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Supplier relationship management as a macro business process

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Abstract

Purpose – Increasingly, supplier relationship management (SRM) is being viewed as strategic, process-oriented, cross-functional, and value-creating for buyer and seller, and a means of achieving superior financial performance. This paper seeks to describe a macro level cross-functional view of SRM and to provide a structure for managing business-to-business relationships to co-create value and increase shareholder value.

Design/methodology/approach – In order to identify the sub-processes of SRM at the strategic and operational levels as well as the activities that comprise each sub-process, focus group sessions were conducted with executives from a range of industries. The focus groups were supplemented with visits to companies identified in the focus groups as having the most advanced SRM practices.

Findings – The research resulted in a framework that managers can use to implement a cross-functional, cross-firm, SRM process in business-to-business relationships.

Research limitations/implications – The research is based on focus groups with executives in 15 companies representing nine industries and multiple positions in the supply chain, including retailers, distributors, manufacturers and suppliers. While all companies had global operations, only one was based outside of the USA. Nevertheless, the framework has been presented in executive seminars in North and South America, Europe, Asia and Australia with very positive feedback.

Practical implications – The framework can be used by managers and has been successfully implemented in large corporations. The view of SRM presented involves all business functions, which extends the current thinking.

Originality/value – The framework includes all business functions and was developed with input from executives representing major corporations with global operations.

Keywords Supplier relationship management, Supplier relations, Buyer-seller relationships, Competitive advantage, Cross-functional processes

Paper type Research paper

Introduction

Supplier relationship management is the business process that provides the structure for how relationships with suppliers are developed and maintained. Supplier relationship management has become a critical business process as a result of: competitive pressures; the need to consider sustainability and risk; the need to achieve cost efficiency in order to be cost competitive; and the need to develop closer relationships with key suppliers who can provide the expertise necessary to develop innovative new products and successfully bring them to market. Significant benefits are possible from better managing relationships with key suppliers. It has been shown that integration of operations with suppliers can improve firm performance (Swink *et al.*, 2007; Singh and Power, 2009; Flynn *et al.*, 2010). An additional benefit of cross functional,

collaborative relationships with key suppliers is the ability to co-create value (Enz and Lambert, 2012).

Sharing information can promote integration with suppliers (So and Sun, 2010) and key metrics can be used to drive performance (Kim *et al.*, 2010) and align perceptions (Giannakis, 2007). Higher levels of integration with suppliers results in improved performance (Frohlich and Westbrook, 2001; Rosenzweig *et al.*, 2003). However, the appropriate level of supplier integration will depend on the relationship, and an effort should be made to identify a strategy tailored to each relationship (Lambert, 2004; Das *et al.*, 2005). Also, integration of suppliers beyond the first tier of the supply chain may increase firm performance (Lambert, 2008a, b; Kannan and Tan, 2010).

While research has shown that better management of supplier relationships increases firm performance, management needs a methodology to guide them in the process of supplier relationship management. In this paper, we provide a comprehensive, prescriptive methodology for implementing the supplier relationship management process

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This paper is based on Chapter 3, “The supplier relationship management process”, in Douglas M. Lambert (2008), *Supply Chain Management: Processes, Partnerships, Performance*, Sarasota, Florida: Supply Chain Management Institute, pp. 53–68. See: www.scm-institute.org

within a firm that is based on focus groups with executives as well as corporate experience implementing the process. In the next section, supplier relationship management is described as a macro-business process and then the research methodology is presented. A description of the supplier relationship management process is followed by a description of the strategic and operational processes that comprise supplier relationship management as well as the sub-processes and their activities. Also, the interfaces with the other key business processes are identified. Finally, limitations and opportunities for research are considered and conclusions are provided.

Supplier relationship management as a macro business process

Just as close relationships need to be developed with key customers, management should forge close, cross-functional relationships with a small number of key suppliers, and maintain more traditional buyer and salesperson relationships with the others (Dryer *et al.*, 1998). Management identifies those suppliers and supplier groups to be targeted as part of the firm's business mission. Supplier relationship management teams work with key suppliers to tailor product and service agreements (PSAs) to meet the organization's needs, as well as those of the selected suppliers. Standard PSAs are crafted for segments of other suppliers. The goal is to develop PSAs that address the major business drivers of both the organization and the supplier. Performance reports are designed to measure the profit impact of individual suppliers on the firm as well as the firm's impact on the profitability of suppliers (Lambert, 2004).

Supplier relationship management represents an opportunity to build on the success of strategic sourcing and traditional procurement initiatives. It involves developing partnership relationships with key suppliers to reduce costs, innovate with new products and create value for both parties based on a mutual commitment to long-term collaboration and shared success. For complex relationships such as The Coca-Cola Company and Cargill, it is necessary to coordinate multiple divisions spread across multiple geographic areas. The Coca-Cola Company has revenue of \$46 billion (2011) and the Coca-Cola System has global revenue in excess of \$100 billion. Cargill Inc. has revenue in excess of \$100 billion. One represents the largest beverage and bottling company and the other the largest ingredient and nutritional company. Cross-functional teams from each company meet on a regular basis to identify projects that will create joint value in areas such as new markets, new products, productivity and sustainability (Buffington *et al.*, 2007). The relationship involves the CEOs of both companies.

Supplier relationship management can be viewed as a macro-level business process. A macro-level process is highly aggregated and is comprised of numerous sub-processes (Srivastava *et al.*, 1999). These sub-processes can be separated into micro-level processes. Supplier relationship management is one of the eight, macro-business processes identified by the Global Supply Chain Forum research team of academics and executives (Lambert and Cooper, 2000) and it must interface with each of the other seven processes (see Figure 1). Each process, to be properly implemented, requires active participation from members of every business function (Lambert *et al.*, 1998; Ryals and Knox, 2001), as well as the involvement of customers and suppliers. The

processes shown in Figure 1 and the supporting materials described in Lambert (2008a, b) were developed over a number of years, starting in 1992, by a team of researchers working with executives from 15 multi-national companies that supported the Global Supply Chain Forum at The Ohio State University. A number of the examples used in this paper were obtained from implementation of the process with several corporations such as The Coca-Cola Company using an earlier version of this material.

Supplier relationship management and customer relationship management provide the critical linkages throughout the supply chain (see Figure 2) and each of the other six processes are coordinated through this linkage (see Figure 3; the Appendix contains a brief overview of each of the eight processes). For each customer, the most comprehensive measure of success for the supplier relationship management process is the impact that a supplier or supplier segment has on the firm's profitability. For each supplier in the supply chain, the ultimate measure of success for the customer relationship management process is the positive change in profitability of an individual customer or segment of customers over time (for a similar article on the customer relationship management process, see Lambert (2010)). The goal is to increase the profitability of both organizations by further developing the relationship. Just as all customers do not contribute equally to a firm's profitability, all suppliers are not the same. Some suppliers contribute disproportionately to the firm's success and with these organizations, it is important to implement cross-functional, cross-firm teams.

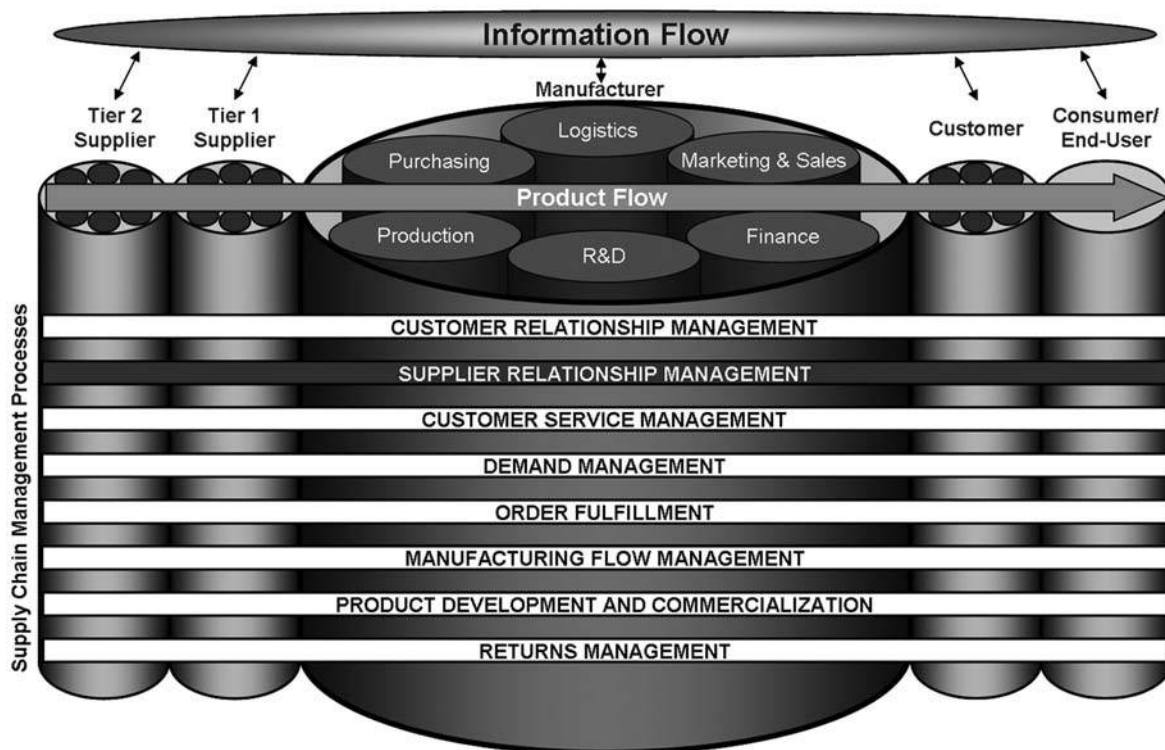
A key benefit of cross-functional, buyer-supplier relationships is the potential to increase joint profitability through co-creation of value (Ramirez, 1999; Lusch and Vargo, 2006; Enz and Lambert, 2012). The financial impact of the value that is co-created in a relationship is quantifiable and can be used for supplier evaluation. The potential to co-create value might be used to determine suppliers with whom to strengthen relationships. Enz and Lambert (2012) provided a method for measuring in financial terms the value that is co-created in cross-functional relationships with key suppliers and provided evidence that more value was created in a cross-functional relationship. Determining how to equitably share the co-created gains can represent a challenge.

