The Value of Procurement to an Organisation

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Abstract

As the strategic potential of procurement has been explored by academics and professionals, there has been increasing discussion surrounding the ways that procurement can be of value to an organisation. Theories of competitive advantage are discussed as one method for procurement to add value. In this paper the major types of competitive advantage - cost leadership and differentiation – are outlined and the importance of procurement's alignment with overall corporate strategy for achieving a competitive advantage is stressed. Three procurement strategies operational improvement, supply chain collaboration and sustainable purchasing – are discussed as further examples of how procurement can create a competitive advantage for an organisation. The discussion highlights three complications that surround determining the value of the competitive advantage: indirect relationships, implementation gaps and measurement. Conclusions drawn from this discussion indicate that these complications are common to all strategies discussed. Despite the complications in determining the value of competitive advantage, it is shown to be an important way that procurement can be valuable to an organisation.

Introduction

The value that procurement can bring to an organisation has been a central preoccupation of the discipline, particularly since academics and professionals began to explore its strategic potential. Although it is widely accepted among procurement professionals that strategic procurement can be integral to a firm's success, the ways that procurement can best add value to an organisation continues to be a topic of debate and interest (Goebel, *et al.*, 2003: 4). Additionally, procurement is claimed to have a "business wide impact" and an effective procurement department can benefit the entire firm (Prisk, 2003: 19). It is therefore important to continue to examine the ways that procurement can create advantages for an organisation.

One obvious way that procurement can be valuable to an organisation is by employing strategies that can create a competitive advantage for the firm. Competitive advantage can be defined as "the ability of a firm to achieve and maintain its chosen competitive position or objective" (Rajagopal & Bernard, 1993: 14). Competitive advantage is maintained by "erecting barriers for newcomers, enhancing your powers towards both buyer and supplier, and out-positioning competitors" (Kundsen, 2003: 723). Porter suggests three main strategies for competitive advantage: differentiation, cost leadership and focus (in Kundsen, 2003: 722-3). Differentiation strategy gives a firm an advantage by offering products or services that have superior or unique qualities. Competitive advantage through cost leadership is achieved when a firm can offer the same product or service at a lower cost than competitors. A focus strategy employs a differentiation or cost leadership strategy on a select segment of the market (Kundsen, 2003). Another commonly used model of competitive advantage is the Resource Based View (RBV), which ties the resources and capabilities of a firm to performance. RBV suggests that in order for a resource to generate a competitive advantage for a firm, it must be inimitable or difficult to replicate, it must be unable to be substituted with a similar resource and, lastly, the resource should not be mobile between firms (Cousins, Lamming, Lawson & Squire, 2008).

It is important to continue to examine the ways in which procurement can be valuable to an organisation in order to support the view that procurement should be involved in high-level decision making within a firm. Demonstrating that procurement can be valuable to a firm through competitive advantage provides justification that procurement should indeed be a strategic tool of the organisation and should be involved to a greater degree within strategic activity throughout the firm.

Key Issues and Challenges

There is a vast range of procurement strategies that have been linked to creating a competitive advantage. CAPS Research has recognised the importance of researching which strategies should be implemented by procurement to achieve a competitive advantage (Monczka & Pearson, 2008; 2009). For this purpose, CAPS Research began a study called the Executive Assessment of Supply (EAS), which aimed to determine critical supply strategies and their degree of implementation in firms across the world (Monczka & Pearson, 2008 & 2009). In both 2007 and 2009 the EAS study identified 23 supply strategies ranging from total cost management to outsourcing/insourcing decisions (Monczka & Pearson, 2009). The most recent study found that the top strategy was "Vision, Mission and Strategic Plan" which is defined as a strategic plan for "the development and management of the supply network that creates value and leads to competitive advantage" (Monczka & Pearson, 2009: 62).

