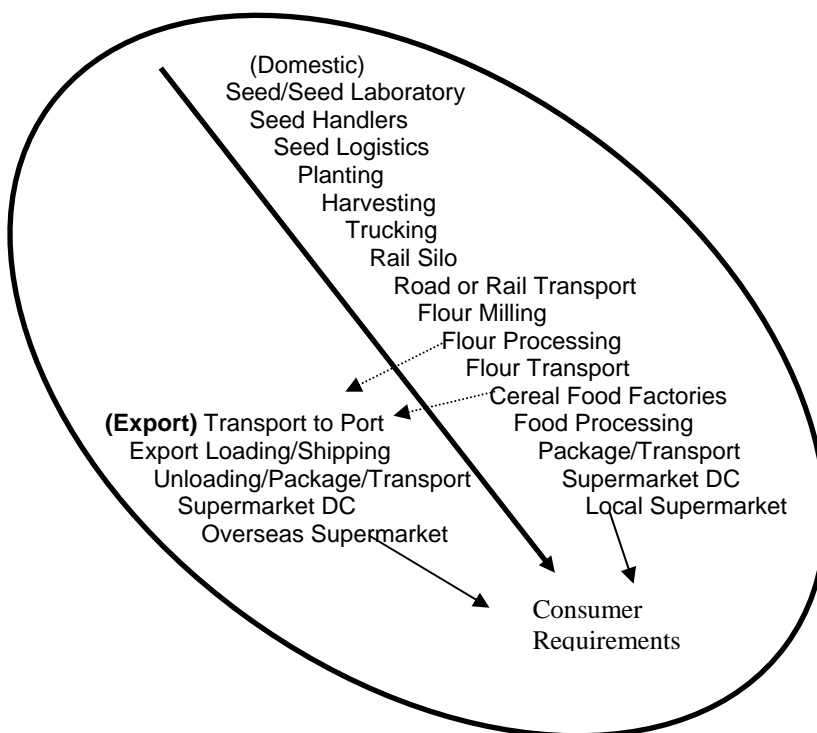
ADDRESSING AUSTRALIAN CEREAL PRODUCT SUPPLY CHAIN CHALLENGES USING SUPPLY CHAIN AND NETWORK THEORY

INTRODUCTION

This paper discusses the issue of how the Australian cereal product industry (ACPI) might address current overall competitive challenges through increased supply chain collaboration and network activity. Supply chain and network theory is applied to some key findings from an exploratory field study on the status of ACPI networks and supply chain practices. The findings relate to current relationship issues along the ACPI supply chain.

The cereal products industry comprises all domestic cereal grain processing including flour milling and the production of cereal food, baking mix, bread, biscuits, cakes, pastries, animal feed, bird feed and beer. Cereal products are a key component of Australia's processed food and beverage industry, the largest manufacturing industry, with a turnover of over \$55 billion (Department of Agriculture, Fisheries and Forestry, Australia (AFFA), 2002). The ACPI, having a national turnover of nearly \$9 billion in 1999-2000 (Australian Bureau of Statistics (ABS), 2003), is also clearly important to the Australian economy. The industry is also becoming increasingly focussed on global trade. A major challenge faced by the industry is the recent unprecedented company-alignment turbulence and future alliance uncertainty within the Australian grains industry (Sohal & Perry, 2004, pp. 1-12). Typically, the main logistical steps first involve preliminary grain seed research and development in a laboratory, seed handling, seed transport to the farm, farm storage and actual planting. This is followed by harvesting, transport to a silo or other bulk storage facility, transport to a miller, flour or feed milling, transport for further manufacturing, product processing, packing, transport to supermarket distribution centre, handling, transport to supermarket, or export outlet, and in-store display leading to purchase (see Figure 1). The supply chain is clearly complex with around sixteen processing stages.

Figure 1: Logistical Steps in the Typical Australian Cereal Product Supply Chain



Due to this complexity, there are many steps to get right in the logistical flow of the developing cereal-based product. Hence smooth information flow and dovetailed operations, facilitated by good relationships throughout the supply chain are imperative. It was evident from the study though that the current industry climate and some tensions between parties have compounded the supply chain complexity challenges. The grains industry and the ACPI have recently been subjected to numerous company realignments.