Research methodology

In order to identify the sub-processes of the eight, macro-business processes and the specific activities that comprise each sub-process, executives were engaged in focus group sessions (Calder, 1977; Morgan, 1997; Krueger and Casey, 2000). The executives were from several industries including agriculture, consumer packaged goods, energy, fashion, food products, high-technology, industrial goods, paper products, and sporting goods. The companies represented multiple positions in the supply chain including retailers, distributors, manufacturers and suppliers. The executives represented various functions and their titles included manager, director, vice president, senior vice president, group vice president, and chief operations officer.

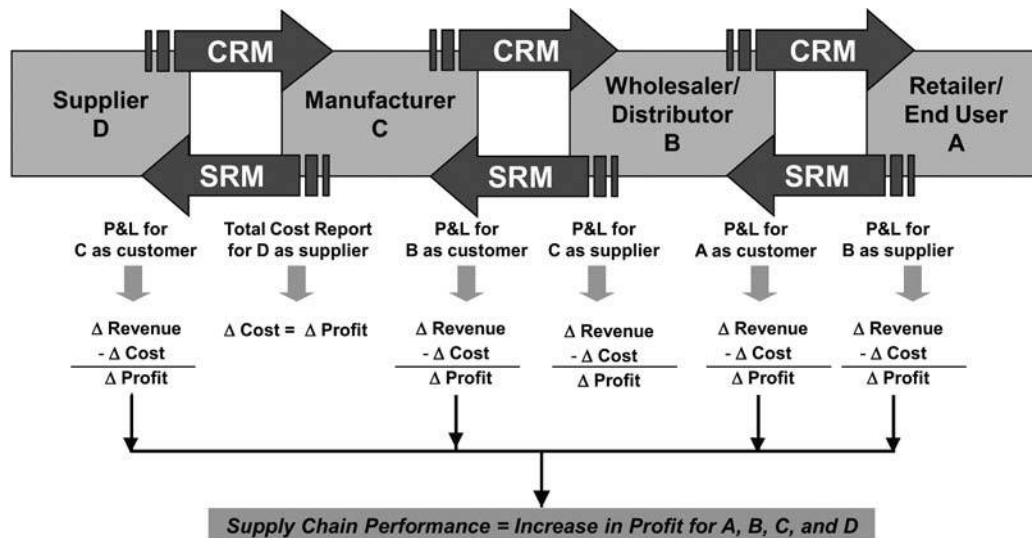
The executives were involved in a total of seven meetings over a period of 25 months from July 2001 to July 2003. In the first three meetings, the executives provided the research team with input on the sub-processes that should comprise

Figure 1 The eight macro business processes: integrating and managing business processes across the supply chain



Source: Lambert (2008a) adapted from Lambert *et al.* (1998)

Figure 2 Customer relationship management (CRM) and supplier relationship management (SRM): the critical supply chain management linkages

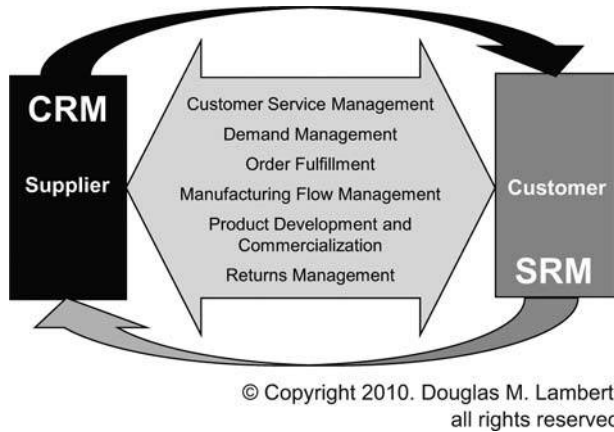


Source: Lambert (2008a) adapted from Lambert and Pohlen (2001)

each of the eight business processes, including supplier relationship management that had been identified in our research. The last four meetings, which are reported here, were specifically devoted to identifying the detailed activities and implementation issues related to supplier relationship management. The first session for the supplier relationship management process was held in July 2002 and 22 executives

participated. The goal was to determine the specific activities that comprised each of the strategic and operational sub-processes of supplier relationship management. During the second session, in October 2002, in which 18 executives participated, PowerPoint slides were presented which summarized the results of the previous session and the information gathered from company visits. Following the

Figure 3 The customer relationship management (CRM) and supplier relationship management (SRM) linkage



presentation, the executives participated in an open discussion providing suggestions for clarification. Based on the executives' feedback and additional company visits to document practice, a manuscript was produced for the following meeting. In the final two meetings, 16 and 17 executives respectively participated in open discussion and after each session, the manuscript was revised. Additional revisions have been made to this material as experience has been gained from working with member companies of The Global Supply Chain Forum such as The Coca-Cola Company on implementation of the supplier relationship management process.

The supplier relationship management process

The supplier relationship management process is comprised of two parts: the strategic process, in which management establishes and strategically manages the process, and the operational process, in which implementation takes place (see Figure 4). The strategic supplier relationship management process provides the structure for integrating the firm with suppliers, and it is at the operational level that the day-to-day activities occur. The strategic process is led by a senior executive and a team of managers that represents the typical business functions such as:

- marketing;
- sales;
- finance;
- production;
- purchasing;
- logistics; and
- research and development.

The team is responsible for identifying which suppliers are key to the company's success now and in the future and for making decisions about how relationships with suppliers will be developed and maintained. At the operational level, there will be a team for each key supplier and for each segment of other suppliers. The goal is to segment suppliers based on their value over time and identify opportunities to co-create value (Enz and Lambert, 2012).

Supplier teams tailor mutually beneficial product and service agreements (PSAs) with key suppliers and develop standard PSAs with segments of other suppliers. The tasks are

similar to those of the customer teams in the CRM process (Seibold, 2001; Lambert, 2010). PSAs come in many forms, both formal and informal, and may be referred to by different names from company to company. However, for best results, they should be formalized as written documents. Performance reports are designed to measure the impact that key suppliers have on the firm's profitability as well as the firm's financial impact on those suppliers.

Teams dealing with key suppliers who are competitors should not have overlapping members since it will be very hard for these individuals to not be influenced by what has been discussed as part of developing a PSA for a competitor of the supplier. It is important to reach agreement on what data to share and there is a fine line between using process knowledge gained versus revealing to a supplier's competitor knowledge gained from a supplier. If a supplier is involved in joint research and development with a firm, and also participates in research and development with a competitor, care must be taken to implement adequate firewalls to protect the firm's intellectual property. The individual supplier teams will have day-to-day responsibility for managing the process at the operational level. Firm employees outside of the team might execute parts of the process, but the team still maintains managerial control.