Aligning the procurement strategy with the overall mission or strategic plan of the organisation has been recognized as a source of competitive advantage since academics and professionals sought to increase the profile of procurement (Ellram & Carr, 1994). The research summarized in Ellram & Carr's literature review (1994) suggested that for procurement to be able to create a competitive advantage for a firm, procurement strategies must compliment the firm's corporate strategy. A corporate strategy is defined by Prisk (2003: 23) as "the comprehensive corporate vision defining the means by which a firm will deliver value to its customers and shareholders". Additionally, because procurement impacts upon most areas in a business, it is a given that procurement strategy should reflect and support an organisation's overarching corporate strategy (Prisk, 2003). Cousins (2005: 421) presents a case study of a UK retailer to demonstrate how corporate strategy and procurement strategy can be "mismatched". In Cousins' example, the procurement branch had pursued a strategy of developing a long-term, collaborative relationship with a supplier. However, senior management's directive was for pursuit of the lowest price. The "mismatch" in strategies became evident when the CEO directed the supplier to reduce prices by 10%, which ultimately resulted in supplier outrage and supply being stopped (Cousins, 2005).

Rajagopal and Bernard (1993) suggest that the most suitable strategy for gaining a competitive advantage will be specific to the firm's competitive priorities. There have been a number of studies that have examined how procurement strategies could best be aligned with corporate strategies. For example, a study by Cousins (2005) found that procurement is likely to have a tactical, cost reducing role if the corporate strategy is cost focused whereas if the firm has a strategy of differentiation, procurement will focus on long term, strategic collaboration. The findings of this study suggest that when a firm's corporate strategy is focused on cost, then procurement pursues strategies of cost reduction, lead-time reduction and the development of short/medium-term relationships with suppliers (Cousins, 2005). The procurement department of a firm with a differentiation strategy, on the other hand, will use strategies of supply tier development, outsourcing and long-term collaborative relationships (Cousins, 2005). Baier, et al., (2008) observe that there have been few studies other than Cousins' research that empirically examine the alignment between a firm's corporate strategy and purchasing strategies. The Baier et al., (2008) study concludes that "high-performing cost leaders prioritize cost reduction over quality improvement and innovation. Conversely, chief purchasing officers in strategic business units that successfully pursue differentiation strategy place particular emphasis on quality aspects and to a lesser extent on innovation while considering cost reduction only as a subordinate priority" (Baier et al., 2008: 46). Finally, their research supports the idea that when purchasing strategy is aligned with corporate strategy, the firm will have "stronger financial performance" and potentially a competitive advantage (Baier et al., 2008: 47).

To examine the issues surrounding how procurement can develop a competitive advantage for an organisation, and thus offer value, three topical procurement strategies – operational improvement, supply chain integration/collaboration and sustainable procurement – will be discussed.

Procurement Operational Improvement

There are a number of procurement strategies that can be broadly captured under the heading of procurement optimization. Optimization in procurement is essentially the process of streamlining or automating certain operational aspects to achieve a competitive advantage (Duffy 2006). Duffy (2006, p. 2) observes that there are numerous optimization strategies which range from "automation, to structural issues, to workload management". Duffy (2006) identifies a number of common optimization strategies including the creation of a data warehouse, separating strategic and tactical procurement, structural changes, automating processes and implementing procurement systems. Some research suggests that gaining a competitive advantage through operational improvement is often linked to the use of information technology (IT) or e-business tools (González-Benito, 2007; Duffy, 2007). E-tools also have many applications: supplier analysis, spend analysis, contract management tools, electronic ordering and invoicing, reporting, e-sourcing/e-auctions (Duffy, 2007) and bid optimization (Giunipero & Carter, 2009).

In early studies of the relationship between IT investment and productivity, the expected positive relationship was not supported. However, using other mathematical models and measurement instruments a positive relationship was demonstrated (Caniato, et al., 2009; González-Benito, 2007). Indeed, the relationship between IT investment and productivity is more likely to be found at an operational level, such as purchasing, rather than the level of the firm (González-Benito, 2007: 203).