Since deregulation of the domestic wheat industry in the late 1980s, the Australian grain and food industries have been in the process of rapid consolidation, with varying degrees of vertical integration towards a small number of major players. The mainly multinational food industry companies, with interests and establishments throughout Australia, are experiencing a period of intense competition for industry dominance. The small corner bakery has all but disappeared, being a casualty of (1) in-store baking by the two major supermarkets, Coles and Safeway and (2) the enormous growth of hot bread franchise bakeries such as Bakers Delight and Banjos. There are three major flour milling companies, comprising Allied Mills, Manildra and the multinational company, George Western Milling. There are also now two major wheat handling, storage and export companies, namely AWB and GrainCorp that also handle much of the domestic wheat supply as well. It is apparent that the major players in the areas of wheat handling, wheat storage, food processing and domestic food retailing are aligning towards two dominant domestic food supply chains that also incorporate much of the wheat-related activity of the ACPI. The remainder of the ACPI industry has been affected to varying degrees as a result of the major-player realignments.

There is enormous potential for growth in the ACPI to cater for world food trends. These trends include bio health products, lubricants, starch and similar products for the pharmaceutical and oil industries (GRDC, 2005) as well as organic foods and products to cater for the increasing Westernisation of the Asian diet (Sohal & Perry, 2004). Catering to these trends necessarily requires a high degree of strategic planning at an industry-wide level, with policy and infrastructure support from local, state and federal governments. Whilst in a climate of supply chain realignment and uncertainty, the trust between industry players, that required for world-class, streamlined logistical flows (Perry, Sohal and Crawford 1995, Newton, 2000), will tend not to be as strong as it would be in less turbulent times. Yet streamlining, through cohesive, well-organised activity throughout the chain is still vital for the future of the ACPI and associated industries (Perry, 2004). The remainder of this paper applies supply chain, network and some SME theory where applicable, to findings concerning ACPI supply chain challenges in order to determine some ways forward for the industry.

Supply Chain Theory

The theme of supply chain streamlining, or 'cohesiveness', is viewed as an important feature of supply chain business success. This theme and similar others, such as collaboration, cooperation and partnerships, feature clearly in supply chain literature. The themes are generally viewed as competitive imperatives (Bhatt & Emdad, 2001; Collins, Desbarats, 1999; Dyer & Chu, 2003; Fawcett & Magnan, 2002; Frolich & Westbrook, 2001; Glaser, (1994); Govil & Proth, 2002; Holstrom, Framling, Kaipia & Saranen, 2002; Macbeth, 2002; Milgate, 2001; Newton, 2000; Perry, 1995; Perry, Sohal & Crawford, 1995; Rigby (2001); Perry, 2004, Perry & Alam, 2005, Perry & Sohal, (Forthcoming); Sahay, 2003; Sahin & Robinson, 2002; Spekman, Spear & Kamautt, 2002; and Yu, Yan & Cheng, 2001). Cohesiveness is clearly a challenge for a complex supply chain and an industry in a state of turbulence. Macbeth (2002), who examined the chaotic nature of change in complex supply chain systems, referred to inherent difficulties in company alignment. He also discussed the inherent lack of equilibrium that supply chain companies may encounter on their way to becoming aligned strategically during an initial period of turbulence. Authors Glaser, (1994) and Rigby (2001) also highlighted the challenges of managing systems in times of industry or organisational upheaval. It is noted, too, that the extension of cohesiveness into 'supply chain integration' is, considered by Fawcett & Magnan (2002) to be a somewhat ideal state that 'seldom in reality resembles the theoretical ideal'. Bearing in mind the difficulties the complexity and

turbulence challenges facing the generalised ACPI supply chain, a consideration of the growing body of network theory is warranted in the search for a holistic way forward for the ACPI industry and its supply chain.

Network Theory

Stemming from social network theory (Redding, 1979) and organizational network theory (Shortell & Zajac, 1990), there is a growing body of academic theory on business networking that augments and informs supply chain theory in the search for competitive business advantage (Whipple & Gentry, 2000). Whipple & Gentry (2000) noted that the trend towards cooperative supply chain interactions for inter-company benefit had spawned relationships referred to variously in academic literature as partnerships, strategic alliances or networks. There are obvious parallels between supply chain management and network theory. The themes of building on supply chain relationships and leveraging from the strengths of other businesses in order to win-win and increase competitiveness for the various parties are clearly evident. The following sections discuss the field research methodology, the findings on collaborative challenges facing the ACPI and how some applications of supply chain and networking theory may provide some industry guidance in meeting the challenges.