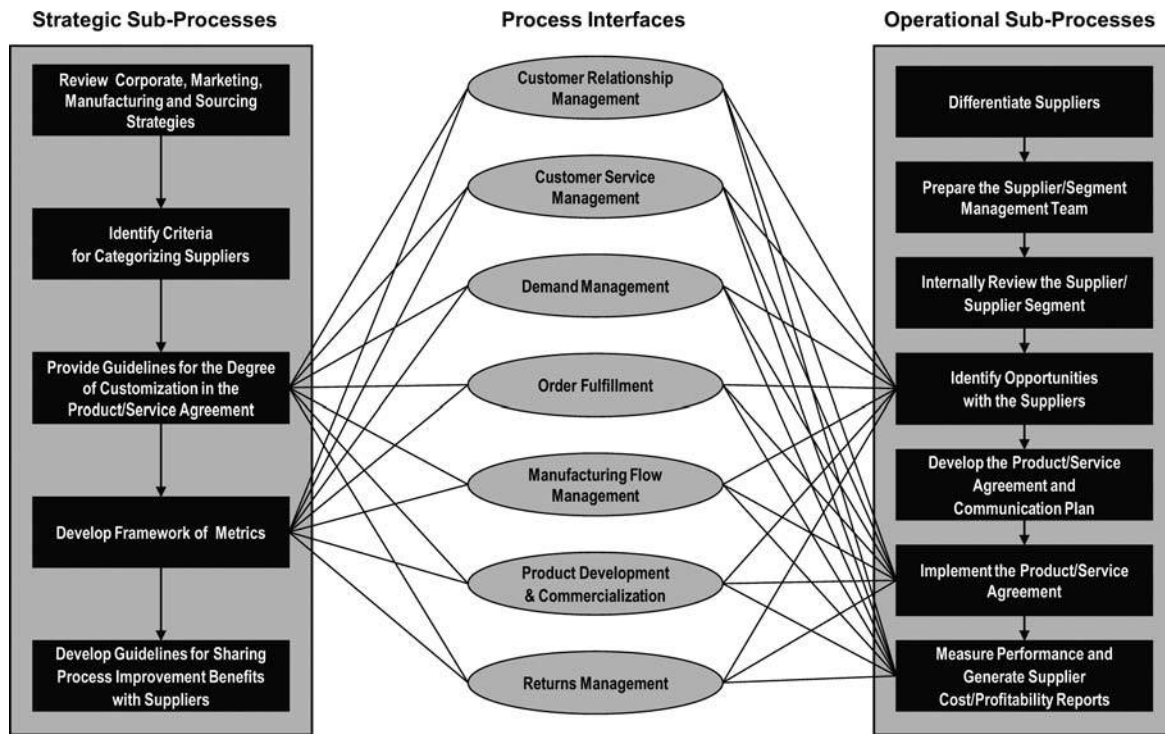
The strategic supplier relationship management process

At the strategic level, the supplier relationship management process provides the structure for how relationships with suppliers will be developed and managed. It is comprised of five sub-processes: review corporate, marketing, manufacturing and sourcing strategies; identify criteria for categorizing suppliers; provide guidelines for the degree of customization in the product/service agreement; develop framework of metrics; and develop guidelines for sharing process improvement benefits with suppliers (see Figure 5).

Review corporate, marketing, manufacturing and sourcing strategies

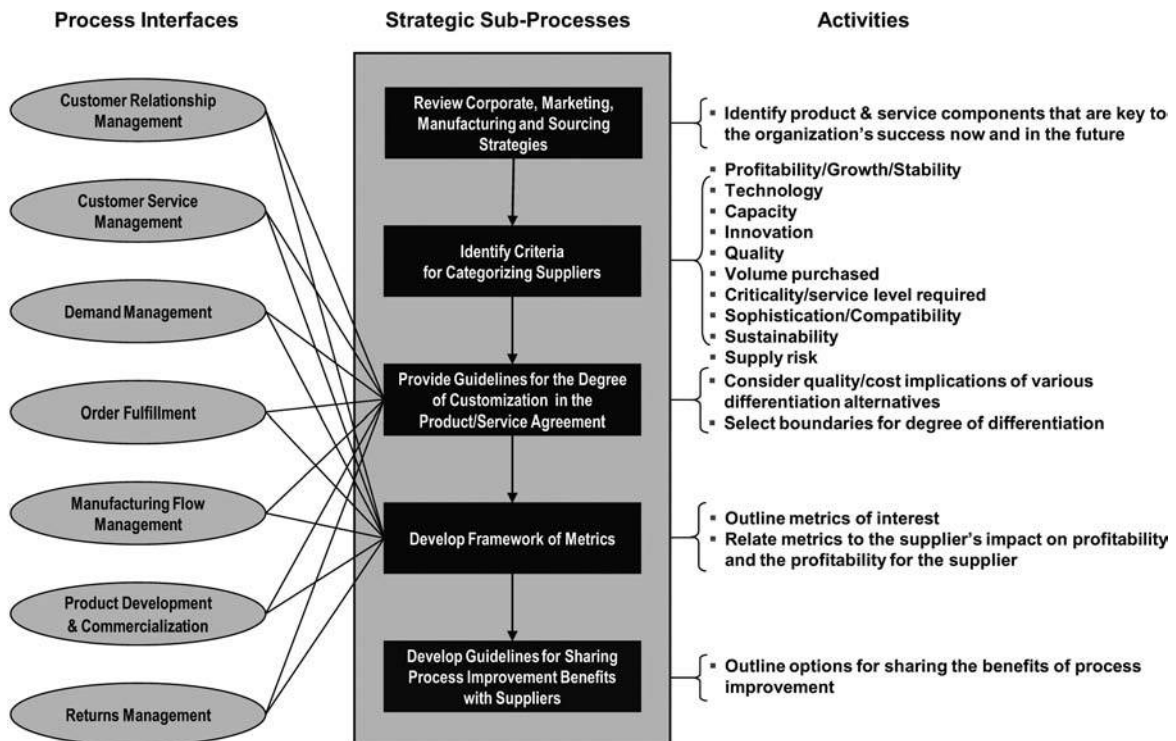
The supplier relationship management process team reviews the corporate strategy, along with the marketing, manufacturing and sourcing strategies, in order to identify supplier segments that are critical to the organization's success now and in the future. The supplier network is a key part of profitable business development since it will impact: the quality of products, product availability, the time to market for new products, access to critical technology, resilience and sustainability. If extensive supply chain mapping is performed prior to this point, management can identify strategic issues such as opportunities for value co-creation, sustainability problems and supply risks, and incorporate these concerns into a comprehensive strategy for managing supplier relationships. Next, management identifies the suppliers with whom the firm needs to develop long-term relationships. For example, at Colgate-Palmolive Company, stretch financial goals led management in the oral care business to the conclusion that closer, partnership type relationships were necessary with key suppliers. Management believed that these relationships would result in product innovations that would enable the business to achieve the financial goals.

Figure 4 Supplier relationship management



Source: Lambert (2008a) adapted from Croxton *et al.* (2001)

Figure 5 The strategic supplier relationship management process



Source: Lambert (2008a)

Identify criteria for segmenting suppliers

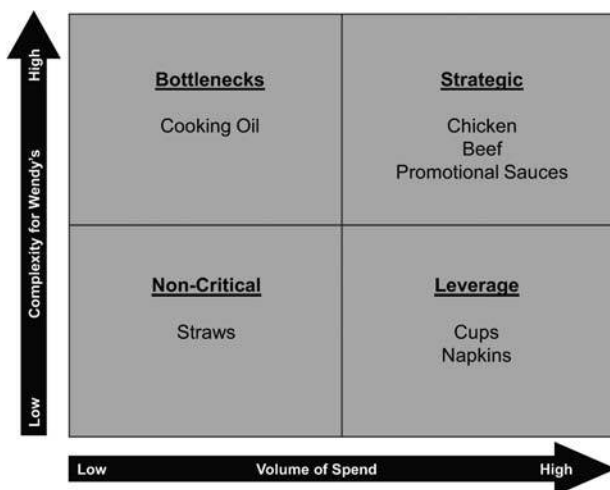
In the second sub-process, the team identifies the criteria that can be used to further segment suppliers, in order to determine with which suppliers the firm will develop tailored PSAs as well as those to be grouped into segments with a standard PSA that meets the firm's goals and generates a reasonable profit for the suppliers. Possible segmentation criteria include:

- profitability;
- growth and stability;
- criticality;
- the service level necessary;
- the sophistication and/or compatibility of the supplier's process implementation;
- the supplier's technology capability and compatibility;
- the volume purchased from the supplier;
- the capacity available from the supplier;
- the culture of innovation at the supplier;
- the supplier's anticipated quality levels (Burt *et al.*, 2003);
- potential to co-create value (Enz and Lambert, 2012); and
- sustainability (environmental, social and economic) (Lee, 2010).

The appropriate criteria must meet the specific needs and goals of the firm. The team determines which criteria to use and how suppliers will be evaluated on each criterion. A segmentation scheme is developed that will be used at the operational level to identify key suppliers and segments of other suppliers.