Most research into the effect of IT on procurement optimization has focused on specific tools, such as e-procurement systems. These include automated purchase order processing, reverse auctions and electronic data exchange (Caniato *et al.*, 2009; González-Benito, 2007). Kundsen (2003) in a conceptual study, attempted to align e-procurement tools with different strategies for competitive advantage. This research came to the conclusion that the use of eprocurement tools was highly aligned with cost cutting and efficiency strategies. Eprocurement tools were moderately aligned with resource based, collaborative strategies, and had only minimal applications for a firm that seeks to corner a unique market (Kundsen, 2003). The conclusion was that e-procurement tools are best suited to facilitate competitive advantage through cost reduction is supported by later research. For example, Tanner, *et al.* (2007: 5) surveyed a number of Swiss firms about e-procurement usage, and found that "reduction of the purchasing price" and "optimizing total costs of procurement" were given the highest priority by those surveyed. Similarly, Duffy (2007) indicates that the major drivers for ebusiness tools in procurement are improving costs, managing complexity and risk mitigation. González-Benito (2007) also suggests that the benefits that IT can bring to an organisation are summarized as information efficiencies, which saves time, money and resources and information synergies, which facilitates the integrations of people and business units within a firm.

Although cost cutting through efficiency is identified as the major source of competitive advantage that e-business and e-procurement tools bring to an organisation, savings have been difficult to quantify as studies have shown (Caniato et al., 2009; González-Benito, 2007). Attaching a savings figure to the introduction of e-tools can be difficult as often the introduction of the tool is accompanied by process improvement (Duffy, 2007). It may not lead to staff reductions, but allows resources to be allocated elsewhere (Duffy, 2007). Studies also show that eprocurement uptake is minimal, particularly in small/medium sized enterprises (Gunasekaran 2009). Some of the difficulties associated with e-procurement uptake include: "high introduction costs for new solutions", "suppliers slow to link up with the procurement system", "lack of quality master data", lack of high-level support, change management, insufficient skills and support and immature technology (Gunasekaran, 2009: 173; Tanner et al., 2007: 9). Simply investing in IT systems for purchasing will not necessarily lead to operational improvement González-Benito's (2007) study shows. Through the analysis of a questionnaire as sent to 141 Spanish firms, González-Benito (2007) demonstrated that a positive relationship between IT investment and procurement's operational performance exists when e-procurement tools are aligned with procurement strategy. González-Benito (2007: 206) suggests that IT "helps to implement [procurement] practices in a more efficient and effective manner". Duffy (2007: 4) summaries this issue also succinctly: "the challenge in getting the most out of tools does not seem to lie with the technical capabilities of the tools themselves; it's more a matter of selecting the proper e-tools system or supplier that fits your needs and then understanding your own needs adequately so that you can dictate the specific functionality you require in the tool".

While these difficulties may exist, the use of e-business tools, particularly eprocurement, has been increasing (Caniato *et al.*, 2009). Although there are difficulties in quantifying a competitive advantage due to the indirect nature of the relationships between IT investment and performance, clearly, both professionals and academics see an e-procurement structure as a way that procurement be valuable to an organisation.

Supply Chain Collaboration and Integration

Collaboration and integration within a supply chain has been identified as one of the most important procurement strategies for developing a competitive advantage (Ogden, *et al.*, 2005; Trent & Monczka, 2005). Integration and collaboration can be internal (within the firm) and external (with suppliers and customers) (Ogden et al., 2005).

Internal collaboration has been linked to increasing the "strategic reputation" of procurement within a firm (Goebel *et al.*, 2003). In particular, when procurement is encouraged to communicate with other operational areas such as marketing and engineering, performance of procurement was found to improve (Goebel *et al.*, 2003). Bernardes (2008, p. 52) suggests that "due to the boundary spanning nature" and the "interpersonal relations" that procurement has with other areas in a firm, it is "well positioned" to facilitate knowledge and sharing within a firm. Bernardes's (2008) research also indicates that the collaborative potential of procurement can offer a source of competitive advantage through the increased responsiveness to customers throughout the entire firm.