RESEARCH METHOD

The major purpose of the cereal-products industry research study was to examine the status of the supply chain networks and practices within what has been a climate of industry upheaval. The study involved two phases of fieldwork. Phase one entailed initial open-ended interviews with twenty grain, grain-marketing and cereal foods industry practitioners and authorities, seeking their views on current cereals industry supply chain issues and challenges. These interviews included representatives of DIIRD, DPI, BIAV, FMCA, Farmers Federation (Grains Group), AWB, AWB Charlton, GrainCorp, MarketLink, Freight Australia, transport analysts, VIDA, the Lentil Company (TLC), grain growers, silo owners and Wimmera Development Association. The purpose of the industry interviews was to obtain a widely informed, national overview of the Australian cereal industry competitive scenario and its component supply chains. Phase two was conducted across a representative sample of fifteen cereal-product manufacturers. The sample was obtained through industry database scrutiny and referrals from industry organisations. The interviewed cereal processing managers represented the industry sectors of bread (small and large-scale), flour, baking mix, biscuits, cakes, pastry, stockfeed, pasta and snack-food manufacturing. Grains processed by the companies included wheat (soft and hard varieties), oats, barley, maize, rye, ancient grains and organic grains. Because of a wish for confidentiality of information by the majority of the company managers, aggregate findings only were included in the government report and this paper.

Phase two research activities included industry visits to sites throughout the state, plant inspections where possible and confidential semi-structured open-ended interviews with senior managers addressing the three research objectives. The first was to examine and map the complexities of supply chain networks operating throughout the cereal products industry. The second was to undertake a preliminary assessment of the global competitiveness of ACPI supply chain practices and the third objective was to identify obstacles to, and opportunities for, increased globally competitive supply chain activity. Research activity focussed mainly on the state of Victoria and was conducted in conjunction with the Department of Innovation, Industry and Regional Development, Victoria. In spite of its Victorian focus, the study was considered to be representative of the Australian cereal product industry by the researchers for two key reasons. The reasons were (1) that the major supply chain players such as AWB and GrainCorp tended to operate in more than one state and (2) Victoria grows a similar range of cereal products as the other cereal growing states. Some differences of varieties were noted, due mainly to climatic conditions.

A framework of questions was developed that first addressed the descriptive elements of company operations and supply chain players, networks and logistical activities. The framework was drawn from supply chain and network literature, industry reports and preliminary discussions with industry leaders and fleshed out the status of competitive company and supply chain practices as well as challenges faced and opportunities presented (see Table 1).

Table 1: Monash University ACPI Survey Questions for Face-to-Face Interviews with Managers

Background information:
The company's range of cereal-based products
On overview of the company's history
Number of full-time and part-time/casual employees
The company's key supply chain players and their locations, products and roles
The main company processes in terms of incoming, production/operations and outgoing processes
Any exported cereal-based products, and their destinations
Manager opinion re:
1. the most important demand trends for cereal-based products
2. major opportunity-areas for increasing business
3. opportunities for value adding to cereal-based products
4. the main issues facing supply chain
5. supply chain relationship improvements needed
6. key production/operational issues to be dealt with in company
7. traceability: how far back in the supply chain main cereals ingredients are tracked
8. desirable further cost reduction and where
9. set backs by the recent Australian drought
10. dealing future drought of similar severity
Improvements required such as:
11. timely delivery
12. product quality
13. internal communication
14. supply chain information flow
15. equipment upgrading
16. branding and marketing
17. training and retaining employees
18. inventory reduction
19. use of beneficial technology
20. obtaining regular, specified supplies

Data analysis was conducted by using the Nvivo2 computer package addressing each of the three main project objectives identified above. For commercial confidentiality reasons, the findings were generalised.

FINDINGS AND DISCUSSION - SUPPLY CHAIN AND ACPI COMPETITIVENESS CHALLENGES

Common challenges found among the industry sectors included: a lack of understanding of other sectors along the supply chain, surviving in the face of competition from major players, meeting local retail demands, uncertainty concerning industry consolidation and coordinating the industry to effectively and competitively participate in meeting worldwide consumer demands.