At Wendy's International, management used a matrix to compare suppliers on the basis of the complexity of the commodity and the volume of spend (see Figure 6). Items identified as low in complexity and low in terms of the expenditure were non-critical items such as straws. Leverage items were those for which Wendy's spend was high but the items were not complex or strategic to the business. The goal for these items was to negotiate prices based on minimizing total costs and to improve service by such things as reducing lead time. For non-critical and leverage items, it was not necessary to have cross-functional teams interacting with the

Figure 6 Comparing suppliers on complexity and volume



Source: Judy Hollis, Vice President, Wendy's International as reported in Lambert (2008a)

supplier. Salespeople from companies that provided these commodities called on buyers as they traditionally had done and buyers selected suppliers based on price and service. Bottleneck items were those for which Wendy's spend was low but they were very complex such as cooking oil due to the effect it has on taste, health concerns (trans fats) and difficulty of disposal. Finally, strategic items were those that were both high in complexity and high in the amount spent per year. These items for Wendy's included chicken, beef and promotional sauces. Suppliers of these commodities were candidates for a partnership meeting (see Lambert and Knemeyer, 2004). Cross-functional teams from the supplier and Wendy's worked on initiatives to increase revenues and reduce costs, thereby improving the financial performance of both firms. Generally, Wendy's management tried to move items from the bottleneck quadrant to the non-critical or to the leverage quadrant. Management's goal was to move cooking oil from the bottleneck segment to the leverage segment, but it was actually moved to the strategic segment as a result of product innovation with Cargill Incorporated, a key supplier.

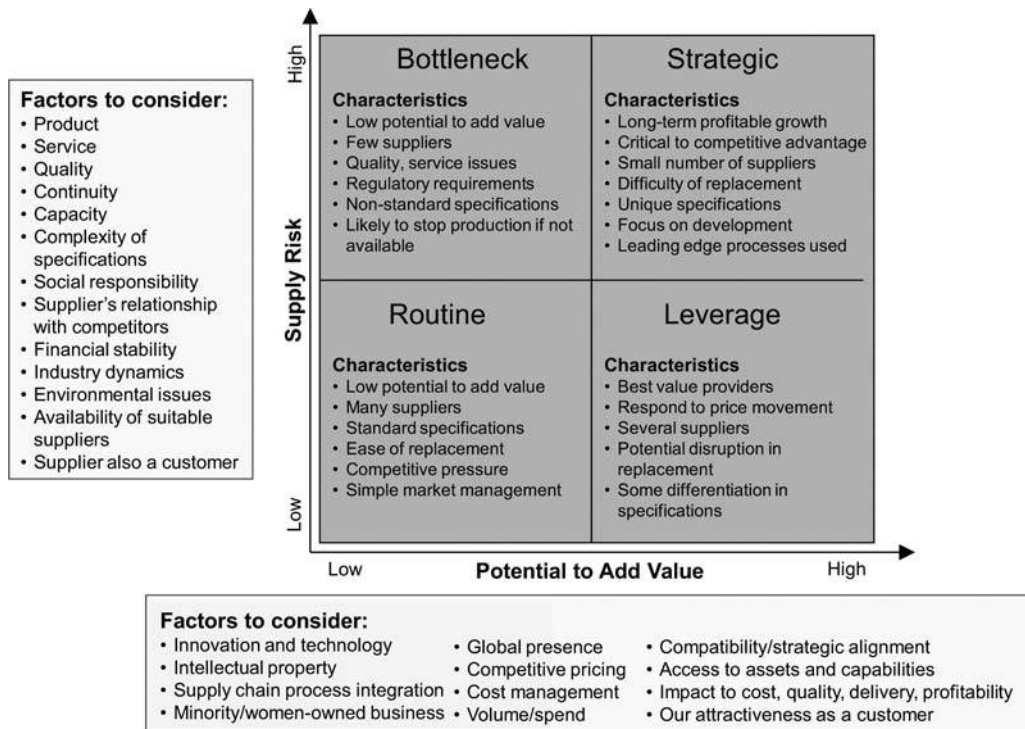
Masterfoods USA used a matrix, similar to Wendy's, but substituted "supply risk" for "complexity" and "contribution potential" for "volume of spend." The fewer the number of suppliers, the more Masterfoods moved up on the low to high scale for supply risk. The mid-point on the low to high "contribution potential" scale was \$500,000. The savings potential had to exceed \$500,000 for the supplier to be in either of the segments on the right side of the matrix (Strategic and Leverage quadrants).

The Coca-Cola Company implemented the supplier relationship management process and Figure 7 shows the supplier segmentation matrix developed at the strategic level to guide in the segmentation of suppliers. At Coca-Cola, the strategic SRM team decided that supply risk and potential to add value would be used as the segmentation criteria. Under supply risk there are 13 factors to consider and under potential to add value there are 12 factors. It is possible to rate suppliers on each of the factors and then based on the relative importance of each factor, develop two scores for each supplier and use these scores to position the supplier on the matrix. However, when implemented at The Coca Cola Company, the specific factors used were dependent on the commodity or commodities that the supplier provided. The team also specified the characteristics of firms for each of the four quadrants of the matrix (see Figure 7).

Additionally, management at The Coca Cola Company defined the business objectives for each segment as well as the expected results from achieving these objectives (see Figure 8). For example, the business objectives for the strategic segment were: manage risk and vulnerability; maximize supply performance; develop preferential relationships and have close supplier management. The desired result was profitable, long-term growth for both parties. The team also identified relationship implication guidelines for each of the four segments that specified the level of engagement, the amount of resources necessary, the depth of involvement and how the relationship should be measured (see Figure 9).

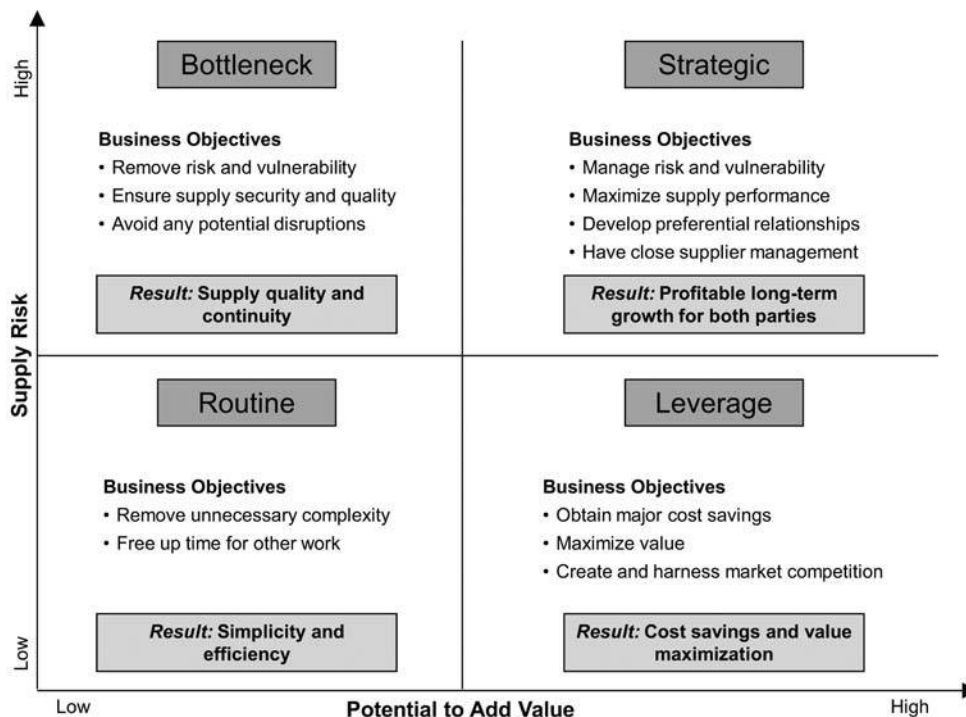
In order to provide Coca-Cola employees with details on the progress being made implementing supplier relationship management and the results that were achieved, the Global SRM Program Manager at The Coca-Cola Company produced a SRM newsletter on a quarterly basis. Topics