Current research of external collaboration and integration suggests that a shift has occurred from "transaction-orientated to relation-orientated" supplier relationships (Sánchez-Rodríguez, 2009: 161). An unsuccessful supplier relationship is not necessarily due to the weakness of the supplier or procurement department, but may be the result of a mismanaged or inappropriate relationship between the two (Sánchez-Rodríguez, 2009). Some of the procurement practices that have been suggested to enhance the buyer-supplier relationship include strategic partnership with a limited number of suppliers (Cousins et al., 2008), communication through supply chains and long-term relationships with suppliers (Chen, et al., 2004). These practices are suggested to encourage knowledge sharing, create a trust based relationship to enhance risk management and dispute resolution, and provide assurance of business (Chen et al., 2004: 509; Sánchez-Rodríguez, 2009, p. 163). They contrast with adversarial, short-term relationships that prioritize cost and encourage high levels of competition (Chen et al., 2004). A study by Chen et al. (2004) confirmed a positive relationship between these procurement strategies and customer responsiveness, which ultimately was positively related to firm performance. Another study by Carr and Pearson (2002) found support for the theory that integrating procurement and potential suppliers in product development increased a firm's performance. These findings were also verified by Sánchez-Rodríguez (2009) whose study found a positive relationship between strategic procurement, supplier development and performance.

The importance of blending internal and external collaboration is brought to the forefront in global sourcing. A firm with a global sourcing strategy is likely to have staff and suppliers spread across numerous locations which need to be effectively integrated (Samli & Browning, 2003). The conventional wisdom of a global sourcing strategy was to buy low and sell high. However, the strategic advantage of global sourcing has broadened to include quality, availability, delivery, new technologies and a global network among other factors (Samli & Browning, 2003). Trent and Monczka (2005: 25-26) made a distinction between firms that engage in "international purchasing" and "global sourcing" by virtue of the level of collaboration and integration of strategy between different functional groups across each location. Studies such as that by Samli and Browning (2003, p. 50), show that comparison between firms that have an integrated strategic directive for global purchasing and those that do not, indicate that the former are "significantly more satisfied" with the performance of their global sourcing practices. However, Trent and Monczka (2005) highlight the difficulty of measuring the savings that result from a complex global sourcing arrangement, so these results need to be treated cautiously.

It is worth noting that while global sourcing and other collaborative supplier methods were expected to be key procurement strategies for the start of the twenty-first century, it did not appear in the top ten strategies in the 2009 or 2007 EAS studies (Monczka & Peterson, 2008; 2009). Global sourcing, however, was flagged as one of the strategies with the biggest gap between strategic intentions and implementation (Monczka & Peterson, 2008). As Trent and Monczka (2005, p. 28) indicate, the majority of firms are at the "international purchasing" stage and have yet to implement collaborative strategies across the globe. Nevertheless, the collaborative procurement approaches like global sourcing and supplier development are valuable strategies that clearly have the potential to provide a competitive advantage.

Sustainable Procurement

An increasingly relevant way that procurement can add value to an organisation is through sustainable purchasing. Sustainability has become an important consideration for organisations around the world and procurement can have a large contribution to a firm's sustainability initiatives. Sustainability is commonly defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Krause et al., 2009: 20-1). This definition not only encompasses environmental considerations, but also social and cultural aspects and is, therefore, linked to ideas of corporate social responsibility (Krause et al., 2009). Sustainable procurement is defined as "a process whereby organisations meet their needs for goods, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimizing damage to the environment" (APCC, 2007: 5). Sustainable procurement considers both the goods that are purchased and the suppliers that a firm contracts with because, as Krause et al. (2009: 18) advise "a company is no more sustainable than its supply chain" members.

Some of the methods that procurement can use to purchase sustainably include: considering alternatives to buying, such as recycling an existing asset; including a sustainability criterion in supplier selection (Little, 2009); adopting a life-cycle costing approach (APCC, 2007), and requesting sustainability accreditation such as ISO 14001, Global Reporting Initiative (GRI) or Leadership in Energy and Environmental Design (LEED) green building management system (Ashenbaum, 2007).