Farmers to Local Manufacturers

From the findings of the ACPI study challenges were particularly noted at the upstream extremity of the supply chain. These were exacerbated during the time of the 2002 drought, when cereal grain was a relatively scarce commodity. A manufacturer interviewee believed that the loyalty of a group of grain growers to their customers was reducing and having a negative impact on the manufacturer sourcing some grains. A sense of on-going mistrust was portrayed when the interviewee stated that grain growers did not show any loyalty in times of need. Trust between chain players has been described as a key element in building successful agribusiness supply chains (Newton, 2000, p.8). Newton (2000) cited the Dutch experience reported by Janzen & de Vlieger (2000). In this case previously mistrustful supply chain members had to address the issue for the sake of supply chain effectiveness. According to Newton, Janzen & de Vlieger (2000) who examined success factors in Dutch agribusiness supply chains stated that: *“The lack of trust and the lack of attention to forming a solid social foundation will almost certainly lead to the social as well as economic failure of chains...”*

The farmers were holding on to grain that a local manufacturer required urgently. The reasons were firstly that there was a drought and the grain was substituting fodder as feed and secondly that it was likely that the grain would fetch a better price in becoming scarce. Farmers also had several options for deploying grain, such as export, domestic manufacturing or stockfeed and tended to keep their cards close to their chest and refrain from locking into a partnership that might close off market options (Sohal & Perry, 2004). There was more at stake too in this scenario than the immediate financial gain of the farmers or the manufacturer. The associated rural town relied almost solely on the manufacturer for labour employment and the company was considering its options, having a more reliable grain supply interstate. The final scenario may have entailed a lose-lose result. Rather than this happening, relationship development, with increased understanding of the other party's predicament and win-win collaboration appeared to be an urgent requirement in this instance. Collaborative supply chain activity requires elements of relationship development, usually at senior manager level, as well as trust, strategic information sharing, mutual learning and win-win outcomes (Perry, 1995 & Perry, Sohal & Crawford, 1995).

Baking SMEs

There has been a marked decrease in the number of small baking operations within the current competitive environment of national franchise expansion and supermarket in-house baking. There has, however, been a growth in boutique bread baking with new markets developing in specialty and exotic breads as well as health associated bread products. The boutique product varies considerably because of the variability in cereal ingredients from small-scale niche-product farmers located in a growing region.

SME bakers interviewed in the ACPI supply chain study pointed out a number of issues adversely affecting the competitiveness of their enterprises. For example, some specific concerns raised by the SME bread bakers included:

- the sector being dominated by two large highly automated companies that were in turn closely linked to the two major supermarkets and intense competition from national baking franchises and supermarket in-store baking for domestic market share;
- job losses in traditional small bakeries; difficulties in attracting young staff for baking work and hours with shifts tending to start after midnight;
- the labour intensity and comparatively low level of value-added per employee in baking industry compared to flour milling and cereal food manufacturing; expensive freight costs of non-local ingredients; and
- a shift in consumer market to more healthy and wholesome breads; and difficulties in attracting and recruiting skilled workers.

A cake baker reported a need for increased food-handling cleanliness throughout the small baking establishments and greater networking to improve market intelligence; and a biscuit baker reported that the demand for biscuits was decreasing due to the consumption trend toward healthier foods. The biscuit maker also stated that much of the equipment in the plant was outmoded but the cost of upgrading was prohibitive.

According to SME literature, it is evident that in order for Australian baking industry SMEs to survive and thrive, they need generally to implement four sets of strategic behaviours. The first strategic behaviour is to develop a broader global market perspective (Alam, Brown & Johnston, 2003; Hennart & Park, 1993; Millington & Bayliss, 1990; and Welch & Welch, 1996). The second behaviour is to participate in cooperative alliances (Boekholt & Thuriaux, 1999), the third is to become more involved in government and industry support programs (Anderson & Svensson, 1994) and the fourth is to invest in upgrading production and logistics systems (Hyer & Wemmerlöv, 2002).

Concerning cooperative activity, thriving SMEs were tending to develop strategic alliances with large competing firms to survive and were also innovating through adding features to suit new niche markets. Small to medium businesses did not always need to pursue the traditional internationalisation approach to compete internationally. Hennart (1991) purported that internationalisation could be widened by incorporating a range of intermediate forms of involvement such as alliances and long-term contracting.