Figure 7 Supplier segmentation matrix for The Coca-Cola Company



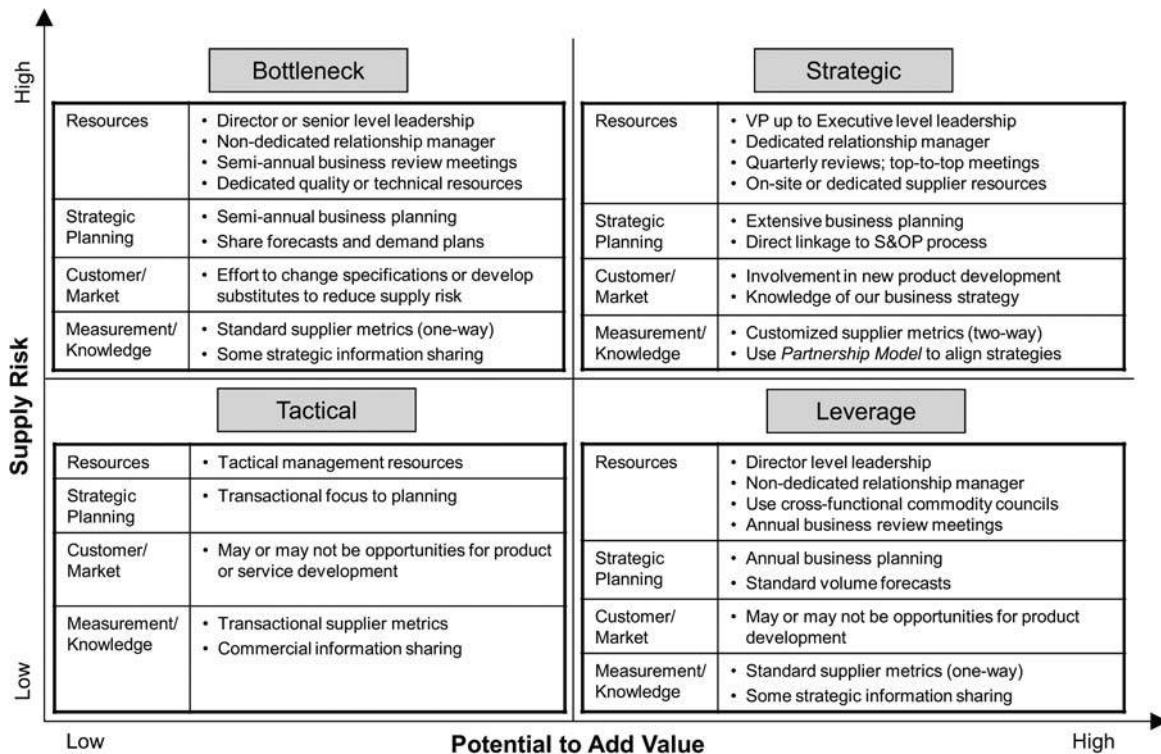
Source: Courtesy of The Coca Cola Company as reported in Lambert (2008a)

Figure 8 Business objectives by segment



Source: Courtesy of The Coca Cola Company as reported in Lambert (2008a)

Figure 9 Relationship implication guidelines by segment



Note: These implications show the level of engagement, amount of resources, and depth of involvement focused on managing the performance of suppliers in each quadrant

Source: Courtesy of The Coca Cola Company as reported in Lambert (2008a)

covered in the newsletter included the SRM framework, updates on activities and results, SRM tools, and how success was measured. Partnership sessions were held with key suppliers identified as strategic in the segmentation and achievements were reported in the SRM newsletter. For more information on the partnership model used at The Coca-Cola Company see Lambert and Knemeyer (2004).

Mapping the corporate entities in the supply chain can provide valuable information when implementing the supplier relationship management process. One benefit of mapping is the identification of opportunities to manage beyond the first tier of suppliers. Significant gains can be obtained when management is willing to take a broader view of the supply chain. Management at The Coca-Cola Company negotiates for PET resins directly with the resin supplier, even though its packaging suppliers are very large. By managing beyond tier 1, The Coca-Cola Company has achieved assurance of supply of a critical component of the manufacturing process, the best price and reduced price volatility. Within the garment industry, Esquel, a Hong Kong based manufacturer, relied on cotton from farmers in China who flooded fields with water to grow the crop which created a breeding ground for insects and disease and required heavy pesticide use (Lee, 2010). Management at Esquel realized that this was not sustainable and helped farmers develop drip irrigation to decrease water use and establish natural pest-control and disease-control programs to reduce reliance on pesticides. By looking beyond tier 1 of the supply chain, the garment manufacturer was able to introduce new growing and

harvesting techniques that enabled the firm to simultaneously assure a supply of cotton and achieve sustainability goals. These examples of managing beyond the first tier in the supply chain support the need for mapping the supply chain to identify opportunities and risks.

Provide guidelines for the degree of differentiation in the product and service agreement

In the third sub-process, the team develops guidelines for the degree of differentiation in the PSA. The team develops differentiation alternatives, considers the revenue and cost implications of each and selects the boundaries for the degree of customization. The team members must interface with each of the other process teams in order to understand the degree of differentiation that is desirable and identify supporting systems to aid in implementation. For example, the demand management process team may want to share demand information with key suppliers that was obtained from collaborative planning, forecasting and replenishment (CPFR) implementations with customers. Investments in technology may be necessary for this to be successful (Skjoett-Larsen et al., 2003; Fletcher, 2003). At Masterfoods USA, the PSA represented a letter of intent that covered five key areas:

- 1 cost;
- 2 innovation;
- 3 supply chain;
- 4 quality; and
- 5 environment.

Supplier teams set specific guidelines for suppliers within these areas.

Develop framework of metrics

Developing the framework of metrics involves outlining the metrics of interest and relating them to the supplier's impact on the firm's profitability as well as the firm's impact on the supplier's profitability (Lambert and Burduroglu, 2000; Zablak *et al.*, 2005; Payne and Frow, 2005). The supplier relationship management process team has the responsibility of assuring that the metrics used to measure supplier performance do not conflict with the metrics used in other processes. Management needs to ensure that all internal and external measures are driving consistent and appropriate behavior (Lambert and Pohlen, 2001).

Figure 10 shows how the supplier relationship management process can affect the firm's financial performance as measured by economic value added (EVA). It illustrates how supplier relationship management can impact sales, cost of goods sold, total expenses, inventory investment, other current assets, and the investment in fixed assets. For example, supplier relationship management can lead to higher sales volume by improving the quality of materials and the service obtained from suppliers. Higher quality products will enable the firm to charge higher prices and/or increase unit sales. Improved service from suppliers might enable the firm

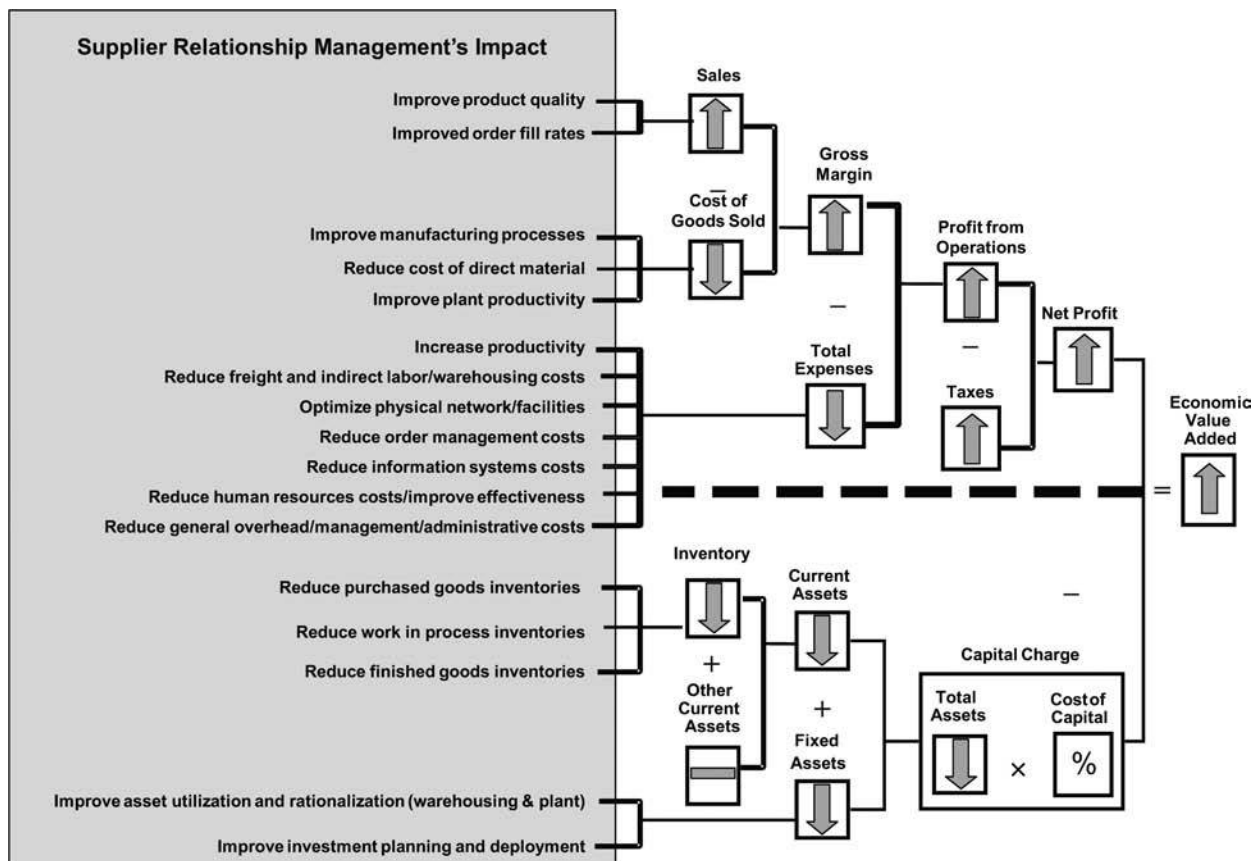
to provide better service to customers and thus lead to increased sales.