Sustainable procurement is driven by social pressure, customer requirements, regulatory compliance, overall corporate culture and top management support (Ashenbaum, 2008). Despite these pressures, sustainability may have to be "sold" to a firm on the potential competitive advantage that it can provide. On the one hand, there are significant costs associated with unsustainable procurement practice, namely environmental costs, legal costs and the loss of customer support (Mebratu, 2001). On the other hand, sustainability can be linked to potential cost savings through increased efficiency and quality (Cousins et al., 2008). For instance, encouraging suppliers to minimize waste, energy and water consumption is both a sustainable and a cost cutting practice (Cousins et al., 2008; APCC, 2007). A number of studies of the manufacturing, furniture and automotive industries have shown that there is a strong relationship between the implementation of a formal environmental management system and improved product quality (Pullman, et al., 2009). Furthermore, there is public demand for sustainable practices, and thus sustainable procurement choices can differentiate a firm and its output and potentially offer a competitive advantage (Pullman et al., 2009; Ashenbaum, 2008).

The literature reviewed previously clearly indicates that sustainable procurement can add value through efficiency, quality and differentiation. However, the extent to which these practices lead to a competitive advantage is difficult to measure (Krause *et al.*, 2009). It is difficult to quantify the cost of both sustainable and unsustainable procurement practices (Mebratu, 2001). The Triple Bottom Line (TBL), which considers sustainability from its economic, environmental and social components, can be a useful measurement tool for procurement (Ashenbaum, 2008). When using the TBL method, procurement professionals are encouraged to equally assess the economic soundness, the environmental impact and the social contribution of procurement (Ashenbaum, 2008). While a useful framework, TBL is still limited by the intangibility of social and environmental costs. There are a number of additional barriers to achieving competitive advantage through sustainable procurement. A study by Walker and Brammer (2008, p. 134) identified "awareness, lack of resources and procurement structure" as the secondary barriers to sustainable procurement initiatives.

These complications are reflected in studies of the relationship between sustainable procurement and performance. For example, Pullman *et al.* (2009) examined the impact of environmental initiatives on performance in the food industry and found complex results. The hypothesis that there is a positive relationship between environmental practices and cost reduction was not supported, yet, their findings indicated that social and environmental practices improved product quality. They also found a positive relationship between quality and cost reduction. These findings lead them to conclude that sustainability practices do have a positive effect on performance, although it is an indirect way (Pullam et al., 2009).

The suggestion of theorists like Krause *et al.* (2009) that sustainability should be added to the competitive priorities for purchasing is not unreasonable as the value of sustainable procurement is well grounded in theory and conceptual modelling. Although studies like that of Pullman *et al.* (2009) did not demonstrate a direct relationship between sustainable initiatives and firm performance, this study and similar studies suggest that further research is likely to indicate that sustainable procurement practices lead to a competitive advantage.

Conclusions

It is clear from the preceding discussions of procurement operational improvement, supply chain collaboration and sustainable procurement, that procurement can be valuable to an organisation through the development of a competitive advantage.

As previously discussed, Porter's theory of competitive advantage and the RBV outline distinct strategies for achieving a competitive advantage namely, cost leadership, differentiation and inimitability of resources. The discussion of each procurement strategy shows that establishing a competitive advantage is highly complex as, procurement strategies can be made applicable to either a cost leadership or a differentiation strategy. For instance, in the discussion of procurement operational improvement, the implementation of e-procurement tools could be used to improve efficiency and provide cost savings through the reduction of staff. Or its information management applications could be used to ensure accurate, timely delivery as a differentiation strategy (González-Benito, 2007). Similarly, the strategy of global sourcing facilitates a cost leadership advantage by allowing firms to undercut competitors by sourcing cheaper products. Differentiation advantage may be created through the ability to source new technologies or higher quality products (Samli & Browning, 2003: 39).

This was also highlighted in the discussion of sustainable procurement. A firm can gain a cost advantage by purchasing from suppliers with efficient waste and energy management systems (Cousins *et al.*, 2008) or a differentiation advantage by purchasing quality sustainable products to cater for the environmentally conscious market (Ashenbaum, 2008). The ability for procurement to be conducive to either competitive strategy, reiterates the importance of a procurement strategy being aligned with corporate strategy if a competitive advantage is to be achieved.