Cereal Product Manufacturers

A win-win situation that was reported in the ACPI study was that of a medium-sized company providing an unsolicited R&D service to a customer. This had led to increased business for the company in the long run. Cooperative activity between supply chain members, as in this example, has been a common supply chain-success theme in academic literature for over a decade. According to Spekman et al (1998), referring to Quinn's text of 1993:

World class companies are now accelerating their efforts to align processes and information systems throughout their entire value added network to meet the rising expectations of a demanding marketplace.

Fearne & Hughes, (1999) also discussed the importance of cooperative partnerships in reference to the British meat industry. Rademakers & McKnight (1998) also found that successful potato firms achieved considerable benefits through cooperative inter-firm activities that enabled them to gain access to high quality raw materials, production capacity and large markets.

Retailers

Mass collaboration was not evident in the Australian cereal industry context. The Australian retailers, with branches throughout the states, were in an exceptionally strong position to dictate trading conditions to their suppliers. Generic product supply, complying with retailer-dictated specifications, had also become a major trend. Also, due to fierce price competition between the small number of major supermarkets and the subsequent lowering of prices, manufacturers in the study reported decreasing margins. This situation was worse during the previous period of drought.

Whole Chain

Exclusive partnerships and networks involving major industry players were observed to be developing within two clearly separate supply chains. The large companies were gaining an increasing level of vertical control in their respective chains and hence achieving an increased ability to align processes and systems. It was evident that trust levels were highest where relationships were long term and where companies were vertically integrated. However, paddock-

to plate interaction was only evident in cases such as organic cereal product supply chains where government-controlled traceability requirements were stringent.

The manager of one major company in the ACPI study that appeared to have reached a high level of efficiency through the internal application of market-focussed learning expressed high levels of commitment and information sharing with supply chain partners. However, for confidentiality reasons, he did not elaborate on the nature of information shared. Another company manager expressed a high degree of knowledge interchange with overseas enterprise counterparts. Otherwise, there was generally a high level of information confidentiality regarding the bigger players due to the intensity of competition.

With regard to information sharing, the ACPI study showed mainly transactional information sharing (as opposed to collaborative and more strategic information sharing) throughout the supply chain. The transactional information concerned such matters as product history, quality control, product variability due to seasonal and climate changes and transport hiccups at harvest time. Networking was found in the ACPI study to be at a low level throughout the entire supply chain. It was evident, though, that progress was occurring through networking between the major cereal-related associations such as the Australian Grains Group, the Baking Industry Association and the Flour Millers Council of Australia collaborating at state and national levels in order to rectify the fragmentation of the industry. A range of ACPI collaborative recommendations, aimed at facilitating more strategic industry activity, was presented at an ACPI forum in 2004, along with summary report (Sohal & Perry, 2004). Key recommendations referred to developing a more globally and strategically focussed industry and conducting research into Asian markets for cereal-based products. The forum participants ratified these recommendations.

CONCLUSIONS

It is clear that there was a lack of collaborative and networking activity throughout the ACPI supply chain. This was occurring through (1) short-term self-interest overriding potential mutual interest, as in the case of the farmers and the manufacturer and (2) critical mass reduction and fragmentation overriding cooperative planning as in the case of the baking SMEs. It was also occurring through (3) power overruling loyalty as in the case of the dominant group of retailers placing increasing demands on their ACPI suppliers and (4) fierce restructuring competition overriding trust as in the case of the two consolidating major supply chains.

Regardless of the current competitive scenario, the ACPI still needs to address key whole industry survival issues such as (1) grain shortages due to lack of cooperation and (2) SMEs losing critical mass and going out of business due to a lack of foresight, networking and survival strategies. Further ACPI survival issues to be addressed include (3) the decreasing margins for local manufacturers in supplying major retailers and (4) the continuing industry uncertainty as companies continue to realign. Joint strategic planning at industry and government level in conjunction with the food industry, and appropriate follow-up action is essential for the ACPI to meet demand challenges in the future. Such action is required for the ACPI to cater efficiently and effectively to the potentially lucrative, growing global demand for cereal-based food and bio-technical products.