Cost of goods sold can be reduced as a result of better planning and fewer last minute production changes, less expediting of materials as well as lower costs for direct materials. In Wendy's case, these savings occurred in suppliers' operations and were shared with Wendy's through price reductions. Also, a number of expenses can be reduced as a result of: increased productivity; lower freight and receiving costs; realignment of network facilities; lower order management costs; lower information system costs; improved management of human resources; and, lower general overhead and administrative costs.

Supplier relationship management can lead to lower inventories of purchased materials, in-process materials and finished goods. Improvement in suppliers' order fulfillment and on-time delivery performance will result in lower safety stock needs for all three types of inventory. Finally, better supplier relationship management can lead to lower fixed assets as a result of improved asset utilization and rationalization (warehousing and plant facilities), and improved investment planning and deployment.

When the team has developed an understanding of how supplier relationship management can impact the firm's financial performance as measured by EVA, metrics must be developed for each of the individual activities that must be performed and these metrics must be tied to financial

Figure 10 How supplier relationship affects economic value added (EVA®)



Source: Adapted from Lambert and Pohlen (2001)

performance. Management should implement initiatives that increase the profitability of the supply chain, not just the profitability of a single firm. Management should encourage actions that benefit the firm and other members of the supply chain while at the same time equitably sharing the risks and rewards. If management makes a decision that positively affects the firm's EVA at the expense of the EVA of a supplier or a customer, every effort should be made to share the benefits in a manner that improves the financial performance of each firm involved so that managers in each firm have an incentive to improve supply chain performance.

At the wholesale and retail level, the development of supplier profitability reports enables the process team to track performance over time. If calculated as shown in Table I, these reports reflect all of the cost and revenue implications of the relationship. Cost of goods sold is deducted from net sales to calculate a gross margin. Then, revenue adjustments such as discounts and allowances, market development funds, slotting allowances and co-operative advertising allowances must be added to achieve a net margin. Next, variable marketing and logistics costs are deducted to calculate a contribution margin (Mossman *et al.*, 1978; Lambert and Sterling, 1990). Assignable non-variable costs, such as salaries, advertising, and inventory carrying costs less a charge for accounts payable, are subtracted to obtain a segment controllable margin. These statements contain opportunity costs for investment in inventory. Consequently, they are much closer to cash flow statements than a traditional profit and loss statement. They contain revenues minus the costs (avoidable costs) that disappear only if the revenue disappears.

Supplier profitability reports can be constructed by wholesalers and retailers but it is not possible for manufacturers to develop these reports for the suppliers of undifferentiated components and materials. In these cases, total cost reports are used. Total cost reports should include the purchase price plus transportation costs, inventory

carrying costs, financial impact of terms of sale, ordering costs, receiving costs, quality costs and administrative costs. There are some cases where total cost reports will not measure the total impact that a supplier has on the firm's profitability. This occurs when suppliers jointly develop new products or services with the company and/or work with the company to improve product quality. It can also occur when the supplier engages in joint branding activities such as "Intel Inside" that may increase sales. In these situations, the increased profit that is achieved through these initiatives should be measured and included in the supplier's evaluation (see Enz and Lambert (2012) for a methodology). At the end of the day, it is the change in profits (or costs when total cost reports are the relevant measure) that management should focus on because it is the impact on before taxes profits that will determine how the relationship affects earnings per share.

Develop guidelines for sharing process improvement benefits with suppliers

In the final sub-process, the team develops guidelines for sharing process improvements with suppliers. The goal is to make process improvements a win for both the firm and the supplier. If both parties do not gain from the relationship, it will be difficult to gain the supplier's full commitment to the company's goals. The supplier relationship management team must find ways to quantify the benefits of process improvements in financial terms. At Masterfoods USA, suppliers were given 100 per cent of the benefits derived from cost savings projects until they recovered their entire investment and made an agreed on level of profit. After that point was reached, 100 per cent of the benefits went to Masterfoods USA. The goal was to encourage suppliers to keep improving and to avoid becoming complacent.

At Wendy's International, the following description of cost savings initiatives and gain sharing was attached to the terms and conditions of every PSA:

Table I Supplier profitability analysis: a contribution approach with charge for assets employed

	SUPPLIER A	SUPPLIER B	SUPPLIER C	SUPPLIER D
SALES				
COST OF GOODS SOLD
GROSS MARGIN				
PLUS: DISCOUNTS AND ALLOWANCES
MARKET DEVELOPMENT FUNDS
SLOTING ALLOWANCES
CO-OP ADVERTISING
NET MARGIN				
VARIABLE MARKETING & LOGISTICS COSTS:				
TRANSPORTATION
RECEIVING
ORDER PROCESSING
Other Costs
(will depend on situation)
CONTRIBUTION MARGIN				
ASSIGNABLE NONVARIABLE COSTS:				
SALARIES
ADVERTISING
INVENTORY CARRYING COSTS LESS:				
CHARGE FOR ACCOUNTS PAYABLE
Other Costs
(will depend on situation)
SEGMENT CONTROLLABLE MARGIN				

Suppliers shall in good faith endeavor, throughout the term of this Agreement, to continually reduce the cost of the services and products it provides hereunder and be responsible to present to Wendy's potential cost savings initiatives on a semi-annual basis. Cost savings may occur in specification changes (as agreed upon by both parties), changes in manufacturing capabilities or other potential cost efficiency areas to be agreed upon by the parties. Wendy's and Supplier agree to review, not less than semi-annually, Supplier's satisfaction of Wendy's reasonable cost and efficiency standards and to reasonably and in good faith improve the cost and efficiency of the Approved Products if and to the extent reasonable in light of the then applicable requirements as set forth by Wendy's, acting reasonably. Supplier shall use its commercially reasonable and good faith efforts to satisfy any such heightened or more stringent standards that the parties agree to pursuant to such semi-annual reviews. Gain sharing arrangements for multi-year Agreements:

- Supplier will deliver 2% minimum annual cost savings on controllable portion of costs.
- 1st year – cost savings generated in year 1 as a result of supplier idea or joint development will be retained by the supplier.
- 2nd year – cost savings generated in year 2 as a result of supplier idea or joint development will be shared between Wendy's and the supplier on a 50%:50% basis.
- 3rd year – cost savings generated in year 3 as a result of supplier idea or joint development will be passed along to Wendy's.
- Any costs savings generated by an idea proposed exclusively by Wendy's that does not require capital investment by supplier will be immediately passed along to Wendy's (Wendy's International as reported in Lambert (2008a)).

In summary, the objective of supplier relationship management at the strategic level is to identify key product and service components, provide criteria for segmenting suppliers, provide supplier teams with guidelines for customizing the product and service offering, develop a framework of metrics, and provide guidelines for sharing process improvement benefits with suppliers.

The operational supplier relationship management process

At the operational level, the supplier relationship management process deals with developing and implementing the PSAs. It is comprised of seven sub-processes:

- 1 differentiate suppliers;
- 2 prepare the supplier/segment management team;
- 3 internally review the supplier/supplier segment;
- 4 identify opportunities with the suppliers/supplier segment;
- 5 develop the product/service agreement and communication plan;
- 6 implement the product/service agreement; and
- 7 measure performance and generate supplier cost/profitability reports (see Figure 11).

Segment suppliers

In the first sub-process, suppliers are segmented based on the criteria that were established in the strategic process. At Wendy's International, management performed an industry analysis including consideration of strengths, weaknesses, opportunities and threats that helped differentiate among suppliers. For example, no single supplier could fill all of Wendy's needs for chicken. One supplier was a low cost supplier who guided Wendy's in terms of where there were opportunities for cost reductions with other chicken suppliers. Another supplier was a leader in research and development and generated new products for Wendy's. However, this supplier did not meet all of Wendy's needs, and shared these innovations with Wendy's other suppliers. Since this supplier conducted the research, it received a large percentage of the first year volume of the new products. A small percentage of the volume went to a minority supplier to satisfy Wendy's corporate goal to encourage

diversity. The output of this sub-process was the identification of which suppliers were key to the firm and which suppliers were grouped into segments.