Each area has additionally highlighted three key complications faced by procurement when demonstrating value to an organisation through competitive advantage. Firstly the discussion of procurement operational improvement indicated difficulties in demonstrating a direct relationship between firm performance and the implementation of e-procurement tools (González-Benito, 2007). This issue was also highlighted in the discussion of a sustainable procurement (Pullman *et al.*, 2009).

The second issue raised in the discussion of supply chain collaboration, particularly in global sourcing, was the gap between strategic aspirations and the implementation of a global sourcing strategy. While many large firms clearly desire to pursue an integrated global sourcing strategy, the complexity of such an arrangement has deterred many (Trent & Monczka, 2005).

Measurement, the third major issue, addressed in the discussion of sustainable procurement, is applicable across procurement strategy and relates to difficulties in finding a direct relationship between strategy and performance. The conventional method of measuring the savings that procurement achieves is through the comparison of current unit prices with previous prices (Emiliani, 2010: 122). This method can be effective for cost leadership strategies when a direct relationship between procurement strategy and performance is clear. In other cases, particularly differentiation strategies, difficulties arise in attempting to measure procurement's contribution when a competitive advantage is based upon intangible factors like quality, relationship development or the sustainable component of a product (Emiliani, 2010).

It can be concluded from the discussions that there are three key complications to determining procurement value through competitive advantage: indirect relationships, implementation gaps and measurement. Despite these complications, the discussion also leads to the conclusion that procurement can be central to creating a competitive advantage for an organisation through a wide variety of strategies. These procurement strategies have the potential to add value to a firm through cost leadership, differentiation or RBV strategies when they are appropriately aligned with the overall corporate strategy.

References

- APCC. (2007) Australian and New Zealand government framework for sustainable procurement. Retrieved: 3 April 2010 from <http://www.apcc.gov.au/LinkClick.aspx?fileticket=%2fIacfFgL8eQ%3d& tabid=151&mid=497>
- Ashenbaum, B. (2008) Green corporate strategies: Issues and implementation from the supply management perspective. CAPS Research Retrieved: 3 April 2010 from<http://www.capsresearch.org/publications/pdfsprotected/cir112008.pdf>

- Baier, C., Hartmann, E. and Moser, R. (2008) Strategic alignment and purchasing efficacy: An exploratory analysis of their impact on financial performance. *Journal of Supply Chain Management*, 44 (4) pp 36-32.
- Bernardes, E. (2010) The effect of supply management on aspects of social capital and the impact on performance: A social network perspective. *Journal of Supply Chain Management*, 46 (1) pp 45-56.
- Caniato, F., Cagliano, R., Kalchschmidt, M., Golini, R. and Spina, G. (2009) Evolutionary patterns in e-business strategy. *International Journal of Operations* and Production Management, 29 (9) pp 921-945.
- Carr, A. and Pearson, J. (2002) The impact of purchasing and supplier involvement on strategic purchasing and its impact on firm's performance. *International Journal of Operations and Production Management*, 22 (9) pp 1032-1053.
- Chen, I., Paulraj, A. and Lado, A. (2004) Strategic purchasing, supply management, and firm performance. *Journal of Operations Management*, 22 (5) pp 505-523.
- Cousins, P. (2005) The alignment of appropriate firm and supply strategies for competitive advantage. *International Journal of Operations & Production Management,* 25 (5) pp 403-428.
- Cousins, P., Lamming, R., Lawson, B. and Squire, B. (2008) Strategic Supply Management: Principles, Theories and Practice. Pearson Education, Harlow.
- Duffy, R. (2006) Operational excellence in procurement. CAPS Research. Retrieved: 3 April 2010 from<http://www.capsresearch.org/publications/pdfsprotected/cir122006.pdf>
- Duffy, R. (2007) E-tool optimisation. CAPS Research. Retrieved: 3 April 2010 from http://www.capsresearch.org/publications/pdfs-protected/cir072007.pdf
- Ellram, L. and Carr, A. (1994) Strategic purchasing: A history and review of the literature. *International Journal of Purchasing and Materials Management*, 30 (2) pp 10-18.
- Emiliani, M. (2010) Historical lessons in purchasing and supplier relationship management. *Journal of Management History*, 16 (1) pp 116-136.
- Giunipero, L. and Carter, P. (2009). The role of optimisation in strategic sourcing. CAPS Research. Retrieved: 3 April 2010 from <http://www.capsresearch.org/publications/pdfsprotected/giunipero2009.pdf>
- Goebel, J., Marshall, G. and Locander, W. (2003) Enhancing purchasing strategic reputation: Evidence and recommendations for future research. *The Journal of Supply Chain Management*, 39 (2) pp 4-14.