REFERENCES

- Alam, Q. Brown, D. & Johnston, F. (2003) 'Best practice management in small and medium enterprises in regional Victoria: problems and issues', LaTrobe University, pp. 1-33.
- Anderson, T. & Svensson, R. (1994) 'Entry modes of direct investment determined by the composition of firm-specific skills', *Scandinavian Journal of Economics*, 96, pp. 551-560.
- Australian Bureau of Statistics, (2003) 'Australian Manufacturing Statistics', 1989/90 – 1999/2000.
- Bhatt, G & Emdad, A. (2001) 'An analysis of the virtual value chain in electronic commerce', *Logistics Information Management*, Vol. 14, No. 1/2, pp. 78-84.
- Boekholt, P. & Thuriaux B. (1999) 'Public policies to facilitate clusters, background, rationales and policy practices in international perspective', in Roelandt, T. & den Hertog, P. (eds), *Boosting innovation: the cluster approach*, OECD, Paris, pp. 381-412.
- Collins, R, Dunne, T & O'Keefe, M. (2002) 'The 'locus of value': a hallmark of chains that learn', *Supply Chain Management: An International Journal*, Vol.7 No.5, pp. 318-321.
- Collins,A, Henschion, M & O'Reilly, P (1999) *Supply Chain Management*, Vol. 4, No. 2, pp. 102-111.
- Department of Agriculture, Fisheries and Forestry, Australia (AFFA), 2002 *National Food Industry Strategy: Action Agenda*, June, pp. 7-25.
- Desbarats, G, 1999 'The innovation supply chain', *Supply Chain Management: An International Journal*, Vol. 4, No. 1, pp. 7-10.
- Dyer, J & Chu, W (2003) 'The role of trustworthiness in reducing transaction costs and improving performance: empirical evidence from the United States, Japan and Korea', *Organization Science*, Vol. 14, No. 1, pp. 57-68.
- Fawcett, S & Magnan, G. (2002) 'The rhetoric and reality of supply chain integration', *International Journal of Physical Distribution & Logistics Management*, Vol. 32 No.5, pp. 339-361.
- Fearne, A & Hughes, D (1999) 'Success Factors in the Fresh Produce Supply Chain: Insights from the UK', *Supply Chain Management: an International Journal*, Vol.4, No.3, pp. 120-129.
- Frolich, M & Westbrook, R (2001) 'Arcs of integration: an international study of supply chain strategies', *Journal of Operations Management*, Vol. 19, pp. 185-200.
- Glaser, S 1994 'The Strategic Imagination' *Management Decision*, Vol. 32, No. 6, pp. 31-34.
- Govil, M & Proth, J-M (2002) *Supply Chain Design and Management: Strategic and Tactical Perspectives*, Academic Press, pp. 61-93.
- Grains Research and Development Corporation, Australian Government, *Single Vision*, http://www.singlevision.com.au/portal/alias_SingleVision/land_en-AU/tabID_3354/DesktopDefault.aspx
- Hennart, J. & Park, Y. (1993) 'Greenfield vs acquisition: the strategy of Japanese investors in the United States', *Management Science*, 39, pp. 1054-1070.
- Hennart, J. (1991) 'The transaction costs theory of joint ventures: an empirical study of Japanese subsidiaries in the United States', *Management Science*, 37, pp. 483-497.
- Holmstrom, J, Framling, K, Kaipia, R & Saranen, J (2002) "Collaborative planning forecasting and replenishment: new solutions needed for mass collaboration", *Supply Chain Management: an International Journal*, Vol.7 No.3, pp. 136-145.
- Hotzapfel, H (1995) 'Potential forms of regional economic cooperation to reduce goods transport', *World Transport Policy & Practice*, Vol. 1. No. 2, pp. 34-39.
- Hyer, N. & Wemmerlöv, U. (2002) *Reorganizing the factory competing through cellular manufacturing*, pp. 10-59.