Prepare the supplier/segment management teams

In this sub-process, the account or segment management teams are formed, including the buyer who will be the supplier or supplier segment relationship manager. The teams are cross-functional with representation from each of the functional areas. In the case of key suppliers, each team is dedicated to a specific supplier and meets regularly with a team from the supplier organization. In the case of supplier segments, a team manages a group of suppliers and develops and manages the standard PSA for the segment which the buyer presents to the supplier's sales person. Each supplier/segment team is comprised of a team manager and a cross-functional group of members. At Wendy's International, the criteria used to identify the key suppliers were also used to identify critical team members. For example, Marzetti's was a supplier of promotional sauces which Wendy's management viewed as strategic. The development of new sauces was a critical component of this relationship which meant that research and development personnel must be part of the Wendy's supplier relationship management team and the Marzetti's customer relationship management team.

Internally review the supplier/supplier segment

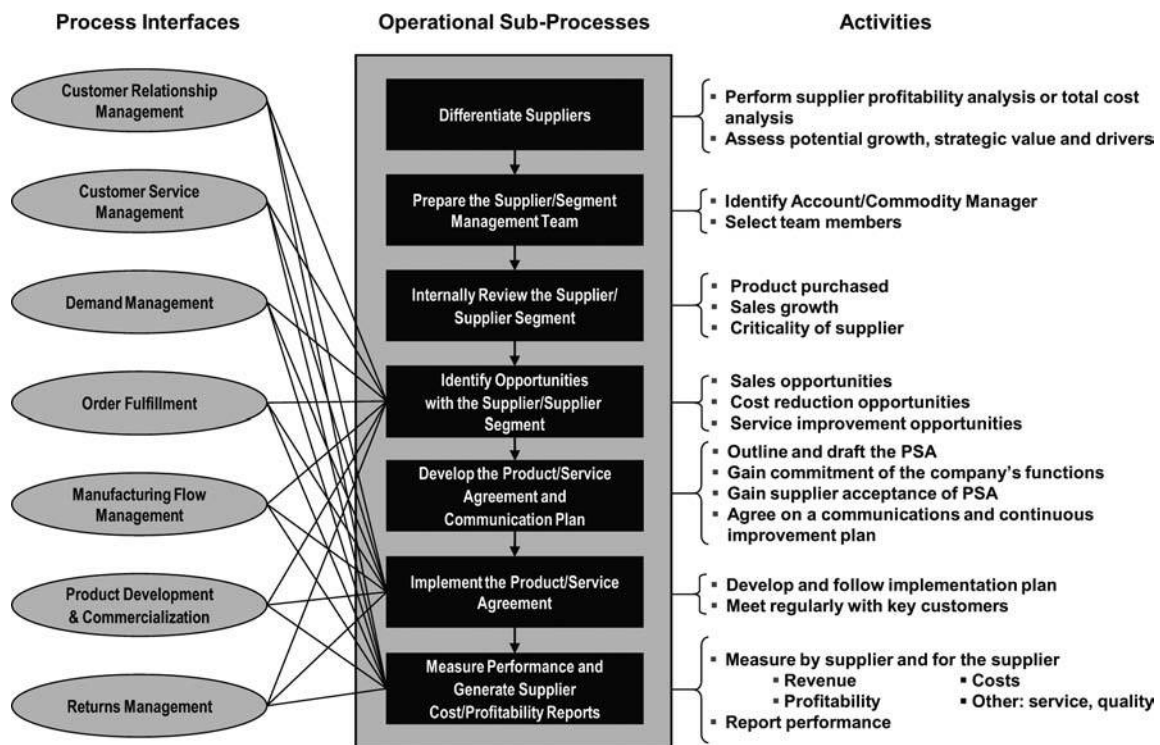
Each supplier/segment team reviews their supplier or segment of suppliers to determine the role that the supplier or segment of suppliers plays in the supply chain. A supplier team works with each supplier or segment of suppliers to identify improvement opportunities. Each team examines the other seven supply chain management processes in order to identify opportunities for improvement with the supplier or supplier segment.

Identify opportunities with the supplier/supplier segment

Once the teams have an understanding of the supplier or segment of suppliers, they work with each key supplier or segment of suppliers to develop improvement opportunities. These opportunities might arise from any of the supply chain management processes, so the supplier teams need to interface with each of the other process teams. Wendy's used the Partnership Model, described in Lambert and Knemeyer (2004), to structure relationships with key suppliers. The partnership sessions enabled both Wendy's and the supplier to gain knowledge about the business drivers of the other firm. This led to goal setting that became part of the PSA and an ongoing part of the quarterly business reviews between the firms. The Wendy's buyers prepared a scorecard for each of their suppliers in which the drivers were included. Other organizations including: Campbell's, The Coca-Cola Company, Colgate-Palmolive, Defense Logistics Agency, International Paper and Masterfoods USA have used the partnership model with key suppliers. In fact, Masterfoods USA used it with a Tier 1 supplier and also with the Tier 2 supplier who provided the key ingredient to the Tier 1 supplier.

Develop the product and service agreement and communication plan

In the fifth sub-process, each team develops the PSA for their supplier or segment of suppliers. For key suppliers, the team

Figure 11 The operational supplier relationship management process

Source: Lambert (2008a)

negotiates a mutually beneficial PSA, and then gains commitment from the supplier's internal functions. They work with the suppliers until agreement has been reached. The Partnership Model and the Collaboration Framework are tools that can provide a structure for developing the PSA (see Lambert *et al.*, 2010). It is important that the PSA for key suppliers include a communication and continuous improvement plan. For segments of non-key suppliers, a standard PSA is developed for each segment. These represent the minimum requirements to be a supplier and they are not negotiable. At Wendy's, supplier relationship management teams prepared a negotiation plan for meetings with key suppliers to develop PSAs. What does Wendy's want to have versus what does it need to have? It is important to prioritize initiatives and negotiate the best solution if all of them are not possible. Items that Wendy's included in the PSA include the cost savings initiatives described earlier as well as goals for spending with minority-owned businesses. Wendy's PSAs stipulated:

Suppliers will make a good faith effort to competitively purchase goods and/or services directly related to the goods covered in this Agreement from Historically Underutilized Businesses (HUB's), also commonly referred to as minority-owned businesses. Supplier shall report all HUB spending on a quarterly basis to Wendy's (Wendy's International as reported in Lambert (2008a)).

Additional items that might be included in Wendy's PSAs with suppliers were the following:

- **Open-book costing.** Supplier shall provide a monthly detailed breakdown of all applicable actual costs as they relate to pricing and costs affecting Wendy's business and the Approved Products.

- **Keybusiness review.** Supplier and Wendy's shall meet regularly for the purpose of conducting business reviews to review the plans and expectations as outlined in the Agreement.
- **Diversity clause.** Supplier agrees to seek out first and second-tier diversity suppliers where applicable to the Wendy's business.
- **Written contingency plans.** Supplier shall provide, in writing, detailed and executable contingency plans applicable for supplier to insure continuity of supply.
- **Weekly volume and pricing reports.** Supplier shall provide to Wendy's in writing at such time periods and in a form as reasonably required by Wendy's, volume and applicable prices sold to Wendy's Approved Distributors and restaurants (Wendy's International as reported in Lambert (2008a)).

At Masterfoods USA, the PSAs included an eight-step, vendor-assurance program shown in Table II that was described in company documents as follows:

Vendor Assurance requires that we seek and develop relationships with those suppliers who have the ability, currently or potentially, to meet Masterfoods USA standards and specifications consistently. This confidence building process is a joint activity between Masterfoods USA and the Supplier, and is grounded on the Mutuality Principle. As our partners, vendors need a thorough knowledge of the specific way in which we will use their product. Open communication will help them to understand our reasons for increasing conformance. Masterfoods' goal is a vendor certification of quality achievement which requires a minimum auditing by ourselves and which assures that materials will perform reliably over time (Masterfoods USA as reported in Lambert (2008a)).

Implement the product and service agreement

In the sixth sub-process, the team implements the PSA, which includes holding regular planning sessions with key suppliers.