- González-Benito, J. (2007) Information technology investment and operational performance in purchasing. *Industrial Management and Data Systems*, 107 (2) pp 201-228.
- Gunasekaran, A., McGaughey, R., Ngai, E. and Rai, B. (2009) E-procurement adoption in southcoast SMEs. *International Journal Production Economics*, 122 (1) pp 161-175.
- Kundsen, D. 2003. Aligning corporate strategy, procurement strategy and eprocurement tools. *International Journal of Physical Distribution and Logistics Management*, 33 (8) pp 720-734.
- Krause, D., S. Vachon and R. Klassen. (2009). Special topic forum on sustainable supply chain management: introduction and reflections on the role of purchasing management. *Journal of Supply Chain Management*, 45 (4) pp 18-25.
- Little, S. (2009) Seven keys to procurement. WME magazine, 1.
- Mebratu, D. (2001) Environmental competitiveness: "Green" purchasing. International Trade Forum, (2) pp 11-13.
- Monczka, R. and Peterson, K. (2008) Supply strategy implementation: Current state and future opportunities. CAPS Research. Retrieved: 3 April 2010 from http://www.capsresearch.org/publications/pdfsprotected/monczka2008.pdf>
- Monczka, R. and Peterson, K. (2009) Supply strategy implementation: Current state and future opportunities. CAPS Research. Retrieved: 3 April 2010 from http://www.capsresearch.org/publications/pdfsprotected/carterp2009.pdf>
- Ogden, J., Petersen, K., Carter, J. and Monczka, R. (2005) Supply management strategies for the future: A Delphi study. *Journal of Supply Chain Management*, 41 (3) pp 29-48.
- Prisk, G. (2003) Developing a procurement strategy. In P. J. A Nagel (ed.) Supply Chain Management: A Procurement Perspective. Hargreen Publishing Company, Melbourne.
- Pullman, M., M. Maloni., & C. Carter. (2009) Food for thought: Social versus environmental sustainability practices and performance outcomes. *Journal of Supply Chain Management*, 45 (4) pp 38-54.
- Rajagopal, S. and Bernard, K. (1993) Strategic procurement and competitive advantage. *International Journal of Purchasing and Materials Management*, 29 (4) pp 13-20.
- Samli, A. and Browning, J. (2003) Developing competitive advantage: International sourcing as a strategic tool. *Journal of Global Marketing*, 16 (4) pp 35-52.

Sánchez-Rodríguez, C. (2009) Effect of strategic purchasing on supplier development and performance: A structural model. *Journal of Business and Industrial Marketing*, 24 (3/4) pp 161-172.

Tanner, C., Wölfle, R., Schubert, P. and Quade, M. (2007) Current trends and challenges in electronic procurement: An empirical study. *eMergence: Merging and Emerging Technologies, Processes, and Institutions.* June 2-4. Retrieved: 3 April 2010 from http://www.hswbasel.ch/iwi/publications.nsf/9419ff0c508bbae8c1257219004fef63/e149f6e2d5ac8333c12574080034f1ba/\$FILE/07-05-05_E-Procurement_Study_Final.pdf>

- Trent, R. and Monczka, R. (2005) Achieving excellence in global sourcing. *MIT Sloan Management Review*, 47 (1) pp 24-32.
- Walker, H. and Brammer, S. (2008) Sustainable procurement in the United Kingdom public sector. Supply Chain Management: An International Journal, 14 (2) pp 128-137.