- Janzen, R. & de Vlieger, J (2000) 'Social network theories as a tool for chain building. from the promise of profit to the promise of persons' in Trienekens J & Zuurbier, P (editors), *Chain Management in Agribusiness and the Food Industry: Proceedings of the Fourth International Conference*, Netherlands, pp. 121- 127.
- Kogut, B. & Zander, U. (1993) 'Knowledge of the firm and the evolutionary theory of multinational corporation', *Journal of International Business Studies*, 24, pp. 625-646.
- Macbeth, D (2002) 'Emergent strategy in managing cooperative supply chain change', *International Journal of Operations & Production Management*, Vol. 22. No. 7, pp. 728-740.
- McAdam, R & McCormack, D (2001) 'Integrating business processes for global alignment and supply chain management', *Business Process Management Journal*, Vol. 7, No. 2, pp. 113-130.
- Milgate, M (2001) 'Supply chain complexity and delivery performance: an international exploratory study', *Supply Chain Management: An International Journal*, Vol. 6, No. 3, pp. 106-118.
- Millington, A. & Bayliss, B. (1990) 'The process of internationalisation: UK companies in the EC', *Management International Review*, 30, pp. 151-161.
- Motwani, J, Larson, L & Ahuja, S (1998) 'Managing a global supply chain partnership', *Logistics Information Management*, Vol. 11, No. 6, pp. 349-354.
- Nassimbeni, G (1998) 'Network structures and coordination mechanisms', *International Journal of Operations and Production Management*, Vo. 18, No. 6, pp. 538-554.
- Newton, D (2000) *Supply Chain Learning for Australian Agribusiness: Chain Reversal and Shared Learning for Global Competitiveness*, Department of Agriculture, Fisheries and Forestry Australia, pp. 1-39.
- Perry, M (2004) 'The Impact of Industry Turbulence and Food Industry Trends on the Cereal Product Supply Chain: an Australian Study', *Electronic Proceedings of ANZAM Conference*, Dunedin, New Zealand, December 8-11.
- Perry, M & Alam, Q. (2000) 'The Impact of Global and Local Competitive Factors on Small-to-Medium Enterprises in the Australian Baking Industry', *Electronic Proceedings, Quality, Innovation and Knowledge Management Conference*, Monash University, Sunway, February 16-18.
- Perry, M & Sohal, A (Forthcoming), Business Environment Influences in the Cereal Product Supply Chain: an Australian Study, pp. 5-117.
- Perry, M (1995) *Outcomes of the TCF Quick Response Pilot Program*, Business Victoria, pp. 1-9.
- Perry, M, Sohal, A & Crawford, B (1995) 'Developing Effective Supply Chain Relationships', *Proceedings of 1995 International Logistics Conference*, July, Nottingham, UK, pp. 103-110.
- Productivity Commission (1999) *Impact of Competition Policy Reforms on Rural and Regional Australia*, AGPS, Canberra, pp. 10-15.
- Quinn, J (1993) *The Intelligent Enterprise* The Free Press, New York
- Rademakers, M & Knight, P (1998) 'Concentration and inter-firm cooperation within the Dutch potato supply chain', *Supply Chain Management*, Vol. 3, No. 4, pp. 203-213.
- Redding, W 1979, Organizational communication theory and ideology: an overview, in Nimmo, D (Ed) *Communication Yearbook* 3, pp. 309-341.
- Rigby, D (2001) 'Situational strategies: A management tool for turbulent times' *Strategy and Leadership*, Vol. 29, No. 6, pp. 8-12,
- Sahay, B (2003) 'Supply chain collaboration: the key to value creation' *Work Study*, Vol. 52, No. 2, pp. 76-83.

- Sahin F & Robinson, E (2002) 'Flow coordination and information sharing in supply chains: review, implications and directions for future research', *Decision Sciences*, Vol. 33, No. 4, pp. 505-536.
- Shortell, S. M., and E. J. Zajac. (1990) 'Health care organizations and the development of the strategic management perspective'. in *Innovations in Health Care Delivery*, edited by S. S. Mick et al.,. San Francisco: Jossey-Bass, pp.144-180
- Sohal, A & Perry, M (2004) *Summary Report: The Status of Supply Chain Networks and Practices in the Victorian Cereal Products Industry Supply Chain*, Monash University and the Victorian Government Department of Innovation, Industry and Regional Development, pp.1-12.
- Spekman, R, Kamauff, J & Myhr, N. (1998) 'An empirical investigation into supply chain management: a perspective on partnerships', *International Journal of Physical Distribution & Logistics Management*, Vol. 28 No.8, pp. 630-650.
- Spekman, R, Spear, J & Kamauff, J (2002) 'Supply chain competency: learning as a key component', *Supply Chain Management: an International Journal*, Vol.7 No.1, pp. 41-55.
- Welch, D.E & Welch, L.S (1996) 'The internationalisation process and network; a strategic management perspective', *Journal of International Marketing*, 4,3, pp. 11-22.
- Whipple, J. S & Gentry, J. J (2000) A network comparison of alliance motives and achievements, *Industrial Marketing*, Vol 15, No. 5, pp. 301-322.
- Yu, Z, Yan, H & Cheng, T (2001) 'Benefits of information sharing with supply chain partnerships', *Industrial Management & Data Systems*, Vol.101 No.3, pp. 114-119.