Table II Vendor assurance: the eight steps

Step 1	<i>Specifications.</i> The concept of vendor assurance is explained to the vendor and the mutual commitment to vendor assurance established. The specifications of the goods or service to be purchased are explained and their content discussed
Step 2	<i>Process description.</i> Good manufacturing practices and environmental responsibility are demonstrated by the vendor. A detailed description of the vendor's normal process is provided in confidence and forms the basis of the vendor file
Step 3	<i>Risk assessment.</i> Jointly, hazards are identified, risks are quantified, and critical control points associated with the vendor's process are located
Step 4	<i>Quality management.</i> Existing quality systems to minimize risks are assessed and documented. Where necessary, additional methods to monitor and control key areas are implemented. A commitment and positive attitude to quality improvement are demonstrated by the vendor
Step 5	<i>Conformance.</i> The vendor provides data that demonstrates his process is capable of consistently meeting his customers' requirements
Step 6	<i>Review.</i> The periods' activities are reviewed, confirming that the customers' requirements are met, assuring incoming materials can be accepted based on vendor data, and identifying areas for improvement
Step 7	<i>Mutual development.</i> Exchanged visits between Mars, Incorporated and the vendor by relevant personnel from all parts of both companies occur, as appropriate, to better understand one another's processes, needs, limitations, specifications and quality performance
Step 8	<i>Continue commitment to quality.</i> Enduring business relationships are established which motivate vendors to continuously improve quality, costs, and responsiveness to our mutual benefits. This will be assured by regular audits as part of normal communications between partners

Source: Masterfoods USA as reported in Lambert (2008a)

The supplier relationship management teams provide input for each of the other supply chain management process teams that are affected by the customizations that have been made in the PSAs. Supplier relationship management teams work with the other process teams to assure that the PSAs are being implemented as determined, and meet with suppliers on a regular basis to monitor progress and performance. At Wendy's, the PSAs with key suppliers were reviewed at the quarterly meetings to ensure that implementation was taking place as planned. Depending on the supplier involved, as many as 50 people participated in these quarterly business reviews.

Measure performance and generate supplier cost/profitability reports

In the last operational sub-process, the team captures and reports the process performance measures. Metrics from each of the other processes are also captured in order to generate the supplier cost/profitability reports. These reports provide information for measuring and selling the value of the relationship to each supplier and internally to upper

management. The value provided should be measured in a manner that captures the impact of the relationship on each organization's profitability and therefore must consider costs, impact on sales, and associated investment; otherwise the process improvements will go unrecognized and unrewarded (Lambert and Pohlen, 2001).

The other process teams communicate supplier-related performance to the supplier teams who relate these metrics back to the profitability of the firm and the profitability of its suppliers. At Wendy's, management regularly scheduled comprehensive performance reviews with key suppliers at quarterly business meetings. Less critical suppliers had a biannual review meeting but all suppliers met with Wendy's personnel at least once per year to review performance.

Limitations and future research opportunities

The research is based on seven focus groups that took place over a 25 month period with executives from 15 companies representing nine industries. The companies represented multiple positions in the supply chain including retailers, distributors, manufacturers and suppliers. While the companies were all global in their operations, during the 25 month period when the supplier relationship management focus groups were conducted, only one was based outside of the USA.

Thus, there is an opportunity to validate this research with organizations outside of the USA and beyond the members of The Global Supply Chain Forum. One way that the supplier relationship management framework is being validated is in executive development programs. Since 2004, the framework has been presented in seminars in Argentina, Australia, Chile, China, England, Germany, Mexico, New Zealand, Uruguay and the USA and the feedback from the executive delegates has been very positive. The framework is being implemented in numerous organizations around the world which provides additional validation.

However, there are a number of potential research topics that remain including:

- What do the representatives from each function bring to the supplier relationship management process teams and what do these individuals gain from their involvement that helps their functions?
- How does rewarding the teams for the profit impact of a supplier increase cross-functional cooperation and value creation?
- To what extent does the involvement of more functions increase the opportunity for the co-creation of value?
- How should team members be identified?
- How should the team members be compensated?
- Who should be the process owner?
- Since team members will have a leader in their functional roles and another in their process roles, how can balance be maintained?

Conclusions

Supplier relationship management provides the structure for how relationships with suppliers are developed and maintained, including the establishment of PSAs between the firm and its suppliers. The supplier relationship management process and the customer relationship management process form the critical linkages that connect

firms in the supply chain. Supply chain management is about relationship management and the supply chain is managed link-by-link, relationship-by-relationship. The ultimate measure of success for each relationship is the impact that it has on the financial performance of the firms involved. Consequently, it is necessary for each firm to have the capability of measuring the performance of the supplier relationship management and customer relationship management teams in terms of their impact on incremental revenues, costs and investment. With this knowledge, it will be possible to develop programs that improve supply chain performance and to negotiate the sharing of benefits and costs so that all of the involved players have the incentive to participate.

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Appendix. Descriptions of the eight macro business processes

The eight business processes identified by members of the Global Supply Chain Forum (Lambert, 2008b) and shown in Figure 1 are:

- 1 customer relationship management;
- 2 supplier relationship management;
- 3 customer service management;
- 4 demand management;
- 5 order fulfillment;
- 6 manufacturing flow management;
- 7 product development and commercialization; and
- 8 returns management.

Each process has both strategic and operational sub-processes. The strategic sub-processes provide the structure for how the process will be implemented and the operational sub-processes provide the direction for implementation. The strategic process is a necessary step in integrating the firm with other members of the supply chain, and it is at the operational level that the day-to-day activities take place. Each process is led by a management team that is comprised of managers from each business function, including: marketing, sales, finance, production, purchasing, logistics and, research and development. Teams are responsible for developing the procedures at the strategic level and for implementing them at the operational level. A brief description of each of the eight processes follows.

Customer relationship management

The customer relationship management process provides the structure for how the relationships with customers will be developed and maintained. At the strategic level, management identifies key customers and customer groups to be targeted as part of the firm’s business mission. These decisions are made by the leadership team of the enterprise and at the strategic level; the process owner is the CEO. The goal is to segment customers based on their value over time and increase customer loyalty by providing customized products and services. Cross-functional customer teams tailor Product and Service Agreements (PSA) to meet the needs of key accounts and for segments of other customers. Performance reports are designed to measure the profitability of individual customers as well as the firm’s impact on the financial performance of customers.

Supplier relationship management

The supplier relationship management process provides the structure for how relationships with suppliers will be developed and maintained. As in the case of customer relationship management, close relationships will be developed with a small subset of suppliers based on the value that they provide to the organization over time, and more traditional relationships are maintained with the others. A PSA is negotiated with each key supplier that defines the terms of the relationship. For segments of less critical suppliers, the PSA is provided and not negotiable. The desired outcome is a win-win relationship where both parties benefit.

Customer service management

The customer service management process deals with the administration of the PSAs developed by customer teams as part of the customer relationship management process. Customer service managers monitor the PSAs and intervene on the customer’s behalf if there is going to be a problem delivering on promises that have been made. The goal is to solve problems before they affect the customer. Customer service managers will interface with other process teams, such as supplier relationship management and manufacturing flow management to insure that promises made in the PSAs are delivered as planned.

Demand management

Demand management is the process that balances the customers’ requirements with the capabilities of the supply chain. With the right process in place, management can match supply with demand proactively and execute the plan with minimal disruptions. The process is not limited to forecasting. It includes synchronizing supply and demand, increasing flexibility, and reducing variability. For example, it involves managing all of the organization’s practices, such as end-of-quarter loading and terms of sale which encourage volume buys that increase demand variability. A good demand management process uses point-of-sale and key customer data to reduce uncertainty and provide efficient flows throughout the supply chain. Marketing requirements and production plans should be coordinated on an enterprise-wide basis. In advanced applications, customer demand and production rates are synchronized to manage inventories globally.

Order fulfilment

The order fulfillment process involves more than just filling orders. It includes all activities necessary to define customer requirements, design a network and enable a firm to meet customer requests while minimizing the total delivered cost. At the strategic level, it is necessary to consider which countries should be used to service the needs of various customers, manufacturing and logistics costs, tax rates and where profits should be earned to legally minimize taxes, as well as import and export regulations. While much of the actual work, at the operational level, will be performed by the logistics function, the process needs to be implemented cross-functionally in coordination with key suppliers and customers.

Manufacturing flow management

The manufacturing flow management process includes all activities necessary to obtain, implement and manage manufacturing flexibility in the supply chain and to move products into, through and out of the plants. Manufacturing flexibility reflects the ability to make a wide variety of products in a timely manner at the lowest possible cost. To achieve the desired level of manufacturing flexibility, planning and execution must extend beyond the four walls of the manufacturer in the supply chain.

Product development and commercialization

Product development and commercialization is the process that provides the structure for developing and bringing products to market jointly with customers and suppliers. Effective implementation of the process not only enables

management to coordinate the efficient flow of new products across the supply chain, but also assists other members of the supply chain with the ramp-up of manufacturing, logistics, marketing and other activities necessary to support the commercialization of the product. The product development and commercialization process team must coordinate with customer relationship management process teams to identify customer articulated and unarticulated needs; select materials and suppliers in conjunction with the supplier relationship management process teams; and, work with the manufacturing flow management process team to develop production technology to manufacture and integrate into the best supply chain flow for the product/market combination.

Returns management

The returns management process involves the activities associated with returns, reverse logistics, gatekeeping and avoidance, and how they are managed within the firm and across key members of the supply chain. The correct implementation of this process enables management not only to manage the reverse product flow efficiently, but to identify opportunities to reduce unwanted returns and to control reusable assets such as containers. In many industries, an effective returns management process provides an opportunity to achieve a sustainable competitive advantage.